Culturally Modified Trees in Western Washington: Impact and Perspective from the Stillaguamish Cultural Resources Department

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Kelsey Maloy

July 28, 2023
Culturally Modified Trees in Western Washington: Impact and Perspective from the Stillaguamish Cultural Resources Department

A Thesis
Presented to
The Faculty of
Western Washington University

In Partial Fulfillment
Of the Requirements for the Degree

Master of Arts

by
Kelsey Maloy
July 2023
Abstract

This study braids qualitative and quantitative views of CMT studies to explore meanings and relationships with Culturally Modified Trees (CMT) with a concern for the ethnographic perspective currently absent in dominant structures. This research showcases community value when combining different CMT ontologies (Stillaguamish and Western Academic Definitions). Ethnohistorical methods and grounded theory help organize semi-structured interviews at five previously recorded archaeological CMT sites. There is a lack of feedback concerning Indigenous philosophy about classifying eco-facts or vivio-facts, specifically CMT. This study comprises an interdisciplinary team within the Stillaguamish Cultural Resources Department to reassess five previously documented cedar use sites in the Stillaguamish River Watershed in Washington State. Culturally Modified Trees are part of a larger picture layered underneath artificial landscapes and boundaries created by Western thinking. In this space of acknowledgment, we can engage the perspective of Indigenous land stewards who are the keepers of this intellect. Culturally Modified Trees are a rich topic that does not align neatly with Western archaeological training or “black box” thinking. This paper calls for a methodological change and seeks first-hand guidance from Indigenous knowledge keepers about the domains in which CMT ontology reflects coordinated care in and around traditionally managed landscapes.
Acknowledgments

This work could not be possible without the Indigenous perspective and expertise. Mentors and friends with the Stillaguamish Tribe of Indians Cultural and Natural Resource Departments volunteered time and expertise to this project, bringing perspective and invaluable ways of conceptualizing CMTs growing in dynamic landscapes. Thank you, Stillaguamish Tribal Community! Individuals provided insight into literary source quality, pictures, and reference material, saving countless hours and guiding a respectful narrative and nuance. Please see Appendix A for the Stillaguamish Tribal clearance and authorization to weave this project together.

Inspiration for shared CMT research began with a short harvesting video produced in 2020 by the Stillaguamish Cultural Resource Department. Sincere interest and dedication encouraged connection with the Stillaguamish Tribe of Indians Cultural Resource Office. This tiny jumping-off point cultivated a relationship that led to friendships and lifelong learning.

Deeply grateful to Master Carver Brian Perry and Nathan Tatro for their time, expertise, and patience in the carving shop on Thursdays. These nights taught me the value of manufacturing - with the hands and working media. Equally cherished are crafting nights on Fridays with Bea Franke and Apprentice Master Weaver Ray Rehaume – these are precious nights when friends meet friends.

Thanks to the academic committee, Dr. Todd Koetje, and Dr. Jerry Ek on the “Tree Team.” I appreciate your guidance in helping structure this research and your technical writing and editing advice throughout this process. In addition, countless reference librarians helped navigate databases and archives across Western Washington University and WWU Special Collections to finagle obscure sources.

Thank you to my late mentor, Dr. Sarah Campbell. Sarah was a huge pillar who challenged me to go after this line of thinking and pursue nontraditional archaeological research. Jamie Lizkow is another friend and professional mentor who continues to be someone I can ask for advice on anything. - thank you. Other regional specialists offered perspective to a young academic carving this pathway whom I met along this journey, Sara Palmer, Stephen Todd Jankowski, Roman Jakien, and Dr. William Schroeder. They helped shape this research somehow or sent me rabbit holes to investigate. Thank you, WWU Anth departmental staff, Lauren Townshend and Maeg Demmons, for putting up with me and having chocolate in the administrative office.

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Chapter I
Introduction

Culturally Modified Trees are intellectual treasures in the form of trees that exist from human interaction with the environment. Cultural memory loss and repetitive tragedy are associated with miscommunication of CMT by Western decision-makers who do not value the sustainability philosophies informed by an Indigenous ontology. This paper does not create policy implications but seeks to deconstruct the dominant perspective of CMTs. This research encompasses qualitative and quantitative views of CMT to emphasize relationality and respect for Stillaguamish Tribal values in their traditional homelands directed by the Stillaguamish Cultural Resource Department. Instead of focusing on policy implementation, I interpret the impact and results from ethnographically informed documentation of CMT in the Stillaguamish River Watershed to find deeper meaning from a more transparent and broader approach to shared CMT research. In order to trace these trees and their community relationships, this project includes an ethnohistoric lens in the interpretation of 5 previously recorded CMTs. The Stillaguamish emphasizes CMT as being alive and deeply connected to land use semiotics guarded within Indigenous knowledge centers. We can see that there is room to invite perspective in the ways CMT is recognized and communicated:

“– the real goal should be the holistic feel…How does that tree fit into the rest of the story… which I think anthropologists are trying to get to it in a good way, hopefully.. that is where it gets more exciting, too, when you look at the scale of landscape modification, that traditional peoples have been doing here, forever” (Informant 1 2023).

Braided thinking is a way to link ontological threads (Western and Indigenous) because cultural resource management protocols and Indigenous philosophies differ. This project braids ontological views to acknowledge the depth of CMTs as a cultural phenomenon in local
communities. There is a societal impact in the real-world observation of CMTs and community recollection in cross-cultural meaning. This study reflects an Indigenous cultural value in the judgmental sampling of five previously recorded CMT sites with non-archaeologists (Tribal Historians and Practitioners). This approach invites perspective and impact often missing from archaeological assessment of Native CMTs of interest.

Listening to knowledge keepers with the Stillaguamish Tribe of Indians talk about Culturally Modified Trees brings depth to this landscape because the exchange of traditional knowledge is kept alive within Tribal communities -absent in recordation strategies. Layers of meaning related to CMTs are segmented by academic studies, which tend to overlook more comprehensive landscape relationships practiced and communicated by Native People. This study combines threads of CMT knowledge to interpret cultural meanings and archaeological definitions. This project unpacks CMT research significance and missed learning opportunities with attention to community vernacular. Diverse definitions offer deeper perspectives on the landscape. When we invite another philosophy to this discussion, we can see where more ethnographic research and input are needed in CMT documentation.

Native people and CMTs are a part of this landscape. Indigenous definitions matter and non-archaeological worldview approaches also have equal weight in this project. The aim of this study proposes an opportunity to make space, listen, and re-imagine signatures on this landscape in the shape of previously recorded Indigenous CMTs.

Culturally Modified Tree is a profoundly relatatable concept that can never be abandoned because CMTs link past and present. Braided thinking work incorporates ethnographic and ethnohistoric perspectives to address deeper connectedness between people, places, and memory concerning meanings and correlations within this knowledge domain (Kimmerer 2013). Impacts
from this study expand the Western conceptualized value of CMT by incorporating an
Indigenous vernacular of the Stillaguamish Watershed Landscape. A wealth of information exists
within CMTs, continuously overlooked in recent centuries -and nearly erased (Stoffel et al.
2018). The evidence I have found affirms their need for adaptive preservation communication. A
critical disjunct revolves around ontological indifference because CMTs are solely translated
through a Western-trained-academic worldview. I refer to this as the “Western” perspective
during this report.

The Western academic perspective is being verified by Indigenous historians who offer
alternative approaches to CMT that move towards inclusive community-based learning. Readers
will see that there is still much to learn about these resources. Historically, dominant Western
reactions ranged from ignorance to profound ecological stewardship messages. Today's
preservation choices surrounding CMTs will impact intergenerational lessons about stewardship.
Imagination, reciprocity, and conservation are vital teachings as we hasten into new climatic eras
of environmental loss.

Centering an Indigenous expert perspective is crucial in determining strategies to
communicate existing legacies in plain sight through CMTs unique to Native History. To be
clear, just because land use activities have changed or shifted, this does not mean that a
community's Traditional Ecological Knowledge (TEK) is deteriorating, just that we can all be
more mindful of the impacts we have on sustainable behaviors -that there is a societal relevance
to archaeology when we decenter ourselves as Western academics in CMT data communication.
This research calls for inclusive academic dialog and multi-vocality to communicate Culturally
Modified Trees from the Stillaguamish Tribal community interest. During this project, readers
become aware of the deficient inclusion of multi-vocality- consequently restricting and keeping imagination limited, ultimately harming human traditions in sustainability and CMT recognition.

Archaeologists who try to make sense of CMT data will need guidance and perspective from Tribal Knowledge keepers because current data collection techniques are inconsistent, creating poor data samples for future research. Culturally Modified Trees outside of easily identifiable bark-stripped Western red cedar trees are at the highest significant risk of concern because they are continuously threatened by settler psychology, industry, and philosophy. After all, CMTs outside of bark-stripped varieties are rarely seen or considered as valuable as diagnostic artifacts in land management decisions, therefore, unrecognized during surveys. In addition, there is a social conversation lacking, in part, due to empathy in the evaluation of CMTs while respecting tribal values. This shared research celebrates diverse perspectives about CMTs, both documented and undocumented, within the Stillaguamish watershed.

The research explored patterns in previously documented CMT sites creating time to connect with Tribal historians to genuinely ask – how can Westerners respect Native philosophy in the conceptualization of Indigenous CMT, focused in the Stillaguamish watershed? Breaking away from CMT studies in public forest lands inadvertently shifted research questions to CMTs in interurban areas, -a significant shift with an entirely different type of relationship to CMT. This master's project unravels cultural disjuncts related to CMT documentation strategies. Shifting scope inadvertently created space for cross-cultural conversations that expand ways to braid Western and Native ontologies collaboratively by revisiting known and confirmed CMT sites with Tribal Historians and Harvesting Experts local to Skagit and Snohomish Counties.

Initially, my interest developed from more than a few uncomfortable learning experiences working as a seasonal archaeological technician for several Federal land
management agencies, which included the assessment of unfamiliar CMT in Eastern Oregon. Feeling lost concerning CMT documentation firsthand resulted in a sensitivity to CMT data collection strategies implemented by Western academics. Western academic survey strategies and land use recommendations utilizing CMT data generated by Western academics caused concern for the quality of information gathered from CMT sites. I culled CMT site observations from Skagit and Snohomish counties to devise questions and themes to revisit CMT sites with tribal experts to weigh in on these sites. As a result, we can all benefit from listening to a cultural harmony that creates empathy and relevance to open eyes to the living history around us in the shape of vivio-facts important to non-mainstream communities.

Regional CMT keys represent worldviews entirely dependent on visual sensation and observation through mainstream academic definitions. Visual elements in archaeology, texts, maps, and pictures portray dominant narratives of “CMT” as a systematically defined phenomenon (that can always be seen). Categorizing these complex figures on the landscape into Western “black boxes” labeled as “CMT” generates definitions while prohibiting questioning outside the dominant narrative. This domain of thinking leaves a disjunct and creates a mysterious absence of information, an “emptiness” (or so we think!). In the United States, entire community CMT definitions are neglected in land management discussions.

Trees of community interest are messages of sustainability as reminders of memory prior to Colonialism – evaded by contemporary mainstream populations. It is little wonder that intersectional CMTs carry perceptions as an optical illusion to dominant members of Western capitalist society who did not interpret these trees for their cultural significance. The underlying cultural disjunction that CMTs exemplify is because academics have not put in the time and
"heavy lifting" to recognize the depth of CMT research hand in hand with the Indigenous perspective and non-archaeological experts.

This project does not profess to have "an all-seeing answer" to CMT but a local and multivocal way of thinking about them. As Westerners, we must understand that Native CMTs are two-way mirrors. Culturally Modified Trees are seen by dominant cultures as a mirage, inverted, not even fully recognized, or respected as belonging to the people who experienced ethnocide and still love and care for this environment too. Love and memory are contained in these powerful stories, disfigured in the archaeological record by Western-trained academics, extensions of dominant colonial narratives. Culturally Modified Trees of Indigenous interest do not belong to Western academics or their historical accounts. Today, modern society occupies an ecologically unsustainable world, has not been wise with resources, and has almost severed the ability to recognize these ancestral messages. Appreciation for CMTs now impacts modern and future generations, who can remind humankind that our world is fragile and that we are responsible for this landscape.

Visibility and Archaeology
Seeing and Looking at Culturally Modified Tree Studies

Western academic mentors say “it” is not real unless “it” is on a map (unless they can see “it” or “it” can be defined). Western-settler-academic positions and methodological techniques have driven CMT studies. Figure 1 outlines a Relationality Diagram representing layers of knowledge associated with CMT. Rarely are Indigenous knowledge keepers included within CMT studies, which is why a relationality diagram is crucial to remember throughout conceptualization.
strategies. This study is an evolving opportunity to *unlearn* elements of Western archaeology. This paper explores appreciation for living history and dynamics impacting community-centered heritage work and forces us to re-center ourselves as mainstream archaeologists as communicators and experts.

Culturally Modified Tree studies demand witnesses to "see" and translate real optical illusions in plain sight. A braided project encourages listening and cross-communication, rich in ethics and empathy. This model considers impact and perspective when looking at Culturally Modified Tree along the Stillaguamish River watershed in Western Washington with Indigenous expertise.

Many Westerners overlook living artifacts in plain sight (personal experience). CMT communicates a complex language on the landscape; they are unique, sometimes invisible, or unseen through a cultural lens or bias (Parker and King 1998). An academic intellectual interest drives Western archaeological data. Culturally Modified Trees yield information related to
meaning and presence, which has not been assessed within the Puget Sound Basin to include ethnohistoric and ethnographic viewpoints on CMT perceived by Native communities.

This project realizes Western archaeologists have become too reliant on dominant attributes, such as visibility and traditional Western academic thinking, which has generated CMT knowledge. It becomes critical to decenter Western perspectives to name excluded viewpoints and voices. Culturally Modified Tree visibility is spectral. People have different viewpoints when encountering CMTs- because the context in urban areas where CMTs grow has been warped in the recent two centuries.

“CMTs to me--and I imagine other Coast Salish people--are tangible reminders of an ancestral presence and way of life before colonization, and their continued creation and existence is an uplifting testament to the survival of traditional ways and cultural knowledge specific to this area” (Informant 2 2023).

This notion undermines traditional Western-driven archaeology because living artifacts counter picturesque mainstream academic thinking (Parker and King 1998). Western archaeology continues to be influenced by neo-European ontology, which tends to base human history on observationally visible remnants of the past (King 2003). This style of archaeology promotes the ability to “find” or count artifacts and legitimize “finds” with pictures, descriptions, and text in the colonizer language (Frichot 2022). Culturally Modified Trees conflict with Western specialist labels and psychologies associated with landscape relationships (Parker and King 1998).

Alternate perspectives remind Western archaeologists that more forms of intelligence and meanings are associated with living artifacts than what is attributed through Western psychology (Parker and King 1998). Living artifacts are not always easily seen or comprehended into documentation strategies and standards, yet Western archaeologists are usually responsible for detecting them (Bulletin 15 Criteria For Evaluation). This study explores a disjunct in CMT
conceptualization correlating to community needs and Native expert perspectives. Flexible project methods allow researchers to invite specialist preservation perspectives to previously recorded CMT sites. This project highlights five CMT site visits with tribal knowledge keepers to review Western archaeological data collected at these sites to offer a community-based perspective (Stoffel et al. 2018). This study investigates five CMT sites with insider ontological communication in the Stillaguamish River Watershed. This local CMT reflection highlights an adaptive need for an Indigenous community voice in the documentation standards (King 2003).

In order to analyze the adequacy of Western academic documentation strategies, it is essential to include the needs of Native Communities in recorded strategies so that Native American consumers find CMT data useful too. Currently, a distance exists between Western archaeologists and Indigenous community specialists who qualify as decision makers to negotiate impacts on their community’s history represented in vivio-facts (living artifacts). Contemporary archaeological techniques are moving toward the inclusion of TEK (Traditional Ecological Knowledge) and ethnographically informed perspective (Anderson 2006). In addition to traditional archaeological site data, this ethnographic technique offers depth to understanding our landscapes today (Turner 2014). These applications can expand Western definitions and incorporate landscape perspectives to understand how we got here in a way that includes alternate viewpoints. Colonial eyes, biases, and lenses prevent us from seeing the colorful world of CMTs living in more places than expected (Informants 1 and 2).

Living artifacts are vital because they will expire and respond to care (Palmer 2022). CMTs from the early contact periods are part of a human language going muted and misunderstood in our lifetimes because they are intentionally disappearing in communication (Informant 1). Species like Western Red Cedar can live for hundreds of years (Van Pelt 2007),
and attention to plants is a fantastic way of reconstructing landscapes (Turner 2014). Current environmental droughts, wildfires, and floods are changing these dynamics, quickly. If readers are wondering when CMT and living artifacts became important or visible, it is because they are becoming threatened. As Westerners, we are not the communicators of CMT belonging to Native interests, as CMTs are ethnographic resources. At present, ethnographic resources can be defined as landscapes, culturally significant or sensitive plants, viewsheds, sites, and structures, that are significant or fulfill a sense of meaning, purpose, and way of existence (NPS Ethnography in the Parks 2022). A community determines these types of resources.

Western documentation strategies of CMTs do not account for the importance of Indigenous stewardship lessons. Documenting CMTs is our obligation and one for future generations because it preserves sustainability messages (Informant 2). Visibility and its limitations drive this paper, so ethnographic perspective and tribal expertise are fundamental in CMT data collection. Community-centered archaeology linked to CMTs and other living artifacts comes down to land use decision-making and how we collaborate archaeology with different ontological views (Lyons et al. 2022). Creative thinking with attention to limited visibility around CMT makes this work incredibly difficult and relevant.

To begin our course on this topic, I will summarize the direction for each chapter, as it supports the more significant archaeological relevance of CMTs and their impact on today’s world.

Chapter II mindfully walks readers through critical concepts of Traditional Ecological Knowledge (TEK) correlated to using trees in the Puget Sound Lowlands. This section combines historical and ethnohistorical reflections on traditional woodland use in the last two centuries in Western Washington. Unfortunately, stewardship traditions were misunderstood and harmed by
newcomers who did not share the same depth in landscape relationships and continue to abuse these stories today.

Chapter III focuses on Western documentation techniques that Western academics have implemented to observe and assess Culturally Modified Trees of Indigenous interest. Counting trees or making them count looks at the legal weight of Western documentation regarding CMTs and the cultural responsibility to diversify voices in the CMT recordation process.

Chapter IV Outlines theoretical designs to substantiate a mixed-method approach, including community-based knowledge correlating to CMTs. This chapter highlights how data is collected, identified, stored, and recorded for contextual analysis. I accomplished my research objection through quantitative archaeological CMT site information and qualitative semi-structured interviews at CMT locations. Feelings and emotions bring voice to five previously recorded CMT sites from a Stillaguamish Tribal perspective.

Chapter V presents the results of the findings. This chapter has two phases. The first phase highlights archaeological CMT data for Skagit and Snohomish Counties. The second phase braid together CMT site visits and background information consisting of summaries, maps, figures, quotes, concept diagrams, and discussions for each site visit that give weight to the documentation of CMT. These two approaches aim to audit the Western academic perspective to showcase the complexity and value rooted in the community dialog of CMT.

Chapter VI concludes by summarizing the results and discussing the implementation of these findings in the framework of CMT studies. Finally, to close this thesis, readers will leave with valuable takeaways and continuing questions for application.
Chapter II

Historical Background

The Landscape Relationships

This chapter expands on CMT varieties, as they are figures of memory and meaning embedded in the Stillaguamish Watershed in Western Washington. Losses of CMT are critical to illustrate when portraying the tribal significance of these features and their stories which were displaced in the 19th and 20th centuries. This chapter incorporates photographic evidence from the Darius Kinsey collections (Bohn and Rodolpho 1978) to support the existence of CMT in Western Washington, specifically in Skagit and Snohomish Counties. The following sections reposition Westerners to events when logging companies and settlers decimated the landscape at lower PNW (Pacific Northwest) elevations, impacting Indigenous stewardship of “home.”

