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Why we gather: traditional gathering in native Northwest California and the future of bio-cultural sovereignty

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Abstract

Introduction: The concept of bio-cultural sovereignty is drawn from Native American Studies scholar Stefano Varese who explores the daily forms of biological and cultural resistance and adaptation in South America. This article extends Varese's notions by exploring biological and cultural resistance in Native California with a particular focus on the continuing cultural practice of gathering.

Methods: This article provides a case study analysis of the *Lyng v. Northwest Indian Cemetery Protective Association* (1988) Supreme Court case and uses traditional ecological knowledge to evaluate how bio-cultural sovereignty is affected by federal land management policies and Western constructions of ecology and the law. The methods are based in an interdisciplinary approach that embraces theoretical notions from linguistics, cultural anthropology, law, environmental justice, history, ecology, and Native American Studies.

Results: As a practitioner of traditional ecological knowledge, I offer an analysis of ecological gathering practices to argue that policies, procedures, methodologies, or experiments should be designed in a way that acknowledges the indigenous bio-cultural sovereignty of the land space.

Conclusions: Tribes have enacted and continue to enact bio-cultural sovereignty, which solidifies their relationship with the land. Written policies can be used to protect Native interests and to develop a relationship between Native peoples and other agencies. Federal agencies can benefit from these partnerships as tribes can offer assistance to care for these land spaces, state agencies can alleviate potential funding issues for maintaining these areas, and researchers and academics can construct knowledge that incorporates traditional ecological practices to build solid, informed best practices.

Keywords: Traditional ecological knowledge, Native American, Gathering, Bio-cultural sovereignty

Introduction

The Native peoples of California are a diverse, populous group who have continuously lived and interacted with every part of what is now the state of California. Kat Anderson writes in her book *Tending The Wild* that: "Excluding desert and high-elevation areas, it was almost impossible for early Euro-American explorers to go more than a few miles without encountering indigenous people" (2005). She also highlights that "Areas now labeled simply 'wilderness' or 'national park' on topographic maps once encompassed ancient gathering and

hunting sites, burial grounds, work stations, sacred areas, trails, and village sites, all making up what was home to hundreds of generations of California Indians" (Anderson 2005). She offers in one simple line just how much the Native peoples utilized the space around them when she notes that "Every place was named" (Anderson 2005)^a.

Oral histories say that the Hupa, Yurok, and Karuk have lived in the area of northwestern California since the beginning of time. These three California Indian tribes are often described as sharing a "common culture" as they have and still continue to come together in ceremony and for other community activities. For Western linguists, anthropologists, archaeologists, and other academics who have studied and theorized about Native

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peoples, the Hupa, Yurok, and Karuk have parallel cultures that are relatively the same. But they also present a sort of paradox when it comes to theorizing about the development of these cultural practices. As one of the most popular linguistic theories, the Sapir-Whorf hypothesis is rooted in "cultural relativism" and was based on the idea that "one's entire sense of reality shifts as one passes from one community to the next..." (O'Neill 2008). Language was "said to encapsulate worldview and reflect its cultural subject matter". However, the Hupa, Yurok, and Karuk share cultural similarities even though they have three very different languages (O'Neill 2008).

For these societies, the sharing of resources, space, and knowledge is essential to the continuing strength and survival of the people. In addition, the tribal groups of the area may not have been primarily concerned with what practices best fit their particular worldview but instead with what worked best for the land, space, and interwoven tribal groups. The Hupa, Yurok, and Karuk (as well as many other tribes in the area) have always intermarried, shared resources, created political systems, come together for community events and ceremonies, and passed on as well as developed new knowledge about the world. These "best practices" would be reflected in the way that multiple tribal groups interacted with the land. Their practices (cultural, spiritual, political) incorporate their relationship with the land in a way that acknowledges and respects the rights of the land itself. This would mean sharing in ceremonial and cultural practices that share similar purposes, especially if this is the best way in which to care for the land and reflect the messages received directly from the land or spiritual guidelines (Deloria et al. 1999).

The knowledge that is shared across languages and cultures in northwest California is based, in part, on the deep comprehension of this space. Native American Studies scholar Stefano Varese writes: "Space, place and memory are intertwined in indigenous societies that have not been totally uprooted by colonialism. They constitute what can be termed 'the inhabited culture' which is asserted always with the 'language of space'' (Varese and Chirif 2006). This language of space would permeate through all parts of life for Native societies. And it would be applied as a social responsibility to acknowledge the rights of the space as well as the rights of humans, animals, and the cosmos.