Culturally Modified Trees stand in urban areas of the Puget Sound Basin across the Pacific Northwest. Culturally Modified Trees can be associated with sacred spiritual practices, trails, networks, landscape management areas, and living history in the form of bark harvesting. These traditions can be seen in the variety of cedar baskets, woven mats, and clothing produced and being produced (Stryd and Feddema 1998; Stewart 2009). Over two hundred years, CMTs and their respective contexts were transformed by Euro-American logging, homesteading, and agriculture. Regardless, Indigenous Communities have retained the memory and meaning of CMTs as part of a larger story disrupted by Colonialism. As figures on the landscape, CMTs are sometimes visually evident, with characteristics such as thick 90-degree bent branches on the top or base of the tree. Culturally Modified Trees demarcate ethnographic resources that can verify the complexity of different land management techniques in Native North America.
Cultural modification of tree is common amongst forest-dwelling peoples worldwide. They are living trees from which materials are harvested (edible inner bark, pitch, resin, bark, branches) or modified through coppicing and pollarding. These modifications produce wood of a specific size and quality. Modification styles represent art or ceremony purposes or indicate boundary lines or trails (Turner et al. 2009). In this thesis, CMTs may be referred to as marker trees interchangeably. “Marker trees” was a term used by Tribal Historic Preservation Officers throughout this project. Typically, CMTs represent the potential for sustainable use and management of trees and forested regions (Turner et al. 2009). Culturally Modified Trees reflect sustainable use, making this knowledge incredibly valuable today. However, bark harvesting can harm the tree, so lessons associated with sustainable bark peeling traditions are essential to living and future generations (Stryd and Feddema 1998; Turner et al. 2009; Turner 2014).

International scholars upset with existing patterns of protection and management of Native resources on private and public lands say that current policies and land management practices do not address tribal concerns surrounding CMTs adequately (Garrick 1998; Eldrige 1997; Turner 2009; Östlund and Gudrun 2021; Lyons et al. 2022). There is a call to explore traditional ecological knowledge linked with historical tribal adaptive approaches to resource management (Benner et al. 2019). Critical environmental lessons were learned during the expansion of Western settlement (Rajala 1999; Beckey 2003) with the erasure of old-growth forests in Coast Salish Country (Coman and Gibbs 1949; Clark 1969), especially close to villages and seasonal gathering areas (Informants 1 and 2 2023). The continuing transformation of entire landscapes warps archaeological understanding of CMTs in real-time. This archaeological approach indicates a relevant disjunct that affects social memory and the legal
translation of Traditional Ecological Knowledge (TEK) concerning CMTs previously recorded within the natural boundaries Stillaguamish watershed (see Figure 2 below).

Figure 2: Stillaguamish watershed boundaries. USGS. Andrew S. Gendaszek 2011.
CMTs are living embodiments of Indigenous stewardship. Ethnographers, naturalists, archaeologists, medical anthropologists, and other groups have been interested in the relationship between Indigenous communities and the natural world (Menzies 2006; Turner 2009; Leprofsky and Armstrong 2018). During the last few decades, sustainable practices and traditions have been an increasing interest as a source of wisdom about sustainable resource use and environmental conservation (Menzies 2006). Bark harvesting is an excellent example of these sustainable practices because it allows individuals to “exchange” with the tree without killing it (Figure 3). An exchange is symbolic here, as having lived on this continent for millennia, having experiential knowledge, and having used the local resources into the present time, Native

Figure 3: Hilary Stewart illustration of Coast Salish cedar bark harvesting. Cedar, 1973.
American communities practice a refined understanding of local ecology and their impact on local resources (Menzies 2006).

Dr. Fikret Berkes coined the term Traditional Ecological Knowledge (TEK) used across the heritage and environmental industry:

“Fikret Berkes has broadly defined Indigenous knowledge as the local knowledge held by Indigenous peoples, and he suggests Traditional Ecological Knowledge (TEK) is a subset of Indigenous Knowledge. TEK is the ecological part of Indigenous knowledge, the land-based practical knowledge of specific beliefs regarding human interaction with the ecosystem (Menzies 2006: 6-8).”

The concept around exchange is simple – it is not only to take from the tree but to sustainably transact with the tree for extracting bark (Informant 1 2023). A small gift, accompanied by a prayer, is spoken to the tree as a provider for tradition (Turner 2014). For millennia, various traditions around the careful use of trees have been practiced with genuine care and deep respect for sustainable harvesting. However, what happens when all the trees with these scars or shaped qualities disappear or go unnoticed? What does this teach future generations, especially during critical environmental stress? Traditional Ecological Knowledge and associated wisdom have been stressed and displaced during the last two hundred years, and we should not abandon these teachings carelessly (Turner et al. 2009).

Archaeologists in the Americas have slowly incorporated TEK’s Indigenous ontology, axiology, and tautology (Wilson 2008; Turner 2014). Traditional Ecological Knowledge, as used here, refers to ways of knowing (knowing, the process) and information (knowledge as the thing known). Archaeological documentation harms spiritual ecology (Sheridan and Longboat 2006: 375). Perhaps this warning is tied to CMT as living artifacts belong to a unique imagination
The distinction between the two is vital for analytical reasons and understanding TEK correctly (Berkes 2012).

Western definitions of CMTs inadvertently symbolize a by-product of reactionary preservation strategies rather than proactive community-oriented stewardship (King 2013). This structure has remained unchecked by the Indigenous perspective in Western Washington.

Traditional Ecological Knowledge is the product of intergenerational, fluid social, and collaborative creative processes, reflecting and identifying a community’s history, cultural, and social identity (Berkes 2012). Culturally Modified Trees are constantly recreated as traditional artists and practitioners bring fresh perspectives to their work (Hoffman et al. 2013: 328; Informant 1 2023). Unfortunately, these living embodiments of TEK have been repeatedly miscommunicated, misused, and misunderstood by Western Academics unfamiliar with this philosophy. Traditional ecological knowledge, misunderstood by foreign eyes, was translated indirectly by early explorers and navigators who relied heavily on Indigenous informants, wrote of beaten roads and heavily traveled trails, or took note of manipulated trees (see Figure 4).

This pass was sighted during the summer of 1890 by C. F. B. Haskell, who, in honor of John F. Stevens, chief engineer of the party, carved the name “Steven’s Pass,” on the tree that stood upon the “divide.” As far as could be determined from the undisturbed condition of the place, Mr. Haskell and his companion were the first human beings who visited the spot. No winding trail bespoke the foot-tread of either red or white man; no scarred tree, bent bough or broken twig indicated their whereabouts; nor did the dying embers or silent ashes of a deserted campfire mark the diurnal resting place of a predecessor. Nature seemed as undisturbed as when Adam and Eve dwelt alone in the Garden of

particular trees are somewhat “remarkable” in historical accounts (Informant 2 2023). Perhaps these signs were ubiquitous in the 18th and 19th-century landscape.

Traditional Ecological Knowledge remains largely ignored by Western archaeologists who inventory Areas of Potential Effect or Project Areas (Berkes 2012). As is widely recognized, Pacific Northwest archaeologists in the early 1900s began to focus on using shells and layers of refuse to identify sites, “as these were easily observed,” often occurring along beaches, rivers, and waterways (Trigger 2006). Ease of access and visibility led to descriptions readily applied to the archaeological detection of shell middens, emphasizing visibility (Miss and Campbell 1991). This shift influenced primary ways to locate archaeological sites by moving away from combined ethnographic approaches. In the 1930s, American archaeologists moved towards new efforts to salvage “vanishing” ethnographic history, strategically conducted to identify and locate archaeological sites based on the traditional information of living community members (Miller 2013). The time from the 1940s to the 1970s saw another change in thinking, emphasizing academic research, which promoted different geological and theoretical foci on a more distant past and strongly influenced by the newly developed radiocarbon dating technology (Miss and Campbell 1991). After the mid-1970s, emphasis again shifted because federal environmental laws included identifying and protecting cultural resources (Tobin 1989; Miss and Campbell 1991; Tuchmann and Connaughton 1996). In the last 50 years, institutional foci have shifted from rigid compliance procedures towards emphasizing tribal and Indigenous academic preservation perspectives to make archaeological data more relevant, equitable, and valuable to non-Western communities.

Today North American archaeologists seek to incorporate diverse viewpoints across federal law and cultural resource management contexts amidst a movement among Indigenous
Sovereign Nations to reclaim and steward their history. Through a multivocal ethnographically informed archeological assessment around documented CMTs in Skagit / Snohomish County, this project incorporates ethnohistoric details to expand the Western conceptualization of CMTs (see Chapter 2).

Specific CMTs in the Stillaguamish watershed are ethnographic resources and extensions of the Stillaguamish community and living traditions embodied in meaningful associations with the landscape. Environmental lessons associated with the use of trees are ancient. There is a long human history in the Stillaguamish Watershed (Collins 1974; Miss and Campbell 1991; Ruby 2001). Figure 5 highlights the network of waterways in and around Snohomish County. The peoples of the Stillaguamish River have existed and thrived for millennia. Absolute dating of artifacts in and around the Granite Falls area suggests the earliest occupation between 7690 and 9630 cal BP (Chatters et al. 2020). 8,000 years of continued cultural land use in one place might offer a deep sense of stewardship practiced by exchanging with the landscape, allowing subsequent generations to conduct sustainable harvesting traditions (Turner 2014).

Based on experience working with Federal Land Managing Agencies in Oregon and Washington State, there is an extreme disjunct in how CMTs are recognized and inventoried by Western academic trained archaeologists. We are not including local expertise in CMT assessments. A mechanical and systematic approach to CMTs restricts an organic understanding of people in relationship to CMTs and broader landscapes, which includes emotion, feeling, impact, and perspective from Traditional Communities (Parker and King 1998). According to Washington State Archaeologist (S. Palmer March 2022), our current legal structure for archaeological documentation presents ontological barriers. After all, CMTs are presented in documentation as entirely visible "sites" with discrete temporal/ spatial boundaries – which
presents a false understanding because the original CMT site boundaries are “gone” because eras since colonization have decimated the original culturally managed landscape. Culturally Modified Trees of Native interest presents a theoretical dilemma in Western thinking about the “past” and “present” because marker trees represent an entirely different form of spatial/temporal communication across Native America in tribal communities. Western academics have an obligation to decentralize the dominant understanding of CMTs because they include extensions of non-Western lifeways. CMTs of Native interest are vehicles for vitality shared by entire communities who semiotically negotiate their inter-generational meanings today. As we move into a new age of environmental loss, CMTs reflect overlapping history harmonizing the past and the present, which increase in loudness as larger mainstream society abandons these teachings.

Culturally Modified Trees have been known to Stillaguamish communities and date from periods before European contact and settlement to more recent times. This research focuses on CMTs of Stillaguamish community interest, covering an extensive diversity of categories beyond peeled cedar trees. In the following site visits (Chapter 5), we discuss the use of trees and also trees of significance. This project follows a braided design, interweaving ethnographic, ethnohistoric, and archaeological data to create a multi-modal web of significance, perspective, and impact informed by CMT knowledge keepers. The project traverses a Western academic and local Tribal landscape to discover fundamental ways of interpreting knowledge about CMTs. This report includes a baseline synthesis of recorded CMT occurrences in Skagit and Snohomish Counties. Using this information, project mentors agreed to visit five selected CMT sites of particular interest – there were plenty of examples.
Site visits were completed physically or virtually, and we discussed what might be done to extend the life and story of CMTs from preservation perspectives outside of existing archaeological strategies. I used a qualitative framework to help outsiders (like myself) conceptualize the significance and respect for CMT data generation. These interviews formed the basis for reflecting on existing processes in the Western documentation style used to record and observe CMTs.
People and Places

The Stillaguamish are a tribe of Southern Coast Salish people of the Pacific Northwest located north of Seattle, Washington. Today, the Stillaguamish Tribe of Indians includes descendants of the Stoluck-wa-mish River Tribe (Ruby and Brown 2001). In 1855, most of their population lived on the (eponymous) Stillaguamish River at the confluence of the North and South forks near present-day Arlington. The name Stoluck-wa-mish or Stillaguamish has been used since 1850 to refer to the peoples who lived along the river and camped along its tributaries (Miss and Campbell 1991). Their ancestors were a party to the Treaty of Point Elliott of 1855, using the spelling Stoluck-wa-mish (Stillaguamish Tribe of Indians 2021). Local accounts suggest the Stoluck-wa-mish river name became anglicized with the incorporation of the town Arlington in 1891 (Collins 1974; Miss and Cambell 1991). However, after the treaty's signing in 1855, the Stoluck-wa-mish riverine communities did not receive separate reservation lands from the US Federal Government until 2014. As a result, families and individuals from the Stoluck-wa-mish were moved to the Tulalip Reservation. Still, most remained in the Aboriginal area along the Stillaguamish River (Stillaguamish Tribe of Indians 2021).

Snohomish County Setting

Snohomish County comprises three major watersheds, the Snohomish, the Sauk, and the Stillaguamish Rivers. “The Stilly” flows from its headwaters (4,000 ft asl) in the Cascade Mountain Range to the Salish Sea, where it meets Camano Island. The river is approximately forty-five miles long, and its two north and south forks comprise the river system. The north and south divisions of the Stillaguamish River supply life to not only humans, but wildlife, marine species, and old-growth forests. Today, communities negotiate the use of the river and are working to restore the ecological health of the Stillaguamish drainage system.
Culturally Modified Trees are the still visible remnants of early, complex modes of communication and exchange along the Stillaguamish River (Boyer et al. 2018). Evidence of occupation in the riverine areas has been well documented (Chatters and Cooper 2020; Collins 1974). In addition, the size and health of Native settlements were reported by Euro-American immigrant witnesses (Figure 6) James Swan, *Three Years on the Northwest Coast*. Trade, exchange, and migration from north to south within the Salish Sea lowlands, east-west, across the Cascade Range, and maritime travel have been well documented (Beckey 2003; Collins 1974). Transmontane and maritime coastal routes are clearly referenced in the following sections. The Stillaguamish People were tied to the river (Ruby 2001). The tribe’s name comes from the Indian term “Stoh-luk” meaning “river,” and its suffix, “whampsh,” meaning people or “tribe.”(Ruby and Brown 2001; Collins 1974; Miss and Campbell 1991). Today, the Stillaguamish Tribe of Indians have re-established their sovereign, contextually correct name, “Stuləgʷábš”, meaning People of the River (Stillaguamish Tribe of Indians 2022).

Just outside this watershed are two other groups, the Upper Skagit and the Sauk, who are documented to have shared the use of “root crops” (Smith 1988; Collins 1974) on the Sauk Prairie, which lies between the Stillaguamish River and the Sauk (Collins 1974). The Upper
Skagit and peoples of the Sauk River villages would use the short portage to the Stillaguamish River to go to saltwater (Collins 1974). This was a logical decision, as the Stillaguamish was a shorter route than the Skagit for the upriver villages (Collins 1974). Shaped and peeled cedar trees can still be appreciated along these same travel corridors, such as old State Route 9, and nearby state highways 530 and 536.

“Significance of Stillaguamish named and sacred places, landscapes, landforms and water bodies, sites and structures, landmarks, and resources are often expressed in, and through cultural stories which have long been elemental to how coast Salish peoples understand their relationships and roles with and in the world” (Boyer et al. 2018: 20).

This definition suggests that expressions on the landscape (such as CMTs) provide vital aspects in Indigenous education and environmental stewardship.

A Brief History of Logging in Snohomish County

Captain Vancouver of the HMS Discovery traveled around Whidbey Island, WA (expedition of 1791-1795). He recorded in his log that “the best timber the world affords, may be found up the straits of Juan de Fuca” (quoted in Coman and Gibbs 1949: 33). By the early 1800s, the first logging mills in what became the Northwest Territories were owned and run by the Hudson’s Bay Company (HBC) where operation began as early as 1828 in Fort Nisqually (Center for Pacific Northwest Studies; Coman and Gibbs 1949). These mills were enormous enterprises that transformed the Puget Sound basin, clearing land for agriculture and paving the way for real estate opportunity and eventual settlement (Rajala 1999). However, during the same period, the United States- Canadian Boundary line was drawn in 1846, closing the original HBC Mills and leaving a vacuum for a hungry corporate American market to establish the first American lumber mills (Figure 7). The beginning of the gold rush in 1848 would start the next
phase of deforestation. The first American-operated timber mill in the Washington Territory was constructed in Port Gamble in 1854 and run by Talbot and Pope (Coman and Gibbs 1949). In 1850, the white population around Puget Sound was less than one hundred (Coman and Gibbs 1949; Cox 1974).

However, as the lumber industry took off, employment and newly logged-off lands quickly attracted massive population movements of European-American Western immigrants.

Figure 7: Lumber Centers of the Pacific Northwest prior to 1900. Cox, Thomas R. Mills and Markets; a History of the Pacific Coast Lumber Industry to 1900. University of Washington Press, 1974: 107.

The American corporate owners of the Talbot and Pope Company, operating the Port Gamble
Mill, were interested in harvesting timber and shipping it to external markets such as British firms in Hawaii. Other international destinations included ports in Shanghai, Yokoyama, Bombay, and Russia (Coman and Gibbs 1949: 193). Usually, sawmill locations were selected based on attributes of 'good tidewater, i.e., at a point where sailing vessels would have good anchorage and safe harbor to load the cargo (Coman and Gibbs 1949: 32). This corporate exploitation scheme transformed the landscape by targeting large trees that grow close to the water’s edge.

Equally significant was the influence that technological change had on forest science, cutting practices, business, and government relations during the decades from the 1860s to the 1920s (Rajala 1999). For example, planning the railroad kickstarted treaty negotiations and established National forests and other land management powers. Political land use agendas influenced the Native American Acts, the Indian Reorganization Act, the Trust Responsibility Act, and the Indian Citizenship Act. However, political measures were only part of the cumulative social and technological changes with detrimental impacts on the forests, the Native populations, and the traditions of sustainability. Conservation discussions remained absent for nearly two hundred years since the first significant sawmill companies were established (Beckey 2003). Industrial-era logging transformed entire environmental settings, incorporating methods from selective logging to clearcutting (Rajala 1999). It severed the relationships traditional communities had with ancestral ecosystems. A foreign factory regime culturally and economically shifted Coast Salish relationships with the forested landscape. This transformation would ultimately harm traditional communities and their traditional uses of trees.

In order to sustain the hungry American economy, 18th and 19th-century environmental transactions produced today's artificial landscapes in the Puget Sound lowlands. Culturally
modified trees are reminders of these older relationships, going unrecognized by the same white settler colonial groups which decimated highly refined environments operated by Native Communities. CMT can be reminders of the generationally stewarded landscapes of Native America. In less than two centuries, industrial logging nearly destroyed the millennia of environmental lessons and ecological knowledge.
Figure 8: Kinsey photograph depicting clear-cutting scenes in a forest in Washington State. Half a Century of Negatives Skagit, Washington. Darius and Tabitha Kinsey circa 1890.
Culturally Modified Trees of Tribal interest grow in Snohomish, Skagit, King, Whatcom, and Island Counties, today, many of these are stranded interurban CMTs dotting our landscape in peculiar ways (Eldridge and Mobely 1992; 1997; Garrick 1998; Turner et al. 2009). Local experts with the Stillaguamish express relationships with trees in culturally specific ways, “treating them like great-great-great-grandparents, with a need to be cared for (Informants 1 and 2 2023). These figures on the landscape (CMTs) have survived extreme social change over the last two hundred years, harming tribal and forest relationships curated by Native American dreamscape in Coast Salish Country (Figure 8). Conceptually, CMTs are expansive. There is more to a CMT site than simply trees. CMTs are part of a broader “story scape/dreamscape” relationship. Traditional ecological knowledge applied to the Stillaguamish CMTs provide continuity around stories of wisdom with a place and spirit with identity defined in traditional ecological knowledge (TEK). Figure 9 represents a model that is a representative helix of intergenerational interactions corresponding with local Traditional Ecological ways of living with the landscape. CMTs represent part of an Indigenous history –doomed to erasure. Corporate and political agendas do not find CMTs valuable enough to Western-agenda-driven decision-makers because they are not seen or understood as having conveyed significance or relevance in the United States.

Sacred groves have been logged, burned, and destroyed, leaving disfigured histories and warped biographies told by Westerners (see Figure 10). Nevertheless, landscapes are dynamic, as reflected in an account by a resident of Arlington, Washington, who vividly remembers 20th-century social change and collective transformation (see Figure 11). The passage below conveys rates of change in which CMT are affected in our developing world of the 21st century.
Figure 9: Traditional Ecological Knowledge. Components and wisdom of Aboriginal Peoples of Northwestern America. Menzies 2006. Figure 3.1, 65-67.
Figure 10: Article highlights the destruction of an ancestral grove. Illustrated History of Skagit and Snohomish Counties; their people, their commerce, and their resources, with an outline of the early history of the State of Washington pp. 474: 1906.
Stillaguamish Ethnohistory

Transmontane travel was frequent in the Cascades during the ethnohistoric periods before the arrival of Euro-American settlers in the North Cascades (Hollenbeck 1987). Early euro-

Figure 11: Account of William H. Verd, (c. 1955). Courtesy of Arlington Historical Society.
American expeditions noted traditionally used trail systems operated by Native groups (Beckey 2003). Eventually, roads were constructed following many traditional Indigenous trail systems. Later, these corridors were expanded to accommodate wagon roads and railroad crossings through the Cascades in Washington and Oregon (Hollenbeck and Moss 1987; Beckey 2003). Documented CMTs today are evidence of these social networks. Ethnohistoric perspectives capture the varieties of ways trees reflected everyday life in Coast Salish Country (Costell 1895; Smith 1949; Bruseth 1977; Stewart 2009). In the face of the changes to traditional landscapes via Western settlement, living practitioners of local harvesting have held onto ancestral knowledge of bark and wood technology in the Pacific Northwest. Evidence from recorded CMTs, modern perspectives, and primary literature suggests that many kinds and types of trees signify integrity to communities in the Puget Sound Basin.

During settler expansion, familiar harvesting locations and cultural practices experienced systemic colonial erasure by destroying ancient sacred groves used for burials and trail networks (Ruby and Brown 2001; Fish 2016). As a result, Stillaguamish Ethnohistoric CMTs of use and significance were far more ubiquitous two hundred years ago. A traumatic example is the Goodridge Farm, shown in Figure 10 (previous), where a vivid account remembers the slaughter of a sacred grove. Marker trees stand as a testament to the Indigenous presence on the landscape from earlier eras, which included the last precontact CMT traditions before the dismemberment of the landscape through immigrant settlement and occupation by Euro-American foreigners.

Along the Stillaguamish River, marker trees are still standing. Trail systems in the North Cascades have memory; their existence is not forgotten by the communities who know the Indigenous stories of the Cascade Mountains. Native communities like the Stillaguamish have remained actively tied to Coast Salish Country, despite the two centuries of colonialism in
Western Washington. However, Stillaguamish historians and practitioners say: marker-trees are unique in that they retire and were replaced (in a world before colonization). A central focus was on managing, maintaining, and regenerating certain “marks on the landscape” to maintain cultural continuity (Informant 2 2023). Over the decades, as settlers encroached on these communities, the trails transformed into roads and byways, eventually interstates connecting the lowlands of Puget Sound.

**Euro-American Maps and Indigenous Trail Systems**

Their purpose may be gone, but their meanings remain here (Wells 2019). Stripped trees and trail marker trees are found in all regions of the United States (Figure 12). Stillaguamish communities were tied to the Stillaguamish River (Ruby and Brown 2001). The Stillaguamish River was a significant travel corridor (see Figure 15) carrying people, ideas, and materials from the headwaters in the Cascade Mountains to the saltwater of the Salish Sea. One purpose of examining CMT is to highlight the decisive significance that living artifacts bring to traditional trail networks, embodying stories of the landscape. CMTs are signals of relationships within a watershed that connects; social networks, ideas, stories, and knowledge that interconnect like streams of consciousness to cultivate life.
Figure 12: Trail Marker Tree. Located on the border of Mettawa and West Lake Forest, IL (c. 1890s). supplied by Lakes Region Historical Society, Lake County, IL.
Collections of maps described in Fred Beckey’s Range of Glaciers offer a glimpse of where extensive Indigenous trail systems in the Northwest connected mountains and sea.

“Beaten paths” were mentioned in primary and secondary sources from early explorers such as Sir Alexander Mackenzie, Railroad surveyors through the Cascades, and the Hudson Bay Company, all of whom were indebted to these navigation routes across Coast Salish Country. These routes were the only means for Westerners to occupy and settle remote areas of a newly established Oregon Territory, which would later become Washington State. Culturally Modified

Figure 13: Map by O.H Blanchard, 1860, depicts an early Cascade trail network. Here we can orient these rivers (Skagit, Stillaguamish, and the rivers leading east, Chelan). Beckey 2003.
Trees found along these corridors were described through secondhand accounts (Journal of Education 1896: 88; Beckey 2003). Other references to trail networks mentioned in Custer’s survey notes of the 49th parallel stated:

It was July 30th. There was a loud hurrah when the party struck “a broad and well-traveled trail,” later known as the Whatcom trail (Beckey 2003). Custer commented about the existing trails from nine miles south of the border. He says, “A good trail could be located through this pass from the Skagit to Fort Hope connecting this with the upper and lower Skagit (Beckey 2003: 189-91).

On O.H. Blanchard’s map, we can see the network of trails that would have connected the Skagit, Stillaguamish, and Snohomish complexes with northern groups (Figure 13). Also, this was one of the earliest maps to mention the Bellingham Bay trail, today known as State Route 9 (Informant 2). Today, original trail networks featuring CMTs of Native interest can be observed across Skagit and Snohomish Counties (Informant 1; Informant 2; and Informant 3 2023).

Over the decades, we can see the transformation of the Bellingham Bay Trail into an auto trail, a state route, and a two-lane highway. Marker trees exist along old State Routes and highway systems used today.

**Stillaguamish Ethnology of CMT**

“CMTs are just like a surface level (easily identifiable) marker, and they are often called marker trees. Often, they indicate a broad landscape modification, whether a well-used trail or a guide to a resource area that is being managed, like a garden, such as camas prairies which would be a highly culturally modified landscape as well” (Informant 1 2023).

CMT taxonomy in the Puget Sound basin is not the primary topic of this research. Instead, the primary focus of this project was to generate an inclusive and equitable approach to documenting CMTs in the Stillaguamish watershed to be expanded upon elsewhere. CMT are
complex, multi-functional, semiotically used signs on the landscape growing into their purpose. For example, “one signifies a message versus one providing a resource” (Informant 3 2023).

Trees of significance might include burial trees, among other Coast Salish religious expressions. Burial trees are an example of a tree of significance that is private, protected, and falls outside this paper's scope. However, readers should be aware of burial trees in the Puget Sound Basin today. Trees of significance are an example of an ethnographic resource going under-recorded, under-recognized, and under-acknowledged in the archaeological record within Washington State. To help conceptualize CMT variety, sketches of reoccurring categories mentioning CMT from ethnohistoric and ethnographic sources were created (Appendix B). One CMT of significance is the aerial canoe, which was forcibly discarded when Europeans arrived (Bruseth 1977). Loss and destruction threaten these familial extensions, who would have prepared Aerial Canoe Trees for Tribal Elites and meticulously oversaw their resting ancestors in the trees (Deur 2009, Informants 1 and 2). Our present world is intersected by a few standing CMTs, which are precious to ancestral heritage within a community. Living Canoe Trees are standing reminders to those who care about the loss happening before our modern eyes. Ecological memory loss goes unrecognized when CMTs are most often documented by mainstream archaeologists. Culturally Modified Trees uncomfortably reminds settler onlookers of the Native stories harmed due to logging and settlement driven by land clearing and nation-building regimes to establish what is today Western Washington. The loss of CMTs about Tribal interest can be seen and felt within the experiential knowledge domains of Indigenous groups.

Western archaeologists and historians’ have often ignored various tree types and groves that interest Indigenous communities without a second thought for including ethnohistoric and ethnographic perspectives into Areas of Potential Affect and Project Areas. Culturally Modified
Trees and places containing vital living history deserve to be observed, recorded, and protected with attention to Sovereign Tribal philosophy. More critically, these traditions should be in the land management dialog. Archaeologists can make time to connect with local communities because *ethnographic resources relate to living history as much as the distant past.* This discussion calls on Western-trained academic archaeologists to undertake responsibility that ensures space for local communities to negotiate cultural impacts to their inheritance rather than Western academics.

The Western archaeological approach to CMTs presents a dilemma because dynamic landscapes are ever-changing, affecting the people who relate to a particular place through landscape identity. At the turn of the 19th century, Native families who lived on the Upper Sauk River Watershed (neighboring the Stillaguamish communities to the East) felt the negative impacts of the establishment of the National Forest in 1908 as the United States government separated Indigenous care from Western stewardship practices (Fish 2016). As an example, in *Two Voices,* the Bedal family record portrayed Indigenous subsistence in the forest during the turn of the 19th century (Fish 2016). This event showcased the loss on this landscape, the harm to TEK, and the treasured nature of CMTs today. The onslaught on the Native landscape saw legal justification in the 1890s when federal authorities switched to national management, away from traditional ecological community cooperation and control.

The Bedal family (and others) faced barriers of permitting, associative allotment licenses, taxes, and fees (Anderson 2006: 312-316). Federal bodies forced the Bedals out of their homelands by establishing the Mount Baker Snoqualmie National Forest (Fish 2016). Families like the Bedal’s left their homes and plots of land where their holdings would be burned or destroyed (Fish 2016). Ethnic cleansing events in Snohomish County are not unique in American
History. Within the Stillaguamish, families with histories in the forest were uprooted and compelled to abandon traditional practices (Ruby and Brown 2001). Driving alongside these forest roads and two-lane highways, county residents can still see the right-angle bent limbs or trees with scars (facing away from the road). Standing scars are part of an intentional decision to leave a subtle signature in the forest so authorities would not see bark peels from the road (Fish 2016) and simultaneously mark an imprint of tradition since time immemorial. This “two-world” concept gives landscape relationships story and intergenerational vernacular. Hunn (2014) relates a similar remembrance of Native communities in central Washington who seek to protect what they love – the landscape.

Regional Variety

Traditionally, the Coast Salish use of trees is broad and diverse. For example, ethnohistoric accounts describe shaped trees and bark-stripped trees in the Skagit and Snohomish County area; commonly, these are Western Red Cedar (*Thuja plicata*) used for canoe burials and burial groves. However, burial trees can come in various forms, including oaks (Figure 14) and maple (informant 2) for example, at Penn Cove on Whidbey Island, adjacent to Snohomish and Skagit County Area. In addition, several types of CMTs go unrecognized in (Western settler) archaeology. For example, holding trees (Figure 15) and tuning fork types (Figure 16).

Today, ethnohistorical information about the Stillaguamish, Sauk, Skagit, and Samish Cultural traditions suggests a complex use of CMTs in the North Cascades. Unfortunately, Western-trained archaeologists focus primarily on bark-stripped cedars and tend to be biased toward other anthropologically modified trees, even when in plain sight. This is because CMTs
are complex living artifacts that are not easily recognizable. As a result, academics confine our vision to black boxes, specific to elevations and site types, while excluding other types of CMTs.

Figure 14: Canoe in a tree at San De Fuca. Artist EJ Hancock, Image Courtesy of Island Historical Society, Collection number 2013. 020.070.
Figure 15: James Swan’s illustration of an Ancient Totem column embedded in a spruced tree found at ancient village of Chathl in E coast of North Island.” August 11, 1883. Miles, George A., et al. James Swan, Cha-Tic of the Northwest Coast: Drawings and Watercolors from the Franz Collections.
This study incorporates CMTs into the discussion outside the traditional bark-stripped cedar focus. In this chapter, I contextualized various ethnographically informed CMT types in Skagit and Snohomish Counties. In order to find these types in previously altered landscapes, I had to revisit information about previously forested lowland environments in the Stillaguamish Watershed. I sought primary sources containing evidence of “ethnographically informed CMT traditions” in addition to oral histories and non-Western vernacular to understand the local

Figure 16: Tuning fork Shaped Cedar along Chuckanut Drive, Bellingham, WA. This Picture commemorates a picture of the same tree in 1915. Biery (Galen) Papers and Photographs, MABLE archives, Western Washington University (c. 1970s).

Relevance
descriptions of customs and uses of trees where forests once stood. Indigenous communities have distinct cultural aims in natural resource management and conservation planning (Benner 2019: 1384). If we, as trained Western archaeologists, are not ethically producing new ways to interact, translate and understand the landscape, then for whom are we documenting the landscape features? Often, standing CMTs represent a continuation of sustainable land use practices. Recent CMTs are being produced alongside the old ones (Informant 2, 2023). Cultural continuity is designed to prevent cultural amnesia for future generations. Generations will lose quality perspective about these treasured trees and their stewardship messages if they are logged and destroyed without respect for a type of guardian viewpoint.

Indigenous people often talk about learning from other places and animals (Berkes 2012). Knowledge, however, is no simple reflection of the surfaces of the world but involves an implicit and innate theory of nature (Hunn 2014:147). Developing an environmental knowledge system with observation requires monitoring or reading environmental signals and error experimentation to elaborate and build sophistication. (Turner 2009; Berkes 2012). Markings and meanings such as those found in scarred trees carry material-semiotic signs that tell stories and speak of materially assembled cultural legacies (Frichot 2021: 117).

“Aware that the power to tell their histories is inseparable from the power to decide who they are, Native Americans are asserting the right, even an exclusive right, in places – to be their historians” (Miller 2013: 106-107).

This thesis creates space through collaborative exercises listening to diverse perspectives about previously documented CMTs. The following Chapter reviews Western systematic approaches rooted in colonial thinking translated into archaeological recordation of CMT and the harmful impacts this structure has on the relationship between Indigenous people and the management of their resources.
Chapter III

Archaeological Background

Counting Trees vs. Making Them Count

The previous chapter emphasized the limitless ways trees play a vital role in the everyday life of Coastal Salish communities. This chapter expounds upon how Western definitions concerning CMTs have impacted tribal collectives. Modern local communities across the Skagit, Sauk, and Stillaguamish River watersheds stressed a deep sense of care associated with the landscape and how that care was devastated by colonialism and settlement. As a Western archaeologist, it is clear that a false sense of stewardship is connected to ethical issues rooted in practices that prohibited Native management of landscapes, from 180 years ago, through today (Steele and Barclay 2020).

Western structures cannot and should not speak for these trees of Native or non-Western interest. Integrating mutually beneficial stewardship strategies for future generations is possible when we collaborate with local tribes and decision-makers to include local management strategies concerning living artifacts. This chapter will look at CMTs from a Western land management perspective with applied definitions, documentation, and handling derived from settler colonial processes and conclude with an adaptive archaeological lens (Atalay 2006 and 2012; Lyons 2019). Words matter. Standard CMTs definitions in the United States do not represent local Native ontology. For example, categories beyond a “tree” might include the elements of an entire “story scape” (McCarty et al. 2018). Notably, Western definitions do not account for the loss of cultural memories and TEK associated with CMTs (Stoffel et al. 2018), and so the impact of their loss is missed.
Western Documentation Overview

Culturally Modified Tree studies vary greatly, depending on what side of the border and what country one holds citizenship. Culturally Modified Tree studies in the United States were initially generated from within the Cultural Resource Management scope of interest, driven by a systematic Western academic approach. Early CMT research in the United States stemmed from reactionary protocols for Section 106 compliance procedures in Glacier Bay National Park, Alaska, in 1992 (Lewis and Mobely 1994).

Environmental policies in Canada bolstered the significance of these features (BCMSBT&C 2001; Eldridge 1997; Garrick 1998; Art Opens Windows Between Space and Ourselves Yahgulanaas 2016). For example, in British Columbia, Canada, the Tribal communities of Haida Gwaii actively litigated legal protection for CMTs, giving these features weight as significant ethnographic resources considered in land use strategies. Community action in Canada led to robust heritage programs, legislation, and collaborative stewardship opportunities, which have elevated the importance of old-growth forests on the west coast of Canada because they are likely to contain CMTs and be ecologically treasured (Eldridge 1997).

The 2022 Executive Order 14027 in the United States actively defined old-growth forests. However, due to the 2020 mega-wildfires along the west coast, recent federal mandates regarding old-growth forests tell us that American political leaders have only recently begun to heed environmentalists. Before this executive decision, the United States did not have legislation for individually complex ecosystems, including old-growth forests or what remains of them. In April 2022, President Biden flew to Seattle, WA, to sign Executive Order 14072. A policy which requires federal agencies, whose lands include many mature old-growth forests, be managed "to promote their continued health and resilience; retain and enhance carbon storage; conserve biodiversity, conserve the risk of wildfires; enhance climate resilience; enable subsistence and
cultural uses; provide outdoor recreational opportunities; and promote sustainable local economic development” (Bureau of Land Management 2022; The White House April 2022).

One hundred miles north of Seattle, where President Biden signed this Executive Order, Old-growth forests in Canada were verified to hold CMT from multiple spatial-temporal events (BCMSBT&C 2001; Garrick 1998; Voggesser et al. 2013). Political dynamics shape world views, and vice versa, ultimately affecting what we see and how we see it. This paper shows readers that excluding ideas and strategies in the United States aligned with tribal management flags an urgent warning to all people, as traditional communities are crucial to the vitality of the remaining old-growth forests on the planet today.

Preservation laws in the United States account for variation in preservation planning as a space for the multi-plurality of American history. Culturally Modified Tree protections for the State of Washington include requiring Forest Protection Plans (FPP) from the Department of Archaeological and Historic Preservation (DAHP) to log their lands up to a certain acreage (Washington Department of Natural Resources 2018). The application process includes consultation with partners such as the Department of Archaeology and Historic Preservation so that contemporary landowners do not log these “sites of significance” unintentionally. CMTs are not typical “archaeological sites” and should not be considered as such. Stands of CMTs are not always easily identifiable, yet they are significant! Their original contexts, or "boundaries," are often gone because the landscapes have been altered by settler-occupation over the last two hundred years. Thus, defining CMT site boundaries can be tricky. In undisturbed locations, CMTs can function as boundaries to entire historic districts (Informant 1 2023). Original CMT meanings are expansive across whole landscapes. Like all living things, marker trees, Culturally Modified Trees embody impacts by their environments and simultaneously respond to care
(Palmer 2023). CMTs are not typical artifacts; they challenge the Western materiality of the past because traditional archaeological training does not include recognition or respect for these ethnographic resources, often in plain sight and outside Western academic world views.

State and Federal regulations create legal boundaries driven by compliance procedures that undermine landscape relationality as represented by CMTs and other ethnographic resources. State and Federal policies impact CMTs of all kinds if state and federal authorities do not come together and work with local Indigenous groups. Through an interdisciplinary lens, we can recognize and empower non-Western forms of stewardship to these features in protected and non-protected areas. Inviting Tribal viewpoints to the preservation and protection discussion is paramount as academic archaeologists, or we risk losing diverse ecological relationships practiced by humankind.

Our goal as Western specialists should be to move away from defining CMT as fixed archaeological “resources” and incorporate entirely translations of CMT by including communities and stories that bring meaning to a place. We should conceptualize CMT as profoundly embedded parts of interconnected, traditionally managed landscapes. Although, no matter the conditions, these figures belong to Native America and pre-industrial thinking, they deserve to be respected by being placed under the direction of Native Americans who can make their own decisions about their trees. Westerners have been deciding impacts when this should be a community informed process to how these phenomena are recorded and assessed. We should be talking to those with a personal stake in these resources. In all cases, they are critical reminders of the forests once standing. Their bends and scars are extensions of the Indigenous relationships with this landscape.
Figure 17 is a product of Western documentation. Western academic thinking has dominated CMT studies and informed CMT protections by systematically documenting them in a way that has been slow to invite an organic perspective. This injustice harms us (humans), our community (flora and fauna), and Mother Earth. As academics, we are not doing anyone any favors except ourselves by gathering inadequate data solely operationalized under Western definitions and structures. A range of perspectives exist around these trees, and we have only been consulting the dominant view.

It is a delicate balance. As archaeologists, we must allow communities to negotiate the impacts on their trees. Therefore, Westerners can defer CMT questions to the appropriate
inheritors of these features, expert practitioners, Tribal historians, and educators to dictate ethnographic resource awareness in cultural inventory planning. Furthermore, regional guides in Washington State CRM do not capture every kind of CMT type. Therefore, undocumented CMTs, or CMTs outside of mainstream conversations, are being missed and going unrecorded, impacting protections or space for Indigenous management of these places. Culturally Modified Trees need protection delegated from within the community because they express Indigenous vernacular on the landscape. All types are precious and must be defined by Indigenous communities with vested interests.

**Western Definitions: CMT**

A history of methods and theory has developed CMT studies to record CMTs. Univocal definitions operated by Western archaeologists have simultaneously harmed CMT as policy-influenced practices and definitions were to become known (Mobely and Eldridge 1992). Dendrochronology promoted a more rigorously tested approach to chronological dating (Mobely and Eldridge 1992), and site types and recording criteria became necessary and institutionalized (BCMSBT&C 2001). Across the United States, a primarily Western lens has documented these arboreal features (Jansson 1941; Downes and Samors 2011; Wells 2021) because dendroarchaeology has been a growing area of study over the last century (Speer 2010). Remarkably, CMTs around this country receive attention, but there is an obligation to bring in the rightful inheritors to construct definitions because CMTs are complex phenomena.