Indigenous gathering practices were staple activities designed not only to provide resources for the people, but also to tend and respond to the needs of the land. The Hupa believe that their First People, who they called the "K'ixinay", left this earth by going into the rocks, the trees, the mountains, and all parts of the environment; these elements were subsequently gathered and used as part of a sustainable society. These indigenous

traditional practices, which Varese calls "the moral treatment of the cosmos, a kind of moral ecology...", are what informs the development of a deep, meaningful understanding of how the world can be shaped, cared for, and protected (Varese and Chirif 2006). The Native peoples of California challenged and overcame colonial threats to this "moral management" through their steadfast insistence on continuing these land-based cultural practices despite who owns or claims ownership of these areas.

In California, the attempts to divest tribal peoples of their ownership or rights to the lands were systematic and ultimately exercised as a means to annihilate California Indian peoples and to erase their presence from the memory of the land. For southern and central California, the mission system was designed as a way of claiming lands in the name of the church. By the end of the mission period many California Indian peoples had died of disease, moved inland or in some cases south to what would become Mexico, or were living in the missions without ownership of any land or access to their homes or sacred places (Cuero 1968). With the influx of the Gold Rush in 1849 white settlers came to California in the hopes of striking it rich. During this time many California settlers called for the annihilation of Indian people as the only "humanitarian" way of dealing with the Native population (Norton 1979). Some California Indian tribes fought wars to keep their land (Nelson and Bayer 1988; Frank and Goldberg 2010; Forbes 1982). Eventually, the federal government dispatched agents to negotiate treaties with Indian tribes in California that guaranteed them certain lands in exchange for peaceful movement onto reservations. The treaties set aside 8 million acres of lands for California Indian tribes. Settlers were outraged by the agreements and lobbied Congress to reject the treaties. The treaties were never ratified and instead were kept under an injunction of secrecy which was not removed until 1905 (Hoopes 1975). This information was not passed on to tribes who had already started to live on their reservation lands under the terms guaranteed in their treaties. When it was finally revealed that the treaties were null and void for California Indians, many tribes were forced to hastily renegotiate terms for reservation lands (Secrest 2003). Other tribes were denied recognition (Tolley 2006). Tribes were then subject to removal and relocation to urban areas and shared reservations with other tribes. All of these policies resulted in further loss of ownership and/or stewardship of lands. Tribes who renegotiated treaties were only guaranteed a fraction of the land that was first promised, and many California Indian communities were left completely landless. Lands that were lost included their ancestral territory and land that was considered sacred or integral to the continued cultural practices of California Indian peoples.

Along with the seizure of lands through treaties or agreements between tribes and the federal government was the establishment of so-called protected wilderness areas or public lands and parks. In the late 19th century the preservation movement and establishment of national parks included policies of Indian removal from these "empty", vast, wilderness lands. For example, establishment of Yosemite National Park required the removal of the Yosemite Indian people (Spence 1999). Native lands, the places where California Indian tribes had interacted closely with the landscape for generations, were designated as unpopulated "wilderness" areas to conform to Euro-American notions of idealized, pristine conditions that supposedly existed before contact. This assertion was, in part, built upon the idea that Native peoples were not and had not interacted in any meaningful way with significant portions of California. These systematic attempts to attack the very existence of California Indians were a means by which white settlers set out to exterminate, control, and dominate the land, flora, and fauna of Native California. It also meant attempting to destroy Native knowledge and epistemologies as a way to claim rightful ownership over the land, a land which became designated as "vast wilderness" that had scarcely been utilized (Anderson 2005).

Similar to this claim was the designation of California Indian peoples as "hunter-gatherers", a term which was popularized by anthropologists and archaeologists and effectively designated California Indian peoples as simple or less evolved (Anderson 2005)^b. California Indians were also often referred to in 19th century newspapers by the derogatory term "diggers"^c and were seen as having only basic knowledge of how to survive (Norton 1979).

These designations have in some ways been challenged and re-classified, although the popular label "huntergatherer" persists in modern scholarship about California Indian peoples. What is often noted by a number of scholars, however, is that California Indians were not only "exploiting the richness of California's many habitats" through hunting and gathering but were creating and shaping "ecosystem diversity by means of various kinds of cultural activities and indigenous management practices that can still be seen today" (Lightfoot and Parrish 2009). California Indians "contributed to the construction of a rich network of habitats that provided a cornucopia of foods, medicines, and raw materials for clothing, baskets, houses, dance regalia, and other cultural objects" by "enhancing the productivity of grasslands, scrub stands, oak woodlands, conifer forests, and mountain meadows" (Lightfoot and Parrish 2009). Legal scholar Michelle LeBeau notes, "In addition to being a spiritual act integral to Native cultures, gathering physically benefits the affected plant populations. ... California Indian land management practices are ecologically sound and even necessary for maintaining the delicate ecosystems across the state" (LeBeau 1998).

California Indians were also concerned with the sustainability of their environmental practices. Their gathering and management practices were carefully tailored to assure that the natural resources were regenerated yearly "by gathering only a portion of the available seed, nut, and fruit crop or basketry raw material, by wasting nothing during the harvesting process, and by observing specific prohibitions about the collection of resources during certain times of the year or month" (Lightfoot and Parrish 2009). It is important to note that this value is still honored in gathering practices. Traditional Yurok basket weaver Kateri Masten echoes this from a 2011 interview, "...when you go out to gather you want to make sure that you are not taking too much from that plant and allowing it to survive and not killing it. And you only gather I would say about 20% from one specific spot and then you move on to the next one. That way it allows it to replenish itself. It's important to respect and value the life of all things when we are taking from nature". For the Hupa, Yurok, and Karuk (and other tribes of northwest California) this practice is an important part of how they strengthen the environmental system. These practices are not only biological or ecological areas of knowledge but also reflect the importance of culture or Varese's "moral ecology" (2006).

One area of Native-based ecological knowledge that has been thoroughly explored is that of fire management through controlled burning. Kat Anderson wrote an often cited book-length thesis on these practices among California Indians in her book *Tending the Wild.* Don Hankin also expands on controlled burning in this volume. Lightfoot and Parish write in their book that burning was a "primary management tool" among California Native peoples (Lightfoot and Parrish 2009). Malcolm Margolin notes that fire management can also fertilize the soil and burn away "overshadow meadow grasses and wildflowers" (Margolin 1981).

Federal, state, and local governments have previously prohibited controlled burning by tribes and communities. In many cases this has resulted in poorer quality materials for basket making and a more unruly, untamed wilderness. In some cases government agencies have worked with tribes to agree to a fire management program based in these indigenous practices. However, a complex interweaving of federal, state, and local governments is required in order to move this process forward. In many of these cases policies are derived without acknowledgement of bio-cultural sovereignty and they are written in a way that does not solidify this relationship between Indian peoples and the lands.

Methods

While the research for this article did not include a quantitative analysis or collection of data, the "Results and discussion" section provides a case study analysis to foreground bio-cultural sovereignty. The case study focuses on the Lyng v. Northwest Indian Cemetery Protective Association (1988) Supreme Court case, also known as the Gasquet-Orleans or G-O Road Controversy. I provide an original analysis using traditional ecological knowledge to evaluate how bio-cultural sovereignty is affected by federal land management policies, standard operating procedures, and Western constructions of ecology and the law. I also offer contemporary examples of Native tribes and organizations working to establish partnerships that recognize bio-cultural sovereignty to protect, preserve, and maintain lands within their aboriginal territories. The conclusion of the paper is a call to action for scholars and policy and law makers to build projects with Indigenous communities that acknowledge and support bio-cultural sovereignty and maintain the ecological and biological landscape "in a good way" that values the sustainable practices and traditional ecological knowledge of Indigenous societies.