The British Columbia Ministry of Forests published a handbook in the early 2000s that has become widely referred to and relied upon by most major American land managing agencies. Known as the *Culturally Modified Trees of British Columbia Handbook*, prepared by the
archaeology branch of BC Ministry of Small Business, Tourism, and Culture 2001 (BCMSBT&C 2001). The BC CMT Handbook was designed for the forests of British Columbia by academic scholars working closely with government agencies of Canada (Ministry of Forests 2001).

In addition to the Western theoretical lens, a few tribal activists offered perspectives on assessment strategies in and adjacent to the Great Bear Rain Forest throughout the CMT studies (Garrick 1998, BCMSBT&C 2001, Haida Gwaii CMT Handbook 2016). Western archaeologists in the United States refer to this foreign handbook as primary literature for CMT information, neglecting to include counter perspectives with local Indigenous expertise and vernacular. For example, horizontal branch trees will be encountered on site visit 5. Some trees are not recorded in the BC CMT Handbook or other regional guides. Another example includes a cottonwood tree memorialized as a cultural symbol, a council tree, that embodied a living person that the Indian People adopted to connect with a place, even though it was no longer managed and stewarded by them (Stoffel 2018: 41). Around the world, CMT transcends international conversations in stewardship and ethical land use practices. In British Columbia, CMT handbooks have influenced CMT documentation in and around the United States and likely other countries because of recirculation within archaeological heritage programs at the federal levels within the US as primary reference material as an introductory guide for field archaeologists to assess CMTs.

This de facto North American standard presents us with three critical issues:

1) It focuses on the tree, not the landscapes or community voice.
2) The CMT classification keys were designed in a dominant Western colonizer language framed within Western psychology.

3) Most critically, this structure conveys a concept that CMT and their local contexts to be understood from a Western worldview.

Reimagination of CMTs contextualizes a psychological foreground featuring language belonging to local Native communities. While the handbook facilitates data collection techniques beneficial to Academic Archaeologists, it is alarming that it has restricted cognizance and translation of varieties outside of bark-stripped cedar. Identifying an indirect discriminatory treatment of CMT highlights a need for adaptive and updated communication in local CMT recordation strategies. This transformation authentically empowers Sovereign Peoples to propose, monitor and manage their sites of significance and trees of interest, so preserving self-determined histories establishes and brings respect for autonomy. A holistic preservation perspective ensures legacy loss prevention and improves community relationships with land managing agencies. Support for Native communities to steward and define their ethnographic resources affects everyone. Finally, cultural resource management dialogs must be adapted to empower living traditions because what we are talking about relates to living history as much as the distant past.

CMT concerns are flagged because a particular academic perspective has been copied across the region. Typological keys, such as the BC CMT handbook, define CMTs through a Provincial language that is unquestioned and operationalized through an overwhelmingly Western literary voice. Without a local representation, data recorded using the typology laid out in Western epistemological guides undervalues local bodies of knowledge. It is not about
opening the eyes, it is about opening the mind. Throughout the Cascade Mountain Range and beyond, CMT studies have added valuable information to understanding relationships within watersheds, connecting people and landscape (Mobely and Eldridge 1992; Green 1994; Blackstock 2001; Marshall 2002; Turner et al. 2009; Hunn and McClure Jr. 2019). Hundreds of works currently support the existence of various CMTs along the Northwest Coast.

Archaeologists must know that other perspectives exist outside Western academic and cultural resource management paradigms. By repositioning ourselves as Western settlers in the heritage industry, we invite new perspectives to curate the human past. Rigorous intellectual merit decolonizes Western archaeological knowledge, which has been incredibly helpful in systematically documenting CMTs because it pushes for legal communication of these features. Awareness of this phenomenon has drawn attention to an imbalance of tribal communication and policy implementation produced from interpreting CMT studies under a Western epistemology. Indigenous preservation perspectives are required to be authentically engaged within the heritage and education industry (Cajete 2015). Collaborative research teaches us that reciprocity and community learning are essential to sharing space which is critical to academic motives. Western academic archaeologists can ask more meaningful questions that appoint cross-community stewardship to create relational and relevant learning pathways to inspire new research avenues essential to the people absent in preservation planning. CMTs symbolize forms of deeply connected traditional ecological knowledge (TEK) -secured by communities, central to include in research designs and land management decisions if we are serious about decolonization tactics in North American archaeology. Larger populations of the United States and Canada know extraordinarily little about Indigenous logging or other traditional land management choices that sustain people and ecosystems across Native America. The general public does not appreciate
CMTs, their variety of shapes and forms, and why they should be considered significant (Stryd and Feddema 1998). In British Columbia, Canada, archaeologists have recorded thousands of trees, primarily yellow cedar, red cedar, spruce, pines, and douglas fir, with cultural modifications from past harvesting (Garrick 1998; Turner 2006; Blackstock 2007; Mathews and Dady 2008). Monumental cedar (see Figure 18, see below) tells a story of the complex ecosystems that would have sustained these enormous trees, logged in the 18th and 19th centuries. Evidence of long-standing arboriculture comes in the form of CMTs that have survived multiple harvesting events, including single groves harvested over an extended period (Earnshaw 2017).

“Observable” features (like bark-stripped cedar trees) in the United States are eligible under the National Register of Historic Places (NRHP), causing Western archaeologists to notice the more identifiable CMT types. Western documentation has a streetlight effect. We revisit this topic in the archaeological analysis and summary. It is distressing that peers and scholars would instead consult an international handbook for primary information rather than a local body of existing knowledge -to provide an Indigenous Voice and in-depth communication to local living legacies of interest to tribal groups.
As an example, from Canada, removing old-growth forests in the early to mid-1980s generated public awareness of these complex ecosystems and stimulated ecological conservation (Earnshaw 2017). Studies on CMT, specifically Western Red Cedar, were conducted in Clayoquot Sound, British Columbia (Figure 19), and rigorously applied in Gwaii Hanaas (Haida Gwaii). International CMT studies from 1983-1987 led to the South Moresby Memorandum of Understanding, forcing logging companies to cede their logging interests (Gwaii Hanaas Agreement 1993).
In the United States and BC, Charles Mobely and Morley Eldridge studied the differences in growth and aging trends in anthropogenic scarring as opposed to natural scarring (Eldridge and Mobely 1992, Eldridge 1997). In Alaska, peeled varieties of CMT dated to the late 17th to the early 19th century, and ring count methods were applied to date the peeling event (Lewis and Mobely 1994). Current CMT data collection tends to align with systematic Western approaches in North America rather than intrinsic dialogs that concern potential local audiences and consumers. Although aging CMTs can be critical in land use recommendations, it is common that most CMT surveys have given more weight to traditional archaeological techniques instead of Tribal Historic Preservation Officers, and expert harvesters who can provide ethnographical reflections, which is just as valuable as data in undatable circumstances.
It is difficult to age and identify culture from natural scarring. A cross-section of a stump (Figure 20) contains two healing lobes adjacent to the scar. Consider the case of a bark-stripped tree. Experts and specialists struggle to date Culturally Modified Cedars using Western methods precisely. Counting annual growth rings is one option; if the tree has been felled. However, cedar is nearly impossible to use core sample strategies because of their susceptibility to fungus and drought (Greebe 2019). Core sample analysis is a benign approach for dating peeled cedar CMTs dendrochronologically, an approach repeatedly proven unsatisfactory due to internal rotting. (S. Palmer 2022). Cedar is a softwood. Fungi can break down lignin at the base of the tree, primarily the most interior core (Greebe 2019), invalidating the core sample of these particular trees. Western Red Cedar is regarded as rot-resistant (Van Pelt 2007). The mighty red cedar is considered a grandfather species living beyond 1,500 years (Informant 1; Van Pelt 2007). Simultaneously, *Thuja plicata* is the largest tree in Western Washington (Van Pelt 2007). For the
most part, cedars can display injury, trauma, or disease resembling strikingly similar characteristics to a peeled tree -having a non-anthropogenic cause.

**Shaped and Peeled Cedar Recordation Strategies**

The current Washington State Archaeological protocols for cultural resource management of CMTs allow for recording bark stripped and shaping occurrences using the following information.

a. Visual assessment of photographs

b. Scar measurements (length, width, height of basal cultural marks above ground surface, and aspect).

c. Original scar width measurement as taken from a round or stump cross-section.

d. Determination of the year of bark removal, age of the tree when peeled, and diameter of the tree when peeled.

Moss and Hollenbeck (1987:16)

**Peeled Cedar**

Washington State archaeologists noted conservation efforts in the mid-1980s through the early 2000s in Clayoquot Sound; to protect CMT in Haida Gwaii off the coast North of Vancouver Island, an archipelago off west British Columbia (Garrick 1998; Mobely and Eldrige 1997; Haida Gwaii Handbook 2016). As a result, CMTs are extensively recorded in the Pacific Northwest. Clayoquot Sound and nearby Queen Charlotte Islands are the epicenters of community-based CMT studies. Following this, Moss and Hollenbeck (1987) compiled intensive forest-wide analyses of Culturally Modified Trees in the Mount Baker Snoqualmie National
Forest (MBSNF) of Washington State, documenting the extent of these traditions and the variation between different cultural groups (Hollenbeck and Moss 1987).

Further south, CMT studies in the Gifford Pinchot National Forest (GPNF) associated Peeled CMT with trails and berry harvesting (Onat and Hollenbeck 1981). Research across the Canadian border connected Indigenous CMTs belonging to the Native People. The Haida Gwaii argued against the loss of CMT and protected their cultural and ecological identity rights. Communities in Haida Gwaii successfully navigated a community decision-making strategy to protect their trees of significance. Within the next year from when legal cultural significance was outlined in Gwaii Haanas Agreement (Moresby Agreement 1993), the GPNF developed a comprehensive Peeled Cedar Management Plan (Green 1994). However, only one type of CMT (bark-stripped cedar) was the primary focus in the Gifford Pinchot National Forest, producing the typology referenced today in Washington State (Figure 21). The schematic above represents the following peeled modification styles. A brief description of the diagram is as follows:

Type 1: Triangular scar; Type II: Rectangular scar; Type III: Multiple harvesting events
Type IV: Girdled tree. The following subsection outlines the criteria for cultural scarring.
Criteria for Distinguishing Cultural from Natural Scars

The following criteria were established in 1986 and are widely referenced in the field by Western archaeologists (Arcas and Associates 1986, Stryd and Eldrige 1993). This key allowed Western archaeologists to recognize cultural from non-cultural scars in the field. The ten steps help determine a CMT:

1. Scars of cultural origin have no bark on the face.
2. Scar lobes produced after cultural bark-stripping exhibit distinctive annual ring characteristics.
3. Scars which exhibit tool marks are cultural in origin.
4. Large branches are not present on cultural scars.
5. Scars that start above the trunk's base are likely to be cultural.
6. Cultural bark scars are typically long and tapered.
7. The diameter of a culturally bark-stripped tree does not normally exceed ca. 60 cm at the time of stripping.
8. The presence of multiple scars on one tree increases the likelihood that scars are cultural.
9. The presence of scarred tree clustering increases the chance that the scars are cultural.
10. Culturally bark-stripped trees usually occur in high-volume dense cedar stands easily accessible from the coast.

Mobely and Eldrige 1996: 97

Adaptive Approaches
Currently, archaeologists record these features with an approach that includes flexibility for Traditional Cultural Landscapes, referred to as TCLs. This initiative has been launched to recognize that large-scale historic properties of significance to Indian Tribes and Native Hawaiian Organizations (NHOs) are increasingly threatened by development (ACHP 2011). An initiative that adopted a plan in 2011 calling on the American Council of Historic Preservation (ACHP) and the Department of Interior (DOI) to:
Promote the recognition and protection of Native American traditional cultural landscapes both within the federal government and the historic preservation community as well as at the state and local levels and,

Address the challenges of the consideration of Native American Traditional Cultural Landscapes in the Section 106 review process as well as in National Environmental Policy Act (NEPA) reviews.

- The ACHP (American Council of Historic Preservation) *Traditional Cultural Landscapes (ACHP Webpage 2023)*

This protocol is cutting-edge because Traditional Cultural Landscapes are not isolated to one archaeological site but contain many types of sites and ethnographic resources that can be defined within a historic district (King 2013). However, the risk of creating gaps in CMT significance persists without attention to community vernacular in CMTs correlating to TCLs. As a result, archaeologists continue to warp the significance of CMT data no matter the scope and project funding when we are instituting reactionary traditional academic methods to inventory CMT rather than initiating proactive hybrid ethnographic methods that might interest communities who care for these landscapes.

Across the Pacific Northwest, studies in the United States, Alaska (Eldridge and Mobely 1992; Eldrige 1997), Washington (Moss and Hollenbeck 1987; Green 1994), Oregon (Boyd 1999), and Idaho (Merrell and Clark 2005) recorded a range of CMT observations (for an exhaustive list, see Appendix C. Inter-regional studies signify an interest in the typology and chronological dating of CMT. Most notably, these studies use the few dominant typologies, which derive from Haida Gwaii examples to identify CMT. Initially, many varieties of CMT
occurrences were recognized. Eventually, however, a structured criteria to identify CMT from natural scars (Eldridge and Mobley 1992) became common. This can be seen as a standard practice in Western Science.

During the 1980s and 1990s, Western academics from the outside layers of community knowledge used these standardized methods to categorize CMTs. This approach and typology focuses explicitly on bark-peeled cedar. These determinations include CMT peeled modification type varieties (Types I, II, III, and IV), referred to in Figure 21. Another field technique that is used to assess CMTs includes size and age and being able to distinguish cultural vs. natural scarring criteria. These archaeological field techniques benefit academically trained archaeologists; however, Native perspectives exist and belong in CMT conceptualization and documentation strategies. As Figure 22 suggests, Western-developed CMT-type varieties do not include more complex traditions, which dramatically declined with the influx of settlers and logging regimes. The twenty-first century presents a responsibility to expand dendro-studies and community-oriented stewardship by inclusively adapting preservation strategies and techniques to protect living resources.

Another sampling bias dynamic suggests that not all archaeologists know of CMT keys or an entire body of CMT research that exists. Archaeologists refer to the dominant guides and regional overviews when they resort to CMT keys. The way that Western-trained archaeologists apply these keys on the ground creates a baking sheet solution or dependence on the dominant CMT keys. There is no standard for CMT documentation. The groups of archaeologists who are not aware of CMT keys are not adding to the variety of CMT recordation. The professionals who are aware of these dominant forms overutilize preexisting keys because there is not enough
variety of recorded CMT types to choose from because our current data collection structure does not capture multi-plurality in the varieties of CMTs.
Figure 22: Kinsey photograph of a typical forest felling scene. Seventy-seven feet to the first limb, 300 feet high – Average timber in Washington [c.1905] p 146. A Half Century of Negatives by Darius and Tabitha May Kinsey, with contributions by son and daughter, Darius, Jr., and Dorothea pp 174. “Notice the two men standing at the base of (plank scar) CMT, preparing the felling” (Informant 1 and 2).
Community-Centered Definitions Matter

Ignorance and complacency are options, or we can reimagine the way we think about the past, and our impact on the future. Our predecessors did not care about environmental lessons and subsequently chose to forget these teachings under the illusion of an industrialized future. Erasing messages of stewardship is a function of colonialism. Marker trees are more than “artifacts,” “sites,” or “features.” They are extensions of vitality held dearly by people who know how to protect their meanings. Nevertheless, these same populations are kept silenced, disconnected, and excluded from the discussions concerning their rightful inheritance (Stoffel et al. 2018; Steele and Barclay 2020; Lyons 2021). Decision-makers love this landscape and have become mindful of the loss since the mid-18th century associated with precious ecological resources, but our legal system can do more.

The past is present. Federal and foreign governments’ policies diverged away from traditional ecological practices, including methods of plant cultivation, prescribed burns (Anderson 2006), and other land use practices used by Indigenous peoples to maintain healthy ecosystems across Native North America; before the mid-1800s seizure of the manifest destiny movement.

Living artifacts are aging, augmenting how archaeologists visualize cultural and environmental change in a geographic place because CMTs are unique landscape features linked to Indigenous rights, values, and knowledge. (Stryd and Feddema 1998; Bierwert 1999; Deur and Turner 2006; Anderson 2006; Josefsson et al. 2009; Stewart 2009). Thinking visually about artificial landscapes in relation to CMTs potentially generates awareness for the fragility of landscape relationships to inspire solutions in adaptive stewardship guided by Traditional Ecological Knowledge keepers. As a society, we have only begun to see the consequences of
two-century-old land use practices stabilized by dominant Western psychology. Relationality and simultaneous representation exist in an exchange with the landscape, consisting of vital stewardship lessons apparent in the occurrence of CMTs. Stillaguamish riverine CMTs result from sustainable philosophy and a meaningful connection with swatixʷted (pn: swa tuu-ted, Earth, Southern Lushootseed translation). Tribal management and conservation around trees of Indigenous interest are critical to decision-making and environmental policy implementation (Voggesser et al. 2013).

This project is braided, meaning various Stillaguamish Tribal perspectives are encouraged in the dialog around Culturally Modified Trees. Decolonizing archaeological practices from within invigorates Western settler-trained archaeologists to question their current approaches to recording CMTs. Connecting with community knowledge keepers to inform assessment techniques is critical for Tribal CMT because the stakes are so high. Westerners find it challenging to conceptualize change and transformation of landscapes -to see beyond the artificial settings created by settlers for dry land farming (Lyons et al. 2021). In other words, transformative environments are not unique to forested environments, distant mountains, or the “wilderness.” Dynamic landscapes apply to complex old-growth forests nearly consumed by early settlers and corporate logging giants in the 18th and 19th centuries. Today, CMTs intersect dynamic landscapes, seen and unseen, across place and time.

The following chapter focuses on the methods and design of an ethnographically informed CMT cross-perspective. It sets the stage to invite Coast Salish values to previously recorded CMTs of Indigenous interest. by weaving in ethnographic experiences an ethnohistoric voice from the Tribal Historians. Part of rewiring a conceptual framework regarding CMTs invites diverse experiential knowledge, critical in re-introducing landscapes and contextualizing
oral histories. Community relationship building in archaeological research strengthens land management perspectives to inform local definitions that account for community interests in Project Areas or Areas of Potential Effect. Part of decentralizing Western archaeology shifts our entire preservation procedure, focusing on top-down reactionary compliance rather than grassroots proactive community preservation regarding CMTs. In reactionary preservation circumstances (usually archaeological inventories) following state and federal policies, we only focus on the most identifiable artifacts. Western CMT frameworks accommodate the most easily recognizable CMTs in the Puget Sound Basin. Local and regional ethnohistoric information suggests that there are alternative types and broader associations, well beyond bark-striped cedars, going undetected in inventory assessments.
Chapter IV

Methods and Design

Copies of this work and data collection throughout each step of the process have been shared and reviewed by Tribal Collaborators. Collaborative work requires listening and learning with the community about what is essential to the people from their perspective (Anderson 2006). Archaeologists alone cannot imagine nor tell the human story or offer good land use recommendations without invested tribal engagement, which is foundational. The role of a Western archaeologist should be to promote transparency in preservation to include ethnographic resources. Archaeologists can decolonize heritage practices and strengthen creative and collaborative perspectives to define archaeological sites locally, including CMTs and other ethnographic resources. The purpose of preservation laws and CMT identification handbooks can encourage multi-plurality, challenge dominant viewpoints, and develop cross-community awareness (Parker and King 1998). Understanding and seeking to avoid ethnocentrism in evaluating Traditional Cultural Properties or Landscapes is essential. Ethnocentrism means viewing the world and people in it only from the point of view of one’s own culture and being unable to sympathize with the feelings, attitudes, and beliefs of someone who is a member of a different culture (Parker and King 1998:4). That is why this project calls on qualitative methods in order to provide respect and value surrounding CMT data collection where a Western academic methodology has reached a limit.

Theoretical Design

Layers of Knowledge

One layer of knowledge was achieved by revisiting 5 CMT sites identified by the Stillaguamish Cultural Resource Department and, while there, thoughtfully listening to the
Indigenous CMT expert perspective. This interpretive approach was organized around five themes derived from absent archaeological information documented with Western training. During these interviews, I implemented a grounded theory process (Delve and Limpaecher 2022, Hennick et al. 2010). This process integrates qualitative analysis by including ethnographic data with known or recorded CMT sites standing in the traditional homelands of the Stillaguamish River Community.