My methods are based in an interdisciplinary approach that embraces analytical tools and theoretical notions from linguistics, cultural anthropology, law, environmental justice, history, ecology, and Native American Studies. My analysis leans heavily on the intellectual discourse in Native American Studies about sovereignty and the many iterations of sovereignty that are important to Native nations. Native American Studies scholar Robert Warrior (Osage) refers to these various iterations as "intellectual sovereignties" that are dynamic, ongoing processes that need to be constantly re-evaluated (Warrior 1994). Part of the process of re-evaluation is to name various types of sovereignty in order to create a public record of Indigenous response to legal and socio-political ideas of sovereignty, and to influence dynamic new directions of the implementation of sovereignty. Naming sovereignty and providing an analysis by which to understand how to incorporate sovereignty into research and public policies is imperative for Native Nations. This paper is primarily concerned with providing an educational historical analysis in order to inform those doing work in land management, ecology, and environmental justice why sovereignty, and by extension bio-cultural sovereignty, needs to be incorporated into their methodologies and policies and how their research can support the continued sovereignty of Indigenous peoples.

In addition, this paper offers a critical analysis and response based on traditional ecological knowledge. My knowledge as a practitioner of traditional gathering is based in teachings passed on to me through several generations. I grew up in northern California where I was

raised learning about the traditional beliefs of my tribes. I am enrolled in the Hoopa Valley Tribe but am also Yurok and Karuk. My great grandparents; grandparents; great aunts and uncles; and aunts, uncles, and parents all imparted to me knowledge based in our Indigenous understandings of the world. I cannot remember a time where I did not gather and learn from my family. I remember hearing about the continued attempts by federal, state, and local governments to assimilate and destroy Indian cultures and communities, but I grew up in a time when my acquisition of traditional knowledge was fairly uninterrupted. I understood from a very young age that my learning of traditional practices was imperative to the continuance of the intellectual, scientific understandings of my people. For the peoples of northwest California the exercise of their bio-cultural sovereignty is encompassed in the consistent practice of their traditions. These practices continued even in the face of policies set forth by the federal, state, and local governments to prevent Indian people from interacting with their indigenous land space (Middleton 2011a). In The Fine Art of California Indian Basketry noted basket weaver Vivian Hailstone (Karuk, Yurok) recalls a story of how "some weavers used to gather woodwardia ferns in the Hoopa Valley early on Sunday mornings, because they knew that the local highway patrol officer was in church at the time" (Bibby and Crocker Art Museum 1996).

Hailstone's resistance is only one example of the ways in which many California Indians continued and passed on gathering and other traditional ecological knowledge throughout the tumultuous post-contact history in Native California. In more recent years, California Indian peoples have also come together through organizations such as the Seventh Generation Fund (SGF)^e, the Native Women's Collective (NWC)f, and the California Indian Basket Weavers Association (CIBA). In the past 20 years CIBA members "have been at the forefront of environmental issues as these relate to the management of native plants used in basketry" (Kallenbach 2009). This includes issues surrounding access to and use of traditional gathering spaces. CIBA set as some of its primary goals "to provide a healthy physical, social, cultural, spiritual and economic environment for the practice of California Indian basketry"; "access to traditional cultural resources on public and tribal lands and tribal gathering sites"; and "monitoring and discouraging pesticide use in traditional and potential gathering areas for the safety of weavers, gatherers, and others in tribal communities".

Vivian Hailstone was my great aunt. Growing up I remember her house being filled with baskets and the smells of gathered roots, ferns, and pine nuts. She was one of the first people to show me what beargrass looked like before it was dried. She pulled out a long green piece and explained that when you choose what

materials to gather you must do it with a purpose. Learning from many generations in my own family and community has helped me to conceptualize this article as a case study assessment of how bio-cultural sovereignty has and has not been supported by current research and policy practices and how it can and should be supported and utilized through continued research and policy development. This article explores the continued bio-cultural sovereignty of California Indian peoples as demonstrated through traditional gathering practices to argue that policies, procedures, methodologies, or academic research involving or affecting tribes should be designed in a way that acknowledges indigenous biocultural sovereignty through concrete policy language and agreements. These agreements can, in turn, be utilized to support the continued revitalization of ecological processes based in Indigenous epistemologies.

Results and discussion

The continuing traditional practices of Native peoples in California are acts of bio-cultural sovereignty and are a means of resistance and revitalization. The term "bio-cultural sovereignty" is drawn from Varese's work in his book *Witness to Sovereignty: Essays on the Indigenous Movement in Latin America* and his discussion on the related issues of "indigenous knowledge and biodiversity" and "bio-cultural and socio-political sovereignty" (Varese and Chirif 2006). Varese asks his readers to consider:

...how could the indigenous outlast the European military invasion, the massive biological warfare, the systematic ecological imperialism and the meticulous destructuring of their institutions, and still initiate almost immediately a process of cultural and sociopolitical recuperation that allowed for their continuous and increasing presence in the social and biological history of the continent?

For Varese, the answer lies in the "exploration of the complex concealed dialectic of daily forms of biological and cultural resistance and adaptation" (Varese and Chirif 2006). In this discussion, I extend Varese's notions by exploring this form of biological and cultural resistance in California, with particular focus on the continuing biological and cultural knowledge of gathering in northern California as a means of exercising, maintaining, and reinforcing bio-cultural sovereignty. The practice of gathering demonstrates the continued resistance against colonization, but also the continued management of land and space regardless of acknowledgement or support from government agencies. It also demonstrates the continued partnership that Indigenous people have with the land space, and their continued responsibility to that space.

Lyng v. Northwest Indian Cemetery Protective Association (1988)

The first time my aunt took me to gather beargrass she said we would head "just up the G-O Road". We drove along the paved roadway until we came to a burned area of the forest. "What you do", my aunt told me, "is you find out the places that burned the year before, because that means next year there will be many good materials waiting for you". We started by giving a gift of tobacco to the place where we were gathering with a short prayer in thanks for the use of the materials. We gathered most of the day. Throughout, my aunt took special care to remind us about being mindful of what we were collecting, to never take the entire plant, and to take only what we thought we would use. We ended our gathering with a song, reminding ourselves and the K'ixinay that we were grateful for the day.

At the time I did not think about the significance of our gathering "just up the G-O-Road". This road, referred to by the federal government as the "Gasquet-Orleans Road", was the centerpiece of the 1988 federal Supreme Court case *Lyng v. Northwest Indian Cemetery Protective Association*. In this case the U.S. Forest Service had proposed the building of a road that would run through the Six Rivers National Forest in northern California from Gasquet to Orleans. "The road's primary purpose was to benefit the logging industry" (Miller 1990).

Local tribes quickly came together to protest the completion of the road. They argued that the road would not only destroy sacred religious sites but would impede their ability to practice their religion. We call this area the "high country". It is an area filled with sacred spaces, geological and ecological formations and numerous resources required in the practice of traditional ceremonies. But aside from the religious significance of this area it is also a part of everyday interactions important to the balance of land and society. The high country is utilized by various tribes for many different reasons. The intimate ties that we have with this land are not only a result of its religious and spiritual purposes, but also the environmental, economic, agricultural, and societal importance of the area to everyday life.

In 1979 the Forest Service commissioned a report while planning the building of the G-O Road in which they did consult with local Indian tribes. The report, *Cultural Resources of the Chimney Rock Section, Gasquet-Orleans Road, Six Rivers National Forest,* stated that the road would have harmful effects on the religious practices of the tribes and that because there was no way to mitigate these issues, the road should not be built (Theodoratus et al. 1979). However, this consultation was actually used as a way to move forward with the building of the road, with the Forest Service maintaining that they had consulted with Indian tribes but that did not mean they

had to listen to any recommendations. Government policies often call for "consultation" with Native tribes, and while they offer suggestions for how to best implement a consultation process, there is no requirement that the recommendations of tribes be respected, followed, or adopted. Though tribes in the area were steadfastly against the building of the road, the Forest Service went ahead and paved a portion of the high country.

Six environmental groups and the state of California joined with the Native people to "preserve the existing uses of this wilderness area" and they filed suit in federal district court. (Miller 1990). The Northern District of California found for the Native peoples stating that the building of the G-O Road would be a violation of First Amendment rights. They also found that it would be a violation of "the National Environmental Policy Act, the Wilderness Act, the Federal Water Pollution Control Act, the government's trust responsibility to protect Indian water and fishing rights, and the Administrative Procedures Act" (Miller 1990).

Ultimately the case was brought before the United States Supreme Court. The government believed that it could remedy any environmental issues associated with the Wilderness Act and still build the G-O Road. The Court overturned a lower court injunction that halted the building of the road. The Court noted that the building of the road was not a violation of the local Indian tribes' religious rights under the Free Exercise clause of the First amendment because the building of the G-O Road would not constitute an action by which Indian tribes would "be coerced by the Government's action into violating their religious beliefs; nor would either governmental action penalize religious activity by denying any person an equal share of the rights, benefits, and privileges enjoyed by other citizens" (O'Connor 1988). However, the Court did note that "The Government does not dispute, and we have no reason to doubt, that the logging and road-building at issue in this case could have devastating effects on traditional Indian religious practices..." (O'Connor 1988)^g.