Grounded theory, or open coding, is a qualitative method (Delve and Limpaecher 2022, Hennick et al. 2010). Open coding allows listeners to engage with the meanings represented in CMT and ways to correlate them with knowledge keepers. Rather than systematically recording new ones, re-examining previously recorded CMT enables listeners to absorb the data and offers an implicitly explorative approach to broad, holistic principles related to CMT data collection. A braided approach opens space to listen and reflect on real-world impacts to ‘these trees’ because of their miscommunication by academic Western settlers. A grounded theory provides a set of flexible guidelines and a process for textual data analysis that is well suited to understanding human behavior and identifying social processes and norms (Hennick et al. 2010: 205-207). This project braids open coding with five CMT site visits corresponding to the layers of significance held by tribal experts.

Dr. Bierwert (Bierwert 2013: 46) discusses Indigenous layers of knowledge associated with space, place, and identity in the criteria below. In addition, this model is called upon to reflect layers of value associated with previously recorded CMTs within the Stillaguamish watershed guided by Stillaguamish subject matter experts.

a. Describes elements of physical place.

b. Noting a place’s uses (by a people) – socially generative powers.
c. Reveals any danger of a place and its destructive powers.

d. Deconstructs a historically ascribed name.

e. Recollecting its mythic persona.

Layers of knowledge bring understanding and invite transformative thinking, especially conceptualizing traditionally managed landscapes containing CMTs (Bierwert 2013).

Multicultural ethics posits a distinctly explicit openness to incorporate alternative or minority voices in designating and preserving objects of cultural heritage – agents that specifically come from equally alternative epistemic cultures (Giovine 2015). This model can benefit from incorporating layers of knowledge as layers of relationality to help Western archaeologists reposition themselves as tertiary communicators of CMTs. This project emphasizes multicultural ethics and authentically engaged viewpoints (Giovine 2015: 204-05).

Research Question

This research intends to address the following:

I. How can Western-trained archaeologists honor and respect Stillaguamish Tribal or broader Coast Salish values in conceptualizing CMTs and support an understudied translation of these resources?

II. What is the ontological system in which known marker trees, bark-stripped trees, and shaped trees can be understood, and communicated?

I approached these questions in two primary phases:

Phase 1: The first phase produces a baseline collection of archaeological Culturally Modified Tree observations for Skagit and Snohomish Counties. Data recorded from the individual
archaeological site and project tabulated in the Tree Tables provide an essential foundation to shape interview questions to ask Tribal Historians.

**Phase 2:** The second phase empowers Indigenous voices and management philosophies to conceptualize CMT within the Stillaguamish Watershed using site themes. Themes were generated from absences in the archaeological data. Guided by community vernacular and expertise through documented CMT site visits (virtually or physically), each visit coordinates time with three independent subject matter experts from the Stillaguamish Historic Preservation and Natural Resources department to hold on-site reflections.

**Purpose**

The primary objectives for this research are to:

I. Invite space to re-imagine CMTs on the Stillaguamish landscape with voice and story told by them.

II. Build relationships and protect interests related to CMT.

III. Create access in a meaningful way to external audiences to conceptualize CMT and treat them respectfully.

Grounded theory combined with previously recorded CMT sites captures emotions corresponding to these trees (Hennick et al. 2010). This adaptive conceptualization technique brings cross-cultural vernacular that can be replicated locally to reevaluate archaeological sites (Dongoske 2020). In addition, cross-cultural conversations can significantly benefit recordation strategies and legal documentation techniques to inform decision-makers on expanded ways to conceptualize CMT to protect ethnographic resources (Sebastian 2020; Dongoske 2020).
Archaeological Methods

The first step in the archaeological-focused thread of this analysis builds a baseline synthesis of information (Sebastian 2020) in the Stillaguamish watershed. I tabulated all of the CMT observations recorded and uploaded to WISAARD going back to the early 1970s. Mentors selected five sites of interest to visit. The team used judgmental sampling (Fleetwood 2023) to determine areas of significance, then scheduled times to arrange “site visits” with Stillaguamish Historians and Practitioners. Most Western researchers are not proficient in assessing Indigenous CMTs without tribal expertise. An augmented judgment sampling technique promotes multivocality within Western communication strategies. Judgmental sampling methods were selected primarily for time constraints and to protect the interests of the Tribe.

This specific research focuses on prerecorded CMT in the Stillaguamish watershed. It became clear that it would be helpful to expand County Counts of CMT observations to include the Skagit watershed, just north of the Stillaguamish River, to gauge the diversity of documentation between the two counties, Skagit and Snohomish.

Braided Archaeology

A significant part of the braided theory approach recognizes that multiple perspectives exist (Kimmerer 2013; Lyons et al. 2022; Wilson 2008). Confronting CMTs with a decolonized approach seeks to move away from hegemonic forms of control over another’s heritage (Parker and King 1998).

“Western science and technology, while appropriate to the present scale of degradation, is a limited conceptual and methodological tool – it is the “head of hands” of restoration implementation. Native spirituality is in the ‘heart’ that guides the head and hands…. Cultural survival depends on healthy land and healthy responsible relationships between humans and the land” (Kimmerer 2013: 327).
Braided thinking promotes the ethnographic core, which is the heart of this research. Equity in research methods and archaeological techniques should be locally implemented to curate the past (Kimmerer 2013, Lyons et al. 2021). This research incorporates an Indigenous perspective on previously recorded archaeological sites to give weight and meaning to CMTs (SN00712, SN00745, SN00763, IS0007, and a 236th Street Improvement Project).

**Methodologies include:**

1. Gathering archaeological data examined Western-trained observation (Sebastian 2020). I use this same qualitative data to generate onsite questions and note low-level trends in the patterns of observations.

2. Ethnographic methods involve 12-15 semi-structured on-site interviews (Hennick et al. 2010). In this component, to protect the privacy of Tribal interests, we pull tangibles and intangibles from the conversations into a concept diagram used at each site to relate deeper meanings tied to these CMTs. This method allows for access from outside audiences, who might be non-archaeologists (Ball et al. 2015)

3. Ethnohistoric synthesis of traditions and customs around the use of trees offers a variety of CMTs documented in the historical record (Ostlund 2021).

Any Western academic archaeologist will say that CMTs do not fit neatly into archaeological site forms in settler academic training or understanding (Parker and King 1998). Therefore, unobserved during inventory projects, CMTs reflect a more meaningful relationship being overlooked in urban planning or land use activities and regrettably destroyed because they are not evaluated correctly for Eligibility to the National Register of Historic Places (Bulletin 15
Criteria For Evaluation). Western archaeological assessments (Academic and Professional) use forms with categories and countable elements recognizable to a trained Western academic eye (Bulletin 15 Criteria For Evaluation). Field observations captured within an archaeological description represent boundaries and point locations (with maps and pictures) usually included in the site forms and reports. This method relies heavily on the ability “to see” and comprehend these occurrences through an academic worldview (Parker and King 1998). It perpetuates a concept of CMTs appearing in an “empty” space suspended by untrained Western ontological thinking because it is out of Western academic depth without guidance from an Indigenous philosophy (King 2003). As readers will see, these trees are not “empty.” They are whole and rich, with an entire community perspective. American Cosmologist Carl Sagan once wrote, “An absence of evidence is not evidence of absence.” As trained academic archaeologists, we aim to preserve and protect archaeological sites (in and outside our interests and worldviews).

Unfortunately, Western academic archaeological care has also directly harmed the relationships with Culturally Modified Trees because it has not included the tribal community perspective.

Cultural Resource Management can be considered Cultural Resource Mining (Lyons et al. 2022). Revisiting known and previously documented CMTs, re-examines previously collected data with fresh ideas and perspective. Examining CMTs with a Native perspective decentralizes the dominant view (Parker and King 1998). Cultivating wisdom and interest from within broader CMT studies emphasizes the importance of stories in connection to place concerning living tribal perspectives (Parker and King 1998; King 2013). This project asks if current documentation procedures, devised and upheld by a Western framework, are adequate for Tribal Communities. Tribal interpretations of CMTs in the United States have largely been absent from the archaeological record (King 2003; King 2013). Traditional Ecological Knowledge (TEK)
presents a limit to Western ontology and an important reason to provide space for multivocal preservation perspectives so future generations can equitably appreciate these Traditional Cultural Landscapes (Arzac et al. 1998). The methods involving telescoping analysis of raw interview transcriptions protect tribal interests while creating access to external audiences to help contextualize 5 CMTs within their cultural landscapes guided by Tribal expertise (Hennick et al. 2010). The telescoping framework uses the transcriptions from the onsite interviews (Hennick et al. 2020). Sifting connected universals and tangibles from the interviews highlight impacts and feelings associated with CMT from an Indigenous perspective, the concept diagrams. The concept diagrams from each site were organized without order to the words. The circles are a design choice by the author.

**Databases- WISAARD**

*(Washington Information System for Architectural and Archeological Records Database)*

A key component to collect CMT information includes access to the Washington Information System for Architectural and Archeological Records Database (Appendix D). Researchers can begin to see an analytical problem in CMT information collection after tabulating quantitative CMT information. When I pulled all of the county CMT information for Skagit and Snohomish Counties, I noticed that my conclusions based on that data were contradictory, and produced questions about how the data as derived. As a result, I incorporated a qualitative approach. Deriving interview questions from the archaeological data helped fill ontological gaps where information was missing about these trees from a qualitative Indigenous perspective. Under a framework of looking through preexisting data, we can expand our previous definitions and conceptualization of CMT with guidance from Tribal knowledge keepers.
Categories

Western settler academic values and monopoly on the dialog associated with CMTs are unverified from a Native perspective. From the WISAARD database, each site report and project containing CMT observations in Skagit and Snohomish counties were tabulated onto a tree table. Information from the WISAARD database generated the records needed to estimate the current CMT observations for Skagit and Snohomish Counties (see Appendices G and H). Information in the following categories was analyzed:

a. **Site type:** (Pre-contact, pre-contact-Historic, Historic, Historic Modern, Modern)

b. **Tree species:** (Cedar, *Thuja plicata*, Hemlock, *Tsuga heterophylla*, Douglas Fir, *Pseudotsuga menziesii*, or any other type recorded in Skagit or Snohomish County)

c. **CMT site count**

d. **County:** (Snohomish/ Skagit)

e. **Other modifications** (recorded on the site form)

f. **Eligibility designation**

g. **Peeled modifications type**

h. **HAG** (height above ground)

i. **DBH** (diameter at Breast Height)

k. **Documentation type**

l. **Aspect of modification**

m. **Cultural features**

n. **Recent use**

n. **Landscape**
i. For example, rivers, mountains, view-scapes, prairies, hot springs, beaver ponds, marshes (etc.)

p. Proximity to these features

q. Vegetation on-site

q. Elevation

A recordation strategy excluding tribal values, expert reflections, or Indigenous historical positionality impacts “how” we look and see living artifacts (Parker and King 1992). Hence, there is a serious sampling bias in the archaeological record, mainly from focusing on bark-stripped cedar trees when there are limitless kinds of CMT of Native interest (Informant 1).

Regional procedures for recording CMT, developed and implemented by Western archaeologists, commit three offenses.

1) a regional CMT handbook benefits specific consumers and simultaneously limits the conception of and variety of ethnohistoric CMTs,

2) definition of the individual “tree” ignores contextual CMT relationships secured by community context and social memory, and

3) most critically, this structure does not include the local Native perspective, which respects community management-related philosophy bound to Traditional Ecological Knowledge (TEK).

Community-Centered Indigenous Research Methodologies

This work could not be possible without tribal relationships and an approved application through the Institutional Review Board (IRB) to achieve ethical qualitative interviews for the
study. The Universities require researchers to apply for an IRB (Institutional Review Board) to conduct this qualitative work involving human subjects (Appendix E). Unfortunately, most Western archaeologists completing their master’s in the United States are not required to collaborate with Indigenous Communities. Therefore, most Western academic archaeologists do not approach IRB-aligned work, which is essential in archaeology to ask these fundamental questions!

Ethnology, and the grounded theory of CMT, cannot be approached without interest and capacity from within the community. Community-centered Indigenous research methodologies are still being defined (Atalay 2006). Applying Indigenous voices in community-focused research is a central part of a decolonizing approach to archaeological practices because it provides a procedure that is both rigorous and ethically minded while also being community-driven and involving community members in a respectful, participatory way that values them as research partners (Atalay 2006: 280-310)

Dr. Shawn Wilson is Opaskwayak Cree from northern Manitoba, Canada, and an International Indigenous collaborator. He is a Southern Cross University Australia professor researching inter-related concepts of identity, health, and healing. He says an Indigenous paradigm comes from the foundational belief that knowledge is relational. Knowledge is shared with all of creation (Wilson 2007: 73-4). A primary method I call upon is relationship building (Atalay 2006). It is not just interpersonal relationships, not just with research or CMTs, but with all creation, including communities mindful/unmindful of environmental impartiality. So it is with the cosmos, and it is with the animals, the plants, and the earth that we all share this knowledge (Wilson 2007). Meaning, care, and respect for Traditional Ecological Knowledge affect future generations and contemporary populations. Revisiting Culturally Modified Trees
with a braided perspective (Kimmerer 2013) requires connecting with the community and learning about what is essential to the people (Wilson 2007:146-7).

For educators to make transformations for the better, knowledge must be rooted in critical thought and awareness of the dynamics that have brought us to where we are (Cajete 2015:68). A cross-cultural reflection on CMTs engages community-centered archaeological interests to be carried out through ethnohistorical methods and grounded theory (Hennick et al. 2010; McCarty 2018). Collaborative approaches blend strengths of Western archaeological science with the knowledge and epistemologies of Indigenous peoples to create a set of ideas and practices for an ethically informed study of the past, history, and heritage” (Atalay 2006:301). The “braiding” of archaeological data, ethnohistoric and ethnographic perspective is the goal for this paper in reference to CMTs, and ways to communicate Culturally Modified Tree phenomena into a more meaningful use of the data.

Threading different knowledge together creates more than a valid research project geared toward conservation interests. Shared projects demand decolonizing approaches to strengthen rational ties between settler and Indigenous worldviews (Parker and King 1998). This project elevates human understanding and challenges the dominant view of CMTs using interpretive techniques. By inviting a range of perspectives, a shared reflection asks Indigenous decision-makers about the quality of data collected from CMT sites. Community viewpoints focused on CMTs, open our eyes to the genuine, raw emotion living artifacts can evoke (Hennick et al. 2020). This project is an exercise in the communication of CMTs from an Indigenous perspective. Creating time and space for cross-cultural reflections brings impact and perspective to living artifacts and community dialog into the data collection strategies (and broader land use recommendations).
From on-site discussions and the ethnohistoric literature, we can see CMTs of Native interest as two sides of the same coin: refusal and survivance of colonialism (Tachine 2023). Vivio-facts, eco-facts, and living artifacts are English terms that describe organic artifacts that categorize phenomena like CMTs (Parker and King 1998). However, traditional ecological thinking is usually not incorporated into Western-trained archaeological techniques. Below is an example of the complexity CMTs represent from a Tribal worldview:

“Living artifacts are unique because they grow into their purpose, and that purpose and function are particular to that community” (Informant 3 2022).

Specific CMTs are part of a rich and varied meaning within tribal communities that have secured their significance (King 2003). CMTs exist because this act refuses colonialism and embodies a refusal with respectful traditions that translate into care for ecological health and conservation for future generations and existing ones. A vital balance here must be respected and acknowledged because survivance plays a critical role in the Native telling of their history (Tachine 2023). It allows people to care for themselves -to respect Indigenous realities as perceived by Indigenous peoples (Younging 2018; Tachine 2023). Acts of survivance creatively traverse, or more precisely collapse, the space between the imaginary and the real (Tachine 2023: 32). Breaking down arbitrary colonial definitions matters, especially concerning heritage. This research design invites a native perspective of CMT to unlearn the same constructs which applied labels to this phenomenon from conception.

After collecting a baseline of CMT county data, I connected with Tribal Historic Preservation Officers with the Stillaguamish Cultural Resource Department to select five sites of interest. From this data, we paired themes and guiding questions with specific places familiar to the Stillaguamish Cultural historians to evoke significance and meaning.
Ethnohistorical Methods

Indigenous voices are historically present in the past (as well as the present), including a historical narrative in understanding changes over time (McCarty 2018). This aspect is critical to the shared human journey: documentation and space to provide input of history, philosophy, and way of life as fundamental matters for cultural identity (Younging 2018). Exploring CMTs local to the Stillaguamish watershed requires gathering ethnographic data about context, linguistic evidence, and contemporary Stillaguamish knowledge from the 18th and 19th centuries. In this research phase, visits to Indigenous archives and state, local, and university libraries were scheduled repositories that offered documentation necessary to support an elusive presence of CMTs represented in historical and ethnohistorical literature. Ethnohistorical accounts help present the consequences of the loss of practices tied to the wide-ranging use of trees. Photographic evidence, newspaper articles, and oral histories supported connections with the trees harmed since the arrival of American settlers, as told from a Native experience.

Direct ethnohistorical information helps delineate important plants and associated traditions related to changes in the use of trees over time since settler expansion (Turner 2014). Ethnographic resources were critical to a baseline understanding of the varieties of living traditions associated with trees in the Stillaguamish Watershed and the larger Pacific Northwest (Appendix C). A compilation of ethnohistoric data includes descriptions of the varieties of tree types (use trees and trees of significance), used, owned, or tended, and how this changed with the arrival of white European settlers. Combining ethnohistoric memory with local tribal vocabulary adds to the depth and significance of these living figures on the landscape to create authentic meanings and relationships to CMTs. It also showcases the variety of CMT that Western-trained archaeologists are not observing.
Ethnographic Methods

Ethnography explores deeper relationships and meanings created and maintained by cultural groups (Hennick et al. 2010). Ethnography is a qualitative method used to examine changes in human social behavior (Hennick et al. 2010). Raw ethnographic interview transcriptions are housed with the Stillaguamish Archives for research requests. Ethnographic information supports the existence and varieties of CMTs (Haeberlin and Gunther 1930, Smith 1949; Bruseth 1977; Turner et al. 2009; Boyd and Thrush 2011). However, the archaeological record suggests that there were almost entirely bark-stripped cedar trees.

The purpose of an ethnography combined with a community centered CMT study explores a relationship between Western standardized criteria and more profound reflections of CMTs via on-site inventory reflection with Indigenous harvesters and tribal historians. We aim to bring perspective to the Western approach through on-site visits to previously recorded CMTs to reflect Stillaguamish Tribal values in the CMT recordation process.

Through open-ended, semi-structured conversations, individual voices acknowledge a local tribal preservation perspective of CMTs in the Stillaguamish Watershed, backed by a vibrant environmental ontology (Hennick et al. 2010). These interviews were conducted on-site, physically, and virtually (going over previously gathered CMT data at that site). Interviewees were given the choice of having their interview either voice recorded or recorded with handwritten notes. All interview notes with recordings will be transcribed, made available to participants, and afterward held in the Stillaguamish Tribe of Indians Archive facilities.

This part of the study highlights tribal values associated with CMTs on each site. A small and diverse range of preservation perspectives from experts with the Stillaguamish Cultural/
Natural Resource Department is critical to this discussion. An absence of multivocality exists, impacting the quality of archaeological data concerning ethnographic resources like CMT (Parker and King 1998). Feelings and emotions are examples of information omitted in assessments of Indigenous bark-peeled cedar trees and other CMT varieties. Cross-cultural conversations remind us of the purpose and meaning correlated with Tribal expertise in conceptualizing local CMTs, and there needs to be communication in the recordation process.

Site visits incorporate a flexible approach that combines physical and virtual interviews to accommodate time constraints and weather conditions. During all interviews (n= 12), we reviewed archaeological site forms containing records of CMTs. Tribal experts were familiar with the CMT locations and, in exceptional cases, knew the trees precisely so we could navigate “site visits” to incorporate elements of experiential knowledge.

Participants are full-time Department Directors, Historians, Practitioners, and Youth Educators. I am most grateful to them for their time and patience with me during the construction and implementation of this project. However, it is essential to note that these individuals are more like mentors than “participants” or “informants.”

Interviewees

This research protects the participant’s identities by redacting names and omitting site interview transcriptions. Participants are simultaneously mentors and advisors to this work. They specialize in cultural/natural resource law and have experienced diverse roles woven into the CRM industry -as well as being researchers and practitioners integral to fulfilling the directions of sovereign governing bodies. Snowball sampling (Hennick et al. 2010) provided an essential technique for recruiting project mentors. The original jumping-off point consisted of an email to
the Stillaguamish Tribe of Indians Resources Department, connecting the Cultural Resources Team. In this instance, the Cultural Resources Department Supervisor. This individual connected me with two other people, bringing the number of participants to three.