At issue in the case was not only the exercise of religion in the high country. Justice Sandra O'Connor lamented in the majority opinion, "Whatever rights the Indians may have to the use of the area, however, those rights do not divest the Government of its right to use what is, after all, its land" (O'Connor 1988). She further expressed that "No disrespect for these practices is implied when one notes that such beliefs could easily require de facto beneficial ownership of some rather spacious tracts of public property" (O'Connor 1988).

With these remarks, Justice O'Connor was essentially re-establishing the "rightful ownership" of the federal government over this space. While the *Lyng* case was couched as a fight over the First Amendment and

freedom of religion, it also centered, as per Justice O'Connor's remarks, on concern over "ownership" of the land. This concern may have ultimately shaped how the Court responded to this case with the fear being that siding with the Native peoples could ultimately build support for divesting federal ownership from this area. Though the Court's language in this case attempted to solidify federal ownership of the land by divesting Native "de facto" ownership, this ownership and sovereignty over the land were continually established by the Native peoples of the area through their interaction with and cultural preservation of the landscape. This was not at issue in the court case and was not discussed at length in the Court's finding. However, not only had Native peoples continued to manage, interact with, and utilize this space throughout history, they also continued to do this despite the intrusion of the G-O Road and the Supreme Court's findings. Native peoples, through continuous interaction with the "wilderness space", demonstrated the power traditional practices have to show the physical connection to the land "in perpetuity", and to demonstrate bio-cultural sovereignty. The Court's findings were intended to solidify the federal government's rights to the land without respect for how this ownership could and should be shared with Native rights to the land space.

While the case was on appeal, Congress passed the *Smith River National Recreation Area Act* (1990) which "...added the twelve-hundred-foot G-O Road corridor into the protected Siskiyou Wilderness" (Echo-Hawk 2010). The only way to protect this piece of land was to claim it as "wilderness", a designation that carries with it a specific set of assumptions about the land and the people who used this area from time immemorial. The Native peoples of this area would have never referred to this land as "wilderness" implying that it was somehow unexplored, "virgin" territory that was scarcely used or cared for.

The passage of the Smith River Protection Act (1990) as a means to protect the G-O Road did not account for the bio-cultural sovereignty of this space and did not speak to the inherent political and cultural sovereignty of the tribes in this area. Section 460(b)(b)(b) of the Act states that the "protection of the Smith River's unique values can be enhanced by a cooperative effort by Federal, State and local governments to coordinate use planning, management, and development of Federal and non-federal lands throughout the watershed" (1990). The Act does not specifically mention tribes, although it is not clear if tribes were meant to be included as "local governments". In many cases this can be particularly problematic where state or other agencies need to be compelled to consider and include tribes in planning and management of these areash. What is particularly interesting about the language of the act itself is that while Sec. 460(b)(b)(b)-3 allows for management of the Siskiyou Wilderness pursuant to the provisions of the Wilderness Act (16 U.S.C. 1131 et seq) it does not speak to nor specifically allow Native-based management of, interaction with, or continued use of the area. The Act does specifically mention several acceptable uses of the area including recreation, public access (including vehicular roads for recreational activities such as camping, hiking, hunting and fishing), permitted use of off-road vehicles, and permitted programmed timber harvest.

The affirmation or acknowledgement of the biocultural sovereignty of tribes in regards to this "wilderness" would not have been unprecedented. In fact, the Act does provide for a reaffirmation of California's sovereignty over the area. In Sec. 460(b)(b)(b)-5 the Act highlights that "Nothing in this subchapter shall be construed to affect the jurisdiction or responsibilities in the State of California with respect to fish and wildlife". The Act further reaffirms California's rights and responsibilities to this area in stating that "Except in emergencies, any regulation of the Secretary pursuant to this section shall be put into effect only after consultation with the fish and wildlife agency of the State of California". Once again, tribes, who were the center of a major court case specifically regarding parts of the Siskyou wilderness, are not included as sovereign governments in either of these examples nor discussed in any separate section in order to solidify their role in consultation or cooperative management of the area. This does not mean that tribes did not continue to interact, care for, and exercise their bio-cultural sovereignty over this space. Many families, including my own, have long continued traditional practices including gathering plants and conducting religious, spiritual, and other cultural practices specifically in this area. Regardless of any concrete acknowledgement by the Supreme Court or the federal, state, or local governments, we continue to take responsibility for the land, interact with the land, protect the land and its inhabitants, and exercise our rights.