**Ethnographic Procedures**

**Grounded Theory**

Upon tabulation of archaeological CMT data, I observed absent information about recorded CMTs that helped formulate the following themes and questions that correlate to layers of understanding within community centers of knowledge. A tabulation of archaeological CMT data supported a critical reason to ask qualitative questions applied using grounded theory (Hennick et al. 2010). Qualitative data centered on the universals and tangibles conveyed on-site through recorded and unrecorded semi-structured conversations focused on absent emotions and feelings during the original archaeological site recordation. This exercise aims to reposition Western thinkers to know the depth and breadth of resources that can positively impact CMT relationality in the field. This shift is powerful because it elevates Indigenous Voice, where colonial thinking has been the primary avenue to communicate CMT, rather than Native communities themselves (Younging 2018). Culturally Modified Tree sites correlate to specific themes because of landscape attributes and associated knowledge of tree modification forms. For the semi-structured interviews, we centered questions around site themes. These five themes correlate to the preservation perspective and cultural impact:

a. More than Trees

b. Place and Language

c. Inviting Indigenous Ontology
d. Community Care

e. Ethics and Mixed Methods

These values and attributes highlight perspectives absent from the original archaeological site data recorded in the field and uploaded to WISAARD. Incorporating these five themes creates space for Indigenous knowledge keepers to include perspective and promote the opportunity to engage with these legacies of Native America (Parker and King 1998). For each site visit, we address five questions guided by a discussion theme around recorded CMTs (Hennick et al. 2010).

The grounded theory supports an explorative design emphasizing Indigenous values and ideas around CMTs evoked by feeling and meaning (Hennick et al. 2010). Each interviewee walked through five previously selected, prerecorded CMT sites to get a sense of depth and meaning evoked by these CMTs – to give other trees besides bark-stripped trees weight in the heritage industry across the Northwest region, United States. We applied the guided interview questions (site visits 1, 2, 3, 4, and 5) to each stop. On-site discussions for each individual at each stop can be anywhere from 20 minutes to 120 minutes (about 2 hours).

For example, in stop one, More Than Trees, we visit a known Candelabra Tree associated with a trail and other nearby features, reminding us of the entire story scapes associated with CMTs. On stop two, Place and Language, we selected a CMT with multiple meanings between salt and freshwater. Stop three, Inviting an Indigenous Ontology, discusses the vitality of trees, corresponding to intergenerational harvesting traditions. The fourth tree visit centers on Native Community Care, inspired by "two worlds," a concept that supports Tribal communities' connection with Native American landscapes and land management discussions. The final stop highlights Ethics and Mixed Methods. At this stop (stop five), proximity to Indigenous CMTs is closer and more complex than previously realized. Culturally Modified Trees can be found quite
literally in our backyards. These layers of miscommunication highlight an extreme disjunct which reaffirms that CMTs need protections defined by executive decision-makers representing Tribal interests to negotiate the adequacy of this strategy.

**Telescopic Application**

Telescopic analysis synthesizes discussions at each site to protect individuals and tribal interests while conveying important universal concepts that impact tribal values in CMT discussions (King 2003; Hennick et al. 2010). Simultaneously, small flexible packages of CMT concepts allow readers and audience members to connect with CMTs from alternate perspectives. This method accounts for the various feelings and reflections brought to these settings (Dongoske 2020). Telescoping breaks down cultural worldviews to make this information more relatable to non-archaeologists and people in/ outside the heritage industry (Hennick et al. 2010). Immediately transcribing audio recordings after the interviews allowed the opportunity to listen to mentors’ words expressed rather than letting an AI (artificial intelligence) system transcribe these voices. Simultaneously, individual transcriptions gave the researcher time to perform a telescopic qualitative data analysis from two to three reflections at each revisited CMT site (Hennick et al. 2010).

Processing written transcripts (raw data) through a telescoping method (Hennick et al. 2010: 248) allowed investigators to vary their scope of the data by moving from a broad overview to a close examination of the details (Appendix F). I listened for keywords and concepts that overlapped between participants related to each CMT (Hennick et al. 2010). Listening to the feedback from informants recorded in the interviews flagged overlapping concepts at each CMT site contributing to the concept diagram (Appendix F). Four or five featured concepts (intangible
or tangible) comprised a relatable range of feelings and emotions from the onsite interviews that capture perspectives from 2-3 people per site (Hennick et al. 2010). Participants \(n=3\) scheduled separate appointments to summarize perspectives and impacts associated with pre-recorded CMTs in the Stillaguamish River Watershed; however, we could only hold 12 of 15 interviews due to time constraints and scheduling. The specific universal concepts in the diagrams were drawn from the interviews, agreed on by participants, as viable ways to give their story about each CMT (Hennick et al. 2010). I arranged concept diagram keywords with no particular order to help audiences visually process the connection between concepts and relate to the informants' perspectives. The telescopic analysis phase reveals universals and tangibles because this research focuses on perspective and tangible impacts on CMTs (Hennick et al. 2010). For this reason, I drew conceptual keywords and expressions tabulated after interview transcriptions to help conceptualize emotions evoked by the site at these visits (Hennick et al. 2010).

In addition, these symbolic artifacts are affected by real-world legal decisions and conversations made by the same mainstream society that has reduced CMTs on the landscape to living disjuncts rather than powerful embodiments of human interactions with the landscape (Parker and King 1998; King 2003).

**Public Disclosure:** (Chapter 42.56 RCW) includes (but is not limited to) records, maps, and other information that identify the location of archaeological sites, historic sites, artifacts, or the sites of traditional religious, ceremonial, or social uses and activities of affected Indian tribes. For this study, known archaeological sites are removed and redacted to respect information whose release would constitute an invasion of privacy.

**Interview Questions**

Themes and interview questions were thoughtfully extracted from the collected archaeological quantitative information. Site types and visits were designed to be flexible. Interviewees were given options about physical and virtual site visits to allow for time constraints.
The ethnographic core of this project consists of semi-structured interviews with open-ended questions regarding a CMTs ethnographic significance, represented by a range of Tribal perspectives (Parker and King 1998; Hennick et al. 2010). The interview guide below captures the questions derived from the quantitative information generated by Western academic archaeologists.

**Interview Guide**

*Site Visit 1*

**Topic: More to This Than Trees**

“Culturally Modified Trees” are a Western concept. Archaeologists have developed specific ways of documenting and thinking about what we call "Culturally Modified Trees", in this visit the thematic questions were:

1. What do you think about these trees? Do you have a term or terms you use to talk about them?
2. Can this concept include other plants, relationships, and existing dynamics?
3. What else should be included in the broader concepts around CMTs? Do you think there are other CMT-type varieties? What does this look like to you?
4. Specifically, do Bark stripped Cedar trees communicate ownership, in any way, to you?
5. Do you think CMTs should be restricted to thinking solely about trees?

*Site Visit 2*

**Topic: Place and Language**

In this visit the thematic questions were:
1. Does place or space play a role in your choice to harvest?
   - What speaks to you about these settings?

2. Do you think these types of features are attributes of Traditional Cultural Places,
   - Why or why not?

3. Who usually participates in bark harvesting of Cedar?
   - Do you remember when you learned to peel Cedar bark?

4. Why and when did you select a particular tree? Does the time of year play a role?

5. To your knowledge, is there a place name for this location?
   - Is this an important aspect to include when documenting CMTs?

7. Are there a Stillaguamish or Lushootseed word/s used for Cedar or Cedar Bark Peel?

8. Is there a Stillaguamish or Lushootseed sentence for gathering bark?
   Can it be written and spoken? What does this translate to?

Site Visit 3

Topic: Inviting an Indigenous Ontology

In this visit the thematic questions were:

1. Are the places you visit today places that need to be protected? Are these places currently
documented? What are the risks of losing these places? What could be the impacts?

2. Why are old trees with scars significant?

3. In what ways do you see community engagement/management around these trees in the
   future?
4. What notable absences or patterns do you see in Western academic recordings of these types of resources? Or- What do you think tribal consumers of CMT information would like to see included in CMT forms that could be useful to Native archaeologists?

5. Where do you see the potential for future research? – Who would you like to see handle and manage these resources?

**Site Visit 4**

**Topic: Promoting Sincere Patrimonial Care**

In this visit the thematic questions were:

1. Do you think current strategies reflect tribal values (at all) in the recordation process around CMTs?

2. Does Culturally Modified Tree, specifically Bark Stripped Cedar Trees, bring life to a landscape or meaning to a place? Do you think this dynamic is subject to change? Are there any impacts on these traditions? What are they?

3. Does memory play a role in interacting with these features and types of landscapes? (*Can it bring life to a place?*)

4. What should resonate with audiences about CMTs? Or what brings meaning to the relationship with CMTs?

5. Does Culturally Modified Trees, specifically Bark Stripped Cedar Trees, bring life to a landscape or meaning to a place? What does CMT communicate about the area, Indigenous communities, and environments? (In your opinion, do these places carry memory, meaning, or purpose?)
6. From your experiences, have you changed your harvesting patterns in where you harvest -
due to these impacts?

Site Visit 5

Topic: Ethics and Mixed Methods

In this visit the thematic questions were:

1. Western archaeologists see these trees as a valuable part of the archaeological record, as
data about the past. How do you feel about that perspective, seeing a Culturally Modified
Tree as data to be collected? What might archaeologists be lacking in gathering quality
data?

2. What should agencies be doing to empower Indigenous communities to manage these
resources? What is the archaeologist's role to you in reaching this goal?

3. Do you feel that these trees should be recorded? To you, what is the harm in
mis-documentation or mis-assessment of Culturally Modified Tree?

4. Is there a way to improve protection and communication to identify strategies that benefit
local communities that care for these resources meaningfully?

In the following chapter, knowledge is braided together to highlight the depth and breadth of CMT
ontology when there is a channel of communication that is open with guardians of local CMT
information. This next chapter incorporates archaeologically recorded information and qualitative
information from the interviews.
Chapter V  

Braiding Knowledge

The following phase of this study interprets recovered archaeological CMT data to illuminate sampling problems. To compensate for absent ethnographic information about CMT's conceptualization, incorporating grounded theory and telescopic approaches to help interpret CMT meanings within a Tribal community. Perspectives and impacts from the Stillaguamish Resource directors of CMTs in the Stillaguamish Watershed bring an ethnographically informed interpretive approach to previously documented CMTs. This exercise aims to bring respect and thoughtfulness to CMT relevance from the perspective of the Stillaguamish Tribe of Indians. This interpretive approach helps register the value of this information from a cross-community perspective because current CMT data conveys little to no tribal community value, making CMT data hard to comprehend analytically.

There are cultural effects when we exclude Indigenous Ontology from interpreting CMTs as they are observed and interacted with across a landscape picture (Parker and King 1998; Bulletin 15 Criteria For Evaluation). Collaborating with tribal partners is the only way to benefit from more critical questions about these trees and land use techniques that are meaningful to a community and promote the equitable interpretation of CMTs in local areas (Parker and King 1998; King 2003).

The CMT data I have compiled from Skagit and Snohomish counties reveal more questions than answers. There are gaps in the data because there is a lack of ethnographic data being re-evaluated and included within archaeological inventories, severely limiting what is
observed and documented in archaeological surveys and how this information is communicated within Indigenous communities (Parker and King 1998; King 2003).

The following tables are synthesized from the county tree counts I compiled through the WISAARD database. I tabulated Culturally Modified Tree data and took special note of the following:

a. Recorded CMTs by species type and county
b. Modification Type By County
c. Spatial-Temporal Use and Return

I compared whole sites and individual trees to use what little data exists on CMT sites in the area of study. Visual analysis of the complete county datasets revealed patterns in the frequency of recorded CMTs between neighboring watersheds. Table 1, outlines site counts and individual counts of trees. By looking at the data collection (what has been ethnographically documented vs. recorded CMT sites), we know intuitively that there is a sampling bias. Furthermore, we can do something about it by creating space and time to listen to alternative perspectives on the ground from CMT knowledge keepers (McCarty 2018). Table 1 represents all of the sites with recorded CMTs in the WISAARD database as of December 2022. This CMT site count reflects low numbers.

Table 1: CMT Counts collected through State Archaeological Database WISAARD

<table>
<thead>
<tr>
<th>County</th>
<th>Sites</th>
<th>Total CMT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skagit</td>
<td>16</td>
<td>299</td>
</tr>
<tr>
<td>Snohomish</td>
<td>25</td>
<td>345</td>
</tr>
</tbody>
</table>

(To present 2022)
A. Recorded CMT by Species and County

Asking broader questions about CMT recording standards has revealed that many CMT types go unseen and undetected by archaeologists within the local Skagit/Snohomish area. Bark-stripped cedar types dominate samples across the Skagit and Snohomish Counties. Results can be seen clearly in Table 2, where 570 of 644 (88.5%) of the recorded trees are cedar. A potential reason could entail that Indigenous people only modify cedars one way. However, the ethnographic information and ethnohistoric literature suggest there was and are a wide variety of Tree use traditions. An onsite reflection shows us that many other kinds of CMT are out there, not being recorded.

“Typically, this area is red cedar, by not always. I have seen them on Pine, Doug Fir. To some extent, it is also important that the motive would be opportunity. What is in the area? – to fit the purpose that you need?” (Informant 3 2023).

Table 2 outlines individual counts of species recorded between Skagit and Snohomish counties. It is worth noting that I used the information on the actual site forms. At each site, I operated from the counts as they were documented in the archaeological site description. Perhaps these counts suggest that archaeologists or recorders often do not look for CMTs outside Western Red Cedar varieties.
Table 2: Recordation of CMT Species by County

<table>
<thead>
<tr>
<th>Species</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Western Red Cedar <em>Thuja plicata</em></td>
<td>278</td>
</tr>
<tr>
<td>Western Hemlock <em>Tsuga heterophylla</em></td>
<td>20</td>
</tr>
<tr>
<td>Douglas Fir <em>Pseudotsuga menziesii</em></td>
<td>1</td>
</tr>
<tr>
<td><em>Red Alder Alnus rubra</em></td>
<td>1</td>
</tr>
</tbody>
</table>

**Skagit County**

<table>
<thead>
<tr>
<th>Species</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Western Red Cedar <em>Thuja plicata</em></td>
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<td>20</td>
</tr>
<tr>
<td>Douglas Fir <em>Pseudotsuga menziesii</em></td>
<td>1</td>
</tr>
</tbody>
</table>

**B. Modification types by County**

Recorded modification types highlight the alarming lack of diversity around CMT species in Skagit and Snohomish Counties—see Table 3 CMT modification types by county. Table 3 counts are by site rather than by tree because documentation standards vary by time and place—As another example, one site was documented as an isolate within Skagit County. Another example, one site could contain anywhere from 1-200 CMTs. Fifteen recorded sites are counted within the CMT Modification (Table 3). Counts for multi-modification were derived from the Peeled, Shaped, and Other categories; also, one of the peeled sites was recorded as an isolate.

It is difficult to create meaning in the data without qualitative reflection and feedback from the Tribal Community who care for these CMTs. Approximately 30 percent of these recorded sites contain an additional complexity relating to multi-modification at these sites.
Table 3: CMT Modification Type by County

<table>
<thead>
<tr>
<th></th>
<th>Skagit County</th>
<th>Snohomish County</th>
</tr>
</thead>
<tbody>
<tr>
<td>Modification type</td>
<td>Number</td>
<td>Modification type</td>
</tr>
<tr>
<td>Peeled</td>
<td>15</td>
<td>Peeled</td>
</tr>
<tr>
<td>Shaped</td>
<td>1</td>
<td>Shaped</td>
</tr>
<tr>
<td>Other</td>
<td>1</td>
<td>Other</td>
</tr>
<tr>
<td><em>(Sites that include multi mod)</em></td>
<td>5</td>
<td><em>(Sites that include multi mod)</em></td>
</tr>
</tbody>
</table>

*(To present, 2022)*

**C. Spatial-Temporal Use and Return**

Figure 23 offers a glimpse into the importance of cultural continuity at CMT sites. Archaeological observations record a unique characteristic at some of these sites, noting “recent use” in some groves containing old scars. There is subtle communication in this nuance. Figure 25 reflects these areas continued and repetitive use in CMT site records.

“Indigenous cultural modification to trees in Western Washington convey an element of inter-generational transience. People return to these places.”

(Informant 1 2023).

“It is not just living on the landscape but being an active part of it.”

(Informant 2 2023).

Listening to Stillaguamish community experts suggests stories told within the community bring recollection to a place, and an essential tribal value stewarded by CMTs, as outlined in site stop three, “Inviting an Indigenous Ontology.” The exchange represents human connectedness with a
landscape that becomes evoked when members of a tribal community return to places containing older peels to harvest. Places, where old and new scars occur on standing trees, contain powerful reminders of story, human vitality, and memory. Traditional communities use a vernacular concerning CMT entirely excluded in preservation procedures (King 2003).

**Figure 23:** Bar graph of County temporal return to CMT sites- Black (Skagit) Grey (Snohomish).

**Summary of Archaeological Evidence**

This data sampling from previously recorded CMTs is problematic without cross-cultural dialog and exchange. It is hard to find meaning in this data without a Tribal perspective. The most critical line item is that interpretations of Native CMT are inextricably limited to Western euro-american philosophy. Invisible constructs of Western settler colonial frameworks developed and upheld CMT assessments since conceptualization rather than promoting translation from within communities whose inheritance rights are represented in CMTs (Parker and King 1998). This report stresses CMT from the perspectives of Indigenous People because there are other
types of CMTs beyond bark-stripped cedar trees. A suggestion for this appearance could be that lowland forests containing diverse forms of CMT were converted into sedentary, agricultural spaces or *artificial environments* in the recent two hundred years. Today, the dominant society is unaware of precious CMTs, which reflect human sustainability and Indigenous lifeways across broad patterns of time (Stryd and Feddema 1998).

Culturally Modified Trees are standing unobtrusively across Snohomish County and Skagit County. Culturally Modified Trees exist in interurban areas too, and they can be seen with guidance and perspective from Tribal Communities. Walking through recorded CMT sites guided by harvesting experts reflects missed opportunities to learn more about CMT of tribal interest in CMTs glossed over by traditional systematic approaches. Incorporating knowledge keepers familiar with the Stillaguamish River generates a deeper and more meaningful reflection of CMTs.

“They definitely are intellectual resources. Um, because they speak to a much deeper intellectual property as well. However, you know, oftentimes, they were made to be seen. It is why they are made, most of the time” (Informant 1 2023).

The physical loss of Native CMTs correlates to individual stories facing the threat of being erased because Western archaeologists are not theoretically interested in creative ways to empower diverse preservation perspectives. Western academically trained specialists are prone to tunnel vision based on our worldview and forget to incorporate other ontological interests (Parker and King 1998; King 2023). Different views and philosophies are essential to promote, preserve and protect all areas of the heritage industry (Giovine 2015).

Preservation laws were designed to be flexible (King 2013). However, legal weight applies to intangible artifacts with clean boundaries rather than emotions and psychology represented in complex figures on the landscape (Parker and King 1998). Modern society exists
in a pressed temporal window where it is valuable to verify the quality of CMT assessments with attention to tribal values. These five site visits containing CMTs reveal more to the story than just the “trees.”

“I think landscapes should really be considered. Rivers, trails should be considered. If the tree indicates a trail system, what about the trail system? Does it deserve recognition or protection? The tree is really simply a clue to the more important references to the trail. What about its protection?”

(Informant 1 2023)

If we make the time to talk to practitioners, we, as Western archaeologists, would learn more about the landscape instead of assuming we know CMTs. Worldview and visibility are crucial in how these figures on the landscape are interpreted and acknowledged (Parker and King 1998; King 2003). There is a peculiar academic fixation on peeled cedar trees – as they are the most identifiable type of CMTs in archaeological inventories. It is not until we look at the data as a whole that we can ask more significant, meaningful questions about community interests related to CMT (Atalay 2012).

**Reflection in Perspective**

Indigenous people are a part of this landscape. Euro-american transformations to the environment impacted Native landscape relationships for over 250 years (Rajala 1999). These CMT stops are exercises in quality listening and authentic engagement from outside traditional archaeological lenses, incorporating limits for access and privacy (Hennick et al. 2010). To present an invitation for alternative perspectives and cultural stewardship decisions to curate pathways in the archaeological record, the human journey. Stillaguamish preservation perspectives woven into five CMT site visits carry ethnographical significance lacking in Western CMT documentation strategies (Parker and King 1998). The relevance of tribal
philosophy is the core of this work, and the section began with an archaeological sampling of CMT data for Skagit and Snohomish County in Western Washington. Instead of original transcriptions, broad concepts, and ideas are shared from semi-structured interviews relating to specific CMT sites. This approach invites a range of three Tribal Guardian viewpoints to conceptualize the depth of CMT sites and stewardship principles. Readers know there are biological and environmental threats, but the most significant threat is *miscommunication and cultural misunderstanding*.

In this second part of this chapter, I will write as though the reader is a visitor to each site. Each stop presents CMT’s background information, including a figure, quote, and discussion of concepts correlating to Indigenous impacts and perspectives with which onlookers of CMT can relate. In addition, each stop includes a word bank of critical meanings and ideas associated with each site visit, also known as concept diagrams representing the telescopic analysis (Hennick et al. 2010).

The previous section focused on the archaeological data derived from two counties in Western Washington. Snohomish and Skagit Counties outline the results of the CMT documentation structure, designed by Western academics. It conveys the limitations around Western standards and definitions maintaining CMT studies and conceptualization of these resources. This structure has functioned in the Stillaguamish Watershed without a reflection in perspective or feedback about the quality of CMT assessment techniques by the Stillaguamish Cultural Resources Department. Site themes were operationalized to elevate feelings and emotions seldom included in Western archaeological assessments of CMTs. Qualitative reflections are crucial in preservation as *other academic and nonacademic philosophies in preservation exist!*
Site 1: More than Trees

Background

Along State Highway 9 (SR9) which runs through Skagit and Snohomish Counties, old and growing CMT can be seen from the road. Culturally Modified Trees symbolize a rich and fluid practice, often informing Indigenous logging and land use management strategies (Stewart 2009). By way of trails, harvesting areas, and areas of particular significance, some CMTs represent the Indigenous human spirit (Informant 2 2023). Today, CMT from historic and precontact eras dot unsuspecting urban areas (Boyd and Thrush 2011). Some of these trees are significant because the ancient traditions of a particular group indicate that they still and exist today (Informants 1, 2, and 3 2023). This CMT (see Fig. 24 and 25 below), a Western red cedar, contains 2-6 spires and is referred to as a Candelabra Tree. This example is approximately 130 years old based on a tree core sample (Cooper 2019) with a Diameter Breast Height (DBH) of 4 feet. It grows in an unnamed seasonal ravine adjacent to an old railroad grade and State Route Nine (SR9).

Stop one is particular because this tree features a Candelabra Top (Figure 25). Candelabra Limbs and Candelabra Tops are different, a candelabra top tree is a complex top (see Figure 18), meaning the tree is much generally old (Haida Gwaii 2016). Candelabra-top trees are noted for their 90-degree candle limbs, which can contain anywhere from 2-5 leaders or, in some cases, more (Haida Gwaii Handbook 2016: 23). All these limbs extend to the same height as the base stem (Haida Gwaii 2016). A tree with candelabra limbs can be considered cultural in specific circumstances determined by the tribes with interest (Haida Gwaii 2016).
Maps and Figures

Figure 24: LIDAR image of the Candelabra Top CMT topography. State of Washington archaeological site inventory form. Cooper. WSDOT report 2019. Figure 2.
Figure 25: Looking upward toward a Shaped Cedar Tree; Candelabra type tree. Cooper, 2019. Figure 7.
Quotes

“These concepts relate to this tree because “ethnographers were capturing information about the landscape and tribes who occupied this land created gaps in place names, where people were and the complex boundless Salish and Coast Salish groups that stood alongside one another” (Informant 2 2023).

“The trees are just like, a surface level, easily identifiable marker, and they are often called marker trees. Often they indicate a broad landscape modification” (Informant 1 2023).

“Culturally modified trees are essentially markers on the landscape. We always take them in context because they are modified natural organisms. That is very holistic, incorporates a native way of thinking, which is holistically you are dealing with a living entity, and you are modifying it as it goes through its life cycle.” (Informant 3 2023)

Archaeological records from Skagit and Snohomish County correlate to concept diagram one (Figure 28) because this type is significant and rarely recorded. The SR9 Candelabra Top Tree was initially recorded in the winter of 2019 by the Stillaguamish Tribal Historic Preservation Officer and Washington State Department of Transportation’s archaeological technicians (SN00712). Three grounded theoretical discussions about trees that were transcribed and
processed through a telescopic lens correlated between the three interviews suggest that vitality, education, purpose, and place are universal concepts associated with this site. We, as researchers, know very little about these types of trees, and they are part of larger complex landscape semiotics.

**Discussion**
From a contextual aspect, place, vitality, purpose, education, and settings are significant components of the interviews that remind us there is more to the story than a single tree but entire landscape relationships (Hennick et al. 2010). This Candelabra Top CMT is associated with Stillaguamish Historic Period use, suspected to be multi-functional as it is near a traditional trail, stream, and Indigenous stone quarry (Cooper 2019; Informant 3; 2023). Candelabra top trees and candelabra limbs, in specific cases, symbolize complex signals unfamiliar to Western archaeologists (Haida Gwaii 2016). Nonetheless, Candelabra-type trees are significant and deserve to be included in pedestrian survey-based documentation and reviewed by the tribe, which may have a cultural community-based stake, or the tree may be important to individuals within a tribe, etc.

**Site 2: Place and Language**

**Background**
Culturally Modified Tree reflects continuity, movement, and human memories. Coastal Salish landscapes would have looked entirely different from today in 1740 on Camano Island, where the Stillaguamish River meets the salt water. Native places and languages preserve a kind of social memory at stop two. This stop takes us to the mid-eighteenth-century of north Camano Island before the establishment of the modern unincorporated town of Utsalady. Its name is Coast Salish, from the ancestral village of ʔəcəladiʔ, phonetically pronounced ‘Xladdy
(Informant 1, Tulalip Place Names). Combined ethnohistoric and living reflections reaffirm Native stories about place-scapes. Native American Places and languages of traditional religious and cultural importance can be expressed by historical experience and cultural practice by naming tangible places (Basso 1996).

Stop two conveys meanings of memory and movement aligned with use and significance. First, attention centers on a 250-year-old (and counting) Western red cedar tree. This location is the traditional home of the Kikiaulis Community, adjacent to the Stillaguamish families, who lived on Camano Island before the euro-american settlement (Gʷeqʷulce? Peter 1950). This tree stands alone near the bay.

Culturally Modified Trees connect nearby Coast Salish Tribal groups and individuals within the Stillaguamish, Swinomish, Skagit, and Samish shared history. Speaking from individual experience and a shared journey, each voice demonstrates the significance of oral stories as empirically grounded cultural resources that can recover and sustain Indigenous knowledge and identities (McCarty 2018).

Today, this tree is remembered by tribal communities, who give this tree significance. For example, driving by, a small no parking sign is staked nearby to respect the tree as it grows on private property today. Listening to project mentors, we realize these trees “speak” more than one language containing degrees of significance. Stop two is a suspected aerial canoe tree from the early contact period, left by the last generations who practiced this tradition (Informant 3; Boersema 2014). Aerial canoe trees are a CMT type protected by The American Indian Religious Freedom Act (1978) and the NRHP. Stillaguamish Tribal historians maintain a story of the landscape belonging to caretakers, representing shared memory and relationships. A sea of knowledge exists around CMT
when we listen to people with experiential knowledge vigilant of changing relationships within a place.

Maps and Figures

Figure 27: Original landscape associated with site stop 2. Government Land Office Survey Map, November 22, 1859. (2022).

Government Land Office maps (Figure 27) also show that a trail system connected Stillaguamish riverine communities with coastal lowland island communities (Haeberlin and Gunther 1930; Smith 1949; Bruseth 1977; Duer 2009). Three grounded theoretical discussions about this CMT were transcribed and processed through a telescopic lens correlated between three interviews, suggesting language, story, name, native, living history, and relation are universal concepts and impacts associated with this site. Correlating this with ethnographical
accounts conveys a fluidity of boundaries relating to village complexes and shared resources (Informant 3 2023). Ethnohistorical sources suggest that intertribal CMT concepts are profoundly complex and intensely private. Culturally Modified Trees were prepared for, cared for, and played vital roles in the everyday life of these communities (Smith 1949; Miller 2005; Deur 2009). This marker tree (Figure 28) grows along an old trail, but its form is unique. This tree is an arbortaph, more specifically, an Aerial Canoe Tree. The ancient custom of the Aerial Canoe had been discarded” when Euro-Americans arrived (Bruseth 1977). These trees are seldom documented in the archaeological record; they are named extensively in ethnographic references (Bruseth 1977; Gunther 1973; Duer 2009; Miller 2013).

Upon visiting this CMT, Tribal Experts highlight the following characteristics:

I. Low, thick 90-degree distance from branches to the ground.
II. The size of the base stem (trunk) is thick.
III. The health of the tree is essential to note.
IV. Contextually this tree exists near an old trail near an ancient village.
Quote

A recollection from Susie Sampson Peter, born in 1853, recalls her upbringing at a time of trauma and transition during treaty eras—as Utsalady is a homeland of the Kikiaulis Tribe, who managed this landscape (Hilbert 1995). The following quotes help connect audiences to the feeling of participants and memories of losing this homeland, which directly impact language, story, name, native, living history, and relation to this CMT.

“Your son would know where the Kikiaulis lived. Where have they lived? Where their lands were. It was Utsalady where their first homelands were, of course. There was one of their original homes at Man's Landing. That was the big home where they dried salmon. The houses were large, communal, and accommodating. White people squeezed themselves into the very middle of the clearing where Natives had their homes. Right away that was where they (chose to) live. The best spot…” (Hilbert 1995: 59-60).

“These factors would ultimately impact entire villages and nearby sacred groves. As this suggests, place names and cultural stories are often co-constitutive and symbolically related to the perseverance of traditional religions and the cultural importance of sacred geographical figures, locales, places, and landscapes…” (Boyer and Boser et al. 2018).

Discussion

A sawmill stayed in operation until the mid-1980s in Utsalady Bay (Coman and Gibbs 1949; Bourasaw 2011). Social and political dynamics since the 1850s pushed tribal neighbors, such as the Tulalip, Skagit, Samish, and countless other communities, to overcrowded reservations away from their homesteads (Miller 2013). The original landscape is gone, logged, and converted into suburban areas, yet this tree survived (Informant 1). Intergenerational memories of this landscape tied to this CMT are a reminder of another’s perspective, the Indigenous vernacular of place. Part of the mental geography of the Utsalady landscape considers this CMT and its oral story, the modern town/ancient village name (Informant 1). All of which survived the ethnic cleansing of Camano Island.

Ethnohistoric recollections and archaeological evidence support this area's long-term and regular occupation (on Camano Island) in historic and precontact eras (Boersma 2014). In
addition, ethnohistorical literature reminds us that this area was the home of the Kikiaulis communities before the re-settlement ofʔəcəladi? (pn. Utsalady) by Western euro-american immigrants (Hilbert 1995). Stop two is powerful because it identifies fragments carefully preserved within a social memory in connection to a place. Sometimes, these features symbolize ancestors that can only be identified by tribal expertise or guidance matched with trust and sincere interest (Parker and King 1998). According to the perspectives of different neighbors, name, relation, living history, and stories embody more than one meaning connected to this tree (Figure 29).

Site 3: Inviting Indigenous Ontology

**Background**

On this site visit, we examined a CMT recording containing an old scar from a peeling event over one century ago (Figure 30). Pictured below is an older bark-stripped cedar CMT. The tree is aged 130-140 years, initially recorded in 2020 (Iverson 2020). Today, this CMT
grows near a historic trail (GLO land map circa 1890), near the confluence with the Stillaguamish River and Grant Creek (Figure 31). It grows near an open prairie providing access to sʔədəlwaʔs, Mt. Higgens, a Traditional Cultural Landscape to the Stillaguamish Community (nominated into the National Register of Historic Places 2022). Two grounded theoretical discussions about this CMT were transcribed and processed through a telescopic lens correlated between two interviews, suggesting that integrity, memory, optics, and multivocality are universal concepts and impacts associated with this site.

Maps and Figures

Figure 30: Old Scar from a peeling event along the Stillaguamish River. Iverson 2020. Figure 4.
"Understandably, we cannot document or save EVERY tree. However, it is about restoring more than you lose" (Informant 2 2023).

“You know those are important when you think about these trees aging out of existence. Or even, just healing themselves in a way that you might not even be able to tell it was modified anymore” (Informant 1 2023).

Discussion
Stop three is incredibly unique because it is an old scar; these are difficult to identify because of healing processes (Garrick 1998). Culturally Modified Trees are reminders of ecological care and sustainability (Stewart 2009). Culturally Modified Trees bearing old scars are significant because their healing processes make old scars harder to see (Garrick 1998: 67). This can yield information vital to history (NRHP Criteria D) that indicates land use events and practices before colonization. Peeled trees occur in unique contexts. This particular CMT is

Figure 31: Original landscape associated with site stop 3. Government land Office Map, November 18th, 1891, Bureau of land management 2023). Stop is in the SW corner of Section 11, near the river corridor and trail system extending to Mt. Higgens.
associated with events that have contributed to the broad pattern of our (American) history (NRHP Criteria A). In addition, this CMT is related to the Stillaguamish Tribe of Indians' historic use period and travel within the valley (NRHP Criteria B).

Scar on CMT are less visible as they age because they become weathered (Garrick 1998). Trees respond to their environments (Informant 2). Not enough research has been conducted on older CMT conditions to analyze their response to time and care (Palmer 2023). People recognize that CMTs will change (Informant 1). Age will obscure the modification of these trees, and older bark-peeled CMTs are a more significant challenge to diagnose than more recently modified trees. A telescopic analysis of onsite conversations noted that two participants expressed that integrity, memory, optics, and multivocality are substantial universals associated with this site. These interviews also helped conceptualize the barriers younger generations face to harvest to engage with these resources and practice ancestral responsibilities (Informant 1 and Informant 2). This old scar evokes a cultural continuity within the landscape, suggesting a connection with trails and other surface features. Culturally Modified Trees are living and, in

Figure 32: Love and Living Traditions montage. Images provided by Sara Thitiprasert, 2023.
some cases, visible. Stories must be allowed to return to spaces, spoken with Indigenous expertise.

Tribal CMTs serve as knowledge keepers and reminders of human vitality because trees are essential in Coast Salish lifeways (BCMSBT&C 2001; Deur 2006; Turner 2006; Stewart 2009). Bark-stripped trees echo teachings in sustainability because CMT is, to some degree, a liaison for education (Informant 1). The second participant relayed that it is not just living on the landscape; bark harvesting is generationally transcendent (Fig. 32).

From listening to knowledge keepers individually, transcribing grounded interviews, and comparing the qualitative data, the age of this particular scar reflects an essential message about long-standing scars and the nature of healing patterns, optics, integrity, memory, and multivocality. Living CMTs carry stories of intergenerational harvesting practices harmed during early settler occupation (Figure 33). Easterly neighbors of the Stillaguamish, the Sauk, intentionally left bark scars facing away from mainstream public groups so that Indigenous traditions would not gain unwanted attention from federal authorities and the euro-american public (Fish 2016; Palmer 2022). Bark peeling practices are alive and practiced today, generationally cared for by local tribal communities. However, opportune bark harvesting areas

![Integrity Memory Optics Multivocality](image)

Figure 33: Telescopic concepts at stop 3.

are becoming more challenging to access and sustainably gather from (Krohn 2013; Informant 2). From onsite discussions with expert naturalists and tribal educators, it is abundantly clear that
these marker trees are living artifacts with evolving purposes that apply to us today. Whether scars appear on, bark-stripped trees, or trail tree or a beloved tree of another kind, old scars on CMTs deserve to be communicated effectively and respected in preservation discussions.

Site 4: Theme- Promoting Tribal Community Care

Background

This fourth stop incorporates community perspectives regarding CMT care. Western-trained academics cannot define the impacts on CMTs held by a community or Native interest - they do not belong to us.

Culturally Modifed Trees have a story, and this information belongs to communities who care for their existence and survival (Parker and King 1998). Stillaguamish Informants maintain that families would have replanted, returned to use areas, and cared for the trees so that stewardship messages could be memorialized and transferred to future generations (Informants 1 and 2 2023). Stop four features a type of CMT, a tuning fork tree associated with the Deer Creek Trail, and an agricultural burn area (Government Land Office Map 1897; Figure 34). Stop 4 is a neat location, because early surveyors recorded a prescribed burn near this trail, marked by a Tuning Fork Tree (Fig. 35). Photographic evidence of these types can be referred to in Figure 16.

Based on the archaeological WISAARD CMT data compilation, Stop Four features the only tuning fork tree recorded in this area along the Stillaguamish River. This CMT grows about twelve miles south of White Horse Mountain, (čubaliali), and eight miles east of Mount Pilchuck (bəlalgʷəʔ), according to Tulalip Placenames.

A Government Land Office map represents the locale in 1897 and helps to contextualize the CMT. An Indigenous agricultural burn area adjacent to the Deer Creek Trail shows that communities, families, and people manage and maintain parts of this landscape. Cartographic
clues to this shaped tree are near a highly refined set of Indigenous land use practices adjacent to the trail, recorded on GLO maps (burn areas, trail systems). Two grounded theoretical discussions about this CMT were transcribed and processed through a telescopic lens correlated between two interviews suggesting that peace, value, community, and lessons are universal concepts and impacts associated with this site.

**Figures and Maps**

![Map](image)

Figure 34: Original landscape associated with site stop 3. Tuning fork tree marked with a black star is situated in section 17 on Deer Creek Trail and burn area to contextualize CMT. GLO map dated 1897 (2023).
Figure 35: Tuning Fork Cedar, Lyste, 2014, Figure 2 (2022).
Culturally Modified Trees are deeply rooted in community and sustainable opportunity (Informant 2). This tree is slightly different because it connects to a larger community managed landscape.

“You know, almost like, might be considered like a pilgrimage type trail. It is like a rite of passage, a kind of trail. Um, and we know about it. It is kind of there but could be brought back into the living culture. Tribal folks could revive/revitalize it. Moreover, it should have CMTs associated with it. Furthermore, whether those are old ones, like this one, that are reminders to us” (Informant 1 2023).

Like the bark-stripped cedar trees represent stewardship for the tree, this shaped tuning fork tree also represents community stewardship (Figure 36). Shaping and harvesting cedar is a refined practice (Informant 1 2023).

Communities that practice learning together form strong relationships, and intergenerational lessons from the landscape offer “a way back” from colonialism (Miller 2013). These specific harvesting events usually involve a social aspect through education and togetherness linked to an Indigenous pedagogy with the natural world while reasserting Indigenous values that lead toward a more hopeful future (Miller 2013). Whether it is a bark stripped peeled tree or a tuning fork tree, CMTs of all kinds belong to their communities.

Figure 36: Togetherness and Community montage. Image provided by Sara Thitipraserth. 2023.
“I also think it is important to recognize that there is a great deal of diversity in Indigenous viewpoints (even intertribally) and that no matter what or how we try to incorporate better or respect tribal values, you are unlikely to find a path that in the recordation process around CMT that is universally acceptable” (Informant 2 2023).

“Shaped trees are more arbitrary sometimes. Um, it requires consultation and site visits from tribes and access to ethnographic history. All of the children of these traditional peoples now live in two worlds. Moreover, to keep the beauty of these things alive. You know we have to make it feasible; it has to fit into those two worlds we are forced to live in” (Informant 1 2023).

“Community provides the means for our continued survival” (Bruce Miller, 2006).

Discussion

Indigenous communities traverse at least “two worlds” (Informant 1; Miller 2013: 44). One acknowledges environmental and cultural education wrapped into one, and another, is complicated by colonialism (Miller 2013). One world is rooted in traditional ecological knowledge centers, and another is socially boxed into visual and virtual reservation environments (Informant 1 2023). Two grounded theoretical discussions about this CMT were transcribed and processed through a telescopic lens. The correlation between the two interviews suggests that value, peace, community, and lessons are universal concepts and impacts associated with this site (Figure 37). Bark Stripped Cedar Trees and other CMT varieties reconcile memory for the associative traditions intentionally broken by colonialism, settlement, and reservation policies. Today, it is rare to find traditional communities practicing CMT-shaping traditions as this knowledge became threatened by settler occupation. Nevertheless, Indigenous knowledge keepers interested in preservation strategies and land use recommendations have exciting ideas guiding CMT assessments and dialog.
Onsite interviews helped us understand the relationship to this tree by promoting tribal community care of CMTs. Both shaped and peeled CMTs bring life and meaning to a place through memory -connected by two worlds. This concept of “two worlds” juxtaposes Native history in CMTs intertwined within a modern society, bringing empathy to the central challenges Indigenous communities face today (Informant 1 2023). Community interests are central to CMT research questions. Because CMTs are variable and are difficult to identify, or completely non-visible – to Western academics without community knowledge, guidance, and patience.