Clearly, there is an opportunity to learn from this example and to implement better quality practices for future policies, acts, and laws. Consultation with tribes is a first step toward building any policy but does not go far enough in forming partnerships among agencies, scholars, researchers, and tribal nations. Tribes have enacted and continue to enact bio-cultural sovereignty, which solidifies their relationship with the land. Written policies have been used as an attempt to divest Native peoples of their interest in the land and also as a means to erase Native interactions with the landscape. This means that written policies can also be used to protect Native interests in these land spaces and to develop a relationship between Native peoples and other agencies that supports a continued stewardship over land areas.

Federal agencies can benefit from these partnerships with tribes as tribes can offer assistance to care for these land spaces, state agencies can alleviate potential funding issues for maintaining these areas by working with tribes, and researchers and academics can construct knowledge that incorporates traditional ecological practices to build solid, informed best practices.

There are several successful contemporary examples of Native tribes and organizations working to establish partnerships that recognize bio-cultural sovereignty. Native American Studies Professor Beth Rose Middleton explores "new directions in Tribal Conservation" in her book Trust in the Land (Middleton 2011b). Her case studies examine ideas and innovations in land conservation and how tribes are protecting lands by collaborating with organizations through conservation easements and land trusts. In many cases this means that tribes are able to legally acknowledge their protection of and interaction with land spaces in their aboriginal territory. Anthony Madrigal, a member of the Cahuilla Band of Mission Indians and the legal counsel for the Native American Heritage Commission, explores issues of sovereignty in Sovereignty, Land and Water: Building Tribal Environmental and Cultural Programs on the Cahuilla and Twenty-Nine Palms Reservations (Madrigal 2008). Madrigal highlights the Native American Land Conservancy (NALC) and their purchase of land jointly with the Anza Borrego Foundation. The subsequent agreement between NALC and the Anza Borrego State Park reflected a cooperative agreement for management of the land's resources. The plan includes access for traditional use of plants and ceremonies and also includes the Cahuilla tribe "in a co-management role ...to develop joint programs to interpret Native sites and a learning landscape program to instruct both Indian youth and non-Indians on native traditions, plants and animals" (Madrigal 2008). The 4,000-acre InterTribal Sinkyone Wilderness in northern California also offers an example of land management and protection that is run by an intertribal organization made up of ten tribes. The area is designated as a conservation easement to "protect the land's cultural and ecological values in perpetuity" (Rosales 2010). The Inter-Tribal Sinkyone Wilderness Council is believed to be the first tribal entity in the United States to have entered into a conservation easement with private land trusts. In addition organizations such as the California Indian Basketweavers Association have also worked closely with federal agencies to design policies to protect, acknowledge, and respect traditional gathering rights. CIBA was one of many agencies that consulted on the development of a traditional gathering rights policy that was signed in 2007 and "clearly recognizes that local indigenous peoples have rights to the forest, and that these rights should be respected, supported, and enhanced" (Middleton 2011a).

There is also a growing body of scholarship written in support of bio-cultural sovereignty rights of Indian tribes. Legal scholars Kristen Carpenter and Angela Riley have conceptualized what they call "peoplehood", a concept of Indigenous cultural property rights that "dictates that certain lands, resources, and expressions are entitled to legal protection as cultural property because they are integral to group identity and cultural survival of indigenous peoples" (2011). They propose that these rights should be understood as "stewardship" rather than ownership and that cultural property claims "are often better explained and justified through a stewardship model" (Carpenter et al. 2009).

Conclusions

Bio-cultural sovereignty is a continuing process that is enacted by Native peoples throughout the Indigenous Americas. This issue becomes especially salient in California, where tribes were denied large parts of the land promised to them through treaties and agreements. California is home to the largest number of federally recognized tribes in the United States. California also has a large number of un-federally recognized tribes. There are a number of reasons why these tribes are not "recognized" as sovereign nations, most of which are tied to historical federal government policies of removal