Site 5: Theme- Ethics and Mixed Methods

Background

Culturally Modified Trees play a role in all our lives, not just in other cultural groups and in different spatial-temporal periods (pre-contact, historical contexts). As reminders of
Culturally Modified Trees (CMTs) haunt us (Boyd and Thrush 2011, Frichot 2021).

Culturally Modified Trees are not just relics of the past but also reminders of sustainability. With rapid urbanization and times of catastrophic biological loss, interdisciplinary conservation concerns have become more critical. These lessons carry not only academic value but wisdom to all of humankind. Native communities working hand in hand with archaeological specialists can inform national history, world conservation, and land use recommendations that benefit forest health (Voggesser et al. 2013). Culturally Modified Trees used or shaped over 160 years ago are threatened through various circumstances, most notably logging and rapid urbanization (Garrick 1998, BC Handbook), followed closely by wildfire (Durr 2023).

“*Their purpose may have changed, but the meanings remain*” (Don Wells, Mysteries of the Trees 2021). This CMT was documented in 2017 during a road expansion project and fortunately recorded. Marker trees along what is now 236th Street, running east and west, have existed since before a road intersected the landscape (Figure 38). Standing along a tributary of the Stillaguamish River, approximately 5.5 feet in DBH (diameter breast height) with a leader (Branch) that points towards Portage Creek (Figure 39 and Figure 40). This tree can be seen with a keen eye driving 236th street, which is seventy feet from the physical road.

Stop five contains a CMT with a 90-degree limb within the site vicinity. Horizontal branches are not explicitly mentioned in the British Columbia Culturally Modified Trees handbook. -yet they are crucial to the tribe of immediate locale negotiated with/for tribal
interests (Humphries et al. 2017). Horizontal branched trees are an example of a critical disjunct in Western CMT strategies. Two grounded theoretical discussions about this CMT were transcribed and processed through a telescopic lens correlated between two interviews, suggesting that ownership, world, practice, and humankind are universal concepts and impacts associated with this site.

Today, this tree stands in the backyard of a home owned by the Stillaguamish Tribe of Indians (Informant 1). Multi-component sites containing both stripped and shaped CMT are remarkable features that tell us that people come back to harvest, for one reason or another (Humphries et al. 2017). This particular shaped tree is unique because of the thick horizontal leader (branch) that extends to the west and its proximity to other peeled trees. Cultural
continuity ensures the survival of generational stories and practices to create multi-component CMT sites near modern expanding urban sprawls (Informant 1 2023). Resource extraction is a healthy indicator of long-time use of a neighborhood for resource procurement (Humphries et al. 2017: 28). On this site visit a diversity of plant species are evident as a series of landscape attributes provide optimal resource gathering in addition to bark harvesting: patches of devil’s club, skunk cabbage, and beaver lodges in the immediate area -indicating a healthy ecosystem in which one might sustainably choose to harvest cedar bark, appropriately (Informant 1 2023).

**Figures and Maps**

![Figure 39: North Aspect of a Shaped Cedar, Equinox Research and Consulting Inc. S.J. Humphries, R.H. Gargett. (28-20). 2017. Figure 17.](Image)
Quote
“It is hard to connect accurate information about the CMT, -it is hard to get past the area of cultural property, humility, and lack of knowledge. Archaeologists need to listen and question beliefs (or positionality). There is a lack of respect for Indigenous knowledge. The tribe will know. People do not ask or question what is in writing (dominant colonist language)” (Informant 2 2023).

“You know, sometimes, deeply academic things are almost written in a different language. So yeah, but having access to the information and having tribal interpreters to convey that to the tribal communities is really important. Yes, consulting early, you know, prior to the survey or immediately after the survey or something that was found, maybe reach out and provide the opportunity for a site visit during the survey” (Informant 1 2023).

Discussion
Expert perspectives help us understand the broad relationships CMTs carry between people, not just the landscape, so we can share data and talk to one another about the greater
value of this information. Western archaeologists studying Native CMTs operate from a distance. Instead, we should respect the cultural complexity of Native CMTs and acknowledge that the Western perspective to communicating CMTs covers a small portion of this resource (Informant 2 2023). Culturally Modified Trees are expressions that are a part of this landscape, in some circumstances, with entire communities around them (Informant 1 2023).

Transversely, Culturally Modified Trees remind European descendants of the Indigenous stewardship relating to ownership, practice, world, and humankind harmed by the power displacement during industrial-era logging activities in Washington State. Today's CMTs are survivors (Informant 3 2023); they represent a symbolic relationship with the landscape hastily liquidated by non-Native locals who considered them obscure if they received attention during original settler migrations (Figure 41). Sites of cultural continuity offer space for Indigenous peoples to return to their traditions (Informants 1 and 2 2023).

Figure 41: Telescopic concepts at stop 5.
**Final Onsite Thoughts**

People are interested in CMTs as ethnographic resources; because clearly, CMTs receive observation by means of categorization and recognition. However, looking at the data analytically tells us very little about the trees and communities that care for their existence. When we invite alternative perspectives to the archaeological data, we form connections and gain a deeper understanding of this landscape concerning CMTs. Ultimately, CMT reflects the complex use of trees in Skagit and Snohomish Counties. In total, 644 CMT were archaeologically recorded and uploaded to WISAARD between these counties.

Whoever controls preservation laws controls the dominant archaeological narratives which are designed to ask specific questions about the purpose of documenting CMTs. These laws also affect the centering or deemphasizing of Tribal expertise of these resources in management discussions. The previous section portrayed layers of complexity associated with living histories intertwined in CMTs.
Chapter VI
Summary of Findings

Conclusion

We can bring meaning and respect to CMT data by examining previously recorded CMTs in the Stillaguamish watershed with an ethnographic lens. Otherwise, without guidance from knowledge keepers, an analytic study of CMT from archaeologically documented observations would be useless. There needs to be a guardian perspective to help make sense of this data. This bias creates a disjunct, where the two threads of knowledge (Indigenous and Western) work to unravel social perspectives correlating to CMTs as an archaeological resource and a form of cultural communication negotiated by Native Peoples.

A significant challenge in this research accounts for the variation of data, “splitting” vs. “lumping” approaches inherently applied by the individual observant (Trigger 2006). Culturally Modified Tree data sets are often bound to methodological scopes of study and sampling bias. For example, in some places, CMTs have rigid definitions which define clusters or isolated features in an archaeological site form (Haida Gwaii 2016). This study reveals the difficulties of using CMT data through a purely analytical framework. There is a particular concern for CMT recordation standards applied within the archaeological field in western Washington. For example, I encountered inconsistencies in site/tree counts at some CMT sites. This is possibly due to a difference in recordation methodologies between archaeologists, and perhaps some archaeologists have received community-centered training before, perhaps not – the data is too inconsistent.
An inherent challenge exists in the documentation procedures; however, this paper does not recommend new strategies other than conveying time spent learning from alternative viewpoints. It is worth noting that some site narratives describe one hundred trees; however, the site description only documents 50 CMTs of that particular grove. In these circumstances, I could not accurately count the CMT total observations in a given CMT site because this sample is so poor.

It is simple. Culturally Modified Tree ontology, guided by Stillaguamish Tribal Historians, teaches us that relationships are integral to the landscape and other centers of knowledge across a community. Looking at CMT and seeing CMT involves optics beyond Western structures and rethinking what we know about them. CMT is a fluid concept without rigid boundaries that Western archaeologists impose. We are all connected. CMT reminds us that our boundaries and worldviews shape our understanding of this landscape, profoundly impacting cultural survey techniques (Parker and King 1998). Culturally Modified Trees remind us of other existing realities and perceptions, and most importantly, our world could benefit from millennia of wisdom embodied in CMT practice (Turner 2014). There is a point at which we have to ask ourselves about who is generating this knowledge and why; -to reflect on who is being impacted by these observations.

Moments spent learning with others about our shared world and American history break down walls, invite new perspectives, and carry lessons that remind us that equity and friendship are valuable concepts to practice. Multivocal preservation perspectives matter (King 2003). Legal standards implemented by academics that define a cultural phenomenon have actual weight (Parker and King 1998; Barclay and Steel 2020).
Understanding *Culturally Modified Trees is not about trees; it is about the people.* This report highlights the web of complexity and valuable lessons associated with these trees to make these figures on the landscape more relevant and observable. Culturally Modified Trees intersect definitions and world views and embody complex figures on the landscape because they were created and exist and are maintained due to those processes (Turner 2014). An inclusive reflection of CMTs and adaptive applications shows why archaeological CMT data can be excellent evidence for Indigenous land rights (Garrick 1998). Culturally Modified Tree studies and an Indigenous passion for this subject matter create ontological space to address a disjunct around Culturally Modified Trees.

In order to be beneficial to Indigenous communities, definitions should be tested for adequacy and inclusivity. Indigenous vernacular, which defines CMT significance, can provide a perspective that promotes multi-vocality in the archaeological record. Authentic definitions created by a tribe require trust and time to offer equitable cultural perspectives to the material record. To move forward with CMT research, we need to be transparent with one another and practice a style of higher learning that impacts existing and future generations.

Revisiting previously identified CMT sites in Snohomish County with Tribal Historians bring communication and depth to the conceptualization of CMT. It is challenging work depicting such an influential part of Coast Salish lifeways while almost eliminating technical and systematic thinking to generate an inclusive CMT dialog. Culturally Modified Trees and other vivio facts are extensions of non-dominant narratives with a deep sense of matrimony and patrimony associated with these figures. They counter clean ideals of materiality enforced by governing descriptions of the past because they represent a form of the non-mainstream vernacular (Parker and King 1998).
This research concerns academically trained Western archaeologists who confine themselves to face-value Western standards of CMTs by failing to critique current methods or reimagine data collection methods or challenge previously existing information about CMTs. Current CMT communication is not wholly adequate or transparent on a local level. We encourage people to listen to alternative and sustainable land use strategies that encourage adaptive preservation approaches of CMTs and incorporate knowledge keepers of their stories. Listening is a powerful tool archaeologists can use successfully to acknowledge and assist the rightful stewards of this landscape. Western specialists should not be the directors or label makers for CMT of Tribal interest – Sovereign Tribal Governments should be given space to confer amongst one another to create community definitions applied to the variety of Marker Trees that can address disjuncts in preservation planning (Parker and King 1998; King 2003). Celebrating relationships with the landscape through CMTs generates space and capacity to strengthen Indigenous preservation perspectives, which have survived eight generations of colonization. Choices within our society are forcing us to re-imagine how archaeological data are interpreted, consumed, and managed for continuing generations while creating relevance for the modern world.

As it stands, Culturally Modified Trees directly highlights existing contrasts between Western scientific views and ideologies of living traditions. Because environmental lessons belonging to CMTs and representative communities radiate intellect, continuity, purpose, and stewardship for the planet that is not always visible to the Western academic trained eye (Parker and King 1998). That is why mindful presentations about CMTs, and Indigenous community involvement of these presentations can strengthen a pathway toward ecological hope for future generations.
Preservation standards are flexible enough to include multi-vocal understandings of CMTs (King 2013). If specialists neglect the potential for imagination around living artifacts and Traditional Cultural Landscapes, we harm a fragile relationship built on empathy and holistic cultural/environmental communication. Community experts and academics could work together to reassess CMTs with attention to cultural impact and community expertise. Critical evaluation of CMT research shines a spotlight on the distance of Western archaeologists from communities which has constrained CMT research and cultural relativism. This project challenges preservation authorities to consider what else is lost within this memory of sustainability. What happens to the human journey when we deem these stories trivial or forget them entirely?

These teachings remind us of community engagement throughout the entire exercise in CMT reflections. We need to work together; preservation choices today impact future generations. This disjunct in CMTs tells us as much about our living world as it does a preindustrial Coast Salish landscape. There are profound conservation lessons that are hard to see and accept. An approach from a cross-cultural CMT perspective can create relevance of CMT to consumers outside of traditional archaeological disciplines, including foresters, community experts, Western-trained specialists, and perhaps everyday people. Nevertheless, other perspectives exist that have been absent from the archaeological discussion of CMTs in the United States. This project creates a chance to unlearn Western perspectives and elevate local voices to support community management of CMTs (Parker and King 1998). Simultaneously, this opportunity demonstrates archaeology’s significance, which is relevant and accessible to everybody (Trigger 2006). Imagination is just as critical as inclusiveness when thinking about CMTs. This project encourages readers to think beyond theoretical limits and see through Western borders to inspire cross-community dialog concerning local historical narratives. More importantly, local learners can
apply or adapt to the Western perspective and incorporate deeply compassionate and equally reciprocal learning methodologies to understand the human journey. So, where do we go from here?

Western archaeologists must incorporate a more inclusive perspective on the human past and the journey ahead. When academics invite a multicultural perspective to the imagination of CMTs, it impacts assessing these features and permits us to ask more meaningful questions about the landscape today. With love and deep care, our parents and great-grandparents remind us of life lessons to hold on to because they are essential. Life is fragile. Society cannot forget its impact on ecosystems and the environment as populations expand and navigate natural resource use. When memories are logged, burned, and urbanized, an extension of local Indigenous history becomes erased, creating an absence of archaeological recognition. Marker trees deserve to be carefully acknowledged and offered community-negotiated protections no matter the CMT type. Community values and experience must be given equal weight in land management discussions fluidly to living sites of significance. It takes time and relationship building.
Appendix
Appendix A – Stillaguamish THPO Approval

Stillaguamish THPO Clearance

To Whom It May Concern:

The following document is a the necessary Tribal Clearance for the Western Washington University Internal Review Board. Kelsey Maloy has consulted with the Stillaguamish Tribal Historic Preservation Office (THPO), has provided her thesis proposal, and has received feedback.

The Stillaguamish Tribal Historic Preservation Office acknowledges Kelsey Maloy’s thesis, *Mis-identified, Mis-interpreted, Mis-communicated Bark Stripped Cedar: Culturally Modified Trees as learning opportunities in the Pacific Northwest*. Her research combines a range of perspective around Culturally Modified Trees, (CMT) advocating for tools that make the data collected and the way it is presented to be more useful for the communities under whose care these trees exist, is given permission from the Stillaguamish Tribal Historic Preservation Office to proceed.

Sam Barr

Tribal Historic Preservation Office Supervisor

Stillaguamish Tribe
Appendix B – CMT Watercolors

Image 1: Above represents a collection of CMT naturalist watercolors drafted by Kelsey Maloy. Graphics approved by the Stillaguamish Cultural Resource Department depict a sample of the types of CMT mentioned in local ethnographic literature for Snohomish County. The image above represents a canoe tree re-imagined from primary source oral histories.
Images 2 and 3: Non-technical illustrations, and watercolors, are used to refocus CMT in contexts with their landscapes and note the importance of vitality – life!
Appendix B (continued)

Images 3 and 4: Non-technical illustrations, and watercolors, are used to refocus CMT in contexts with their landscapes and note the importance of vitality – life!
# Appendix C – CMT Variety

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<th>Type and purpose of modification</th>
<th>Examples: Regions, tree species</th>
<th>References</th>
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Appendix D – WISAARD User Agreement Approval

WISAARD USER AGREEMENT
College or University Student

I. Purpose

The purpose of this document is to set forth the agreement between the Department of Archaeology and Historic Preservation (DAHP) and the User relating to the use of restricted archaeological and historic data on DAHP’s WISAARD (Washington Information System for Architectural and Archaeological Records Data) online web system.

II. Policy

DAHP maintains data identifying the location and nature of archaeological and historic sites within the state of Washington. DAHP agrees to share this data through WISAARD with qualified Users.

A. Users with access to restricted data on WISAARD must be a student in good standing at a college or University and need access to data for specific projects related to archaeology classwork.

B. Users must also have the agreement co-signed by the User's professor, who must meet the Secretary of the Interior’s Professional Qualification Standards for Archaeology and the definition of “professional archaeologist” in RCW 27.53.030. The professor must also submit a vita and graduate diploma/ transcripts, if not already submitted to DAHP.

C. The professor agrees to ensure appropriate usage, and must set an end date for the student’s access to be terminated. Typically this will be the end of the quarter, but can go until graduation. The Professor will notify DAHP in writing if the User is in bad academic standing, leaves school or no longer needs access for educational purposes earlier than the student’s end date on the agreement. DAHP will terminate user access upon receipt of such notification.

III. Security for Archaeological Site Inventory Data

To protect sites from looting and vandalism, archaeological sites are exempt from public disclosure consistent with Washington State Statute RCW 42.56.300 and federal statute 16 U.S.C. 470w-3(a).

A. To gain access to exempt data, the User must create a user name and password using Secure Access Washington (SAW) before submitting this agreement to DAHP. The user can sign up at http://secureaccess.wa.gov.

B. The User will keep his or her password confidential and shall not share, transfer or make it available to any other person or entity. The User will also safeguard all data printed or downloaded in electronic format from WISAARD that contains archaeological site data. The User agrees to use this data only for the purposes of educational research projects at an accredited college or university.
I HEREBY AGREE TO ABIDE BY AND COMPLY WITH ALL TERMS AND CONDITIONS SET FORTH HEREIN.

Signature of User

05/02/2022
Date

Kelsey Maloy
Print Name of User

Maloyk
SAW User Name

5 Maloyk@edu
User Email

I HEREBY AGREE THIS USER IS A STUDENT IN GOOD STANDING IN THE COLLEGE OR UNIVERSITY WHERE I TEACH AND I WILL COMPLY WITH ALL TERMS AND CONDITIONS SET FORTH HEREIN.

Signature of Professor

5/2/2022
Date

Jerald Etc
Print Name of Professor

End Date of Student Usage

FOR DAHP USE ONLY
Approved by:

DAHP Archaeologist

Date

Entered into DAHP Web Portal Database:

Name

Date

Form Updated 4-7-2016
Appendix E – WWU IRB Approval

Appendix H: Represents the WWU IRB process required to complete this research because braided archaeology incorporates human subjects (knowledge keepers).
## Appendix F – Telescopic Analysis

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- Record
- Healing/old scar
- Practice
- Distance
- Minimal energy

- For Whom?
- Grounding
- Real
- Ask questions
- Impact
- Perspective
- Generational memory

- Meaningful data
- Preservation – Awareness
- Scrying
- “Restoring more than you lose.”
- Violence
- Bring respect
- Definitions
| Promoting Sincere care | Reservation | | | Harvesting |
|----------------------|------------|--------------|--------------|
| Everywhere           | Beyond     | Future       | Harvesting   |
| Continuity           | peels      | Care         | Lessons      |
| Two worlds           | Two Worlds | Personal steward | Materials    |
| Memory               | Refuse     | Distance     | Tradition    |
| Agency               | colonization | Affects     | Health/goodness |
| Best for the tree    | Hurt       | Practice     |
| Verification         | landscapes. | Suitability  |
|                      | Lifelong   | Generational |
|                      | memory     | lessons      |
|                      | Unique      | Memory       |

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<td>Belonging</td>
<td>Trust</td>
</tr>
</tbody>
</table>

White coded columns – Intangible  Blank columns – tangible

Telescopic analysis of the interview data collected during site visits during the Winter of 2023.
### Appendix G – Tree Table (Skagit)

<table>
<thead>
<tr>
<th>Date</th>
<th>Assessor</th>
<th>Site #</th>
<th># CMTs</th>
<th>Site type</th>
<th>Tree 1</th>
<th>Tree 2</th>
<th>Tree 3</th>
<th>County</th>
</tr>
</thead>
<tbody>
<tr>
<td>7/12/1993</td>
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<td>Skagit</td>
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</table>

**Tree Table 1**: This clip of the Tree tables conveys the categorical framework that I used to extract information from the archaeological site form. Each recordation corresponds to a site report in the WISAARD database. This collection of information summarizes CMT data for Skagit County.
## Appendix H – Tree Table (Snohomish)

<table>
<thead>
<tr>
<th>Date</th>
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<th>Site</th>
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<th>Site type</th>
<th>Tree 1 T</th>
<th>Tree 2 T</th>
<th>Tree 3 T</th>
<th>County</th>
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<td>Snohomish</td>
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</tbody>
</table>

**Tree Table 2**: This clip of the Tree tables conveys the categorical framework that I used to extract information from the archaeological site form. Each recordation corresponds to a site report in the WISAARD database. This collection of information summarizes CMT data for Snohomish County.
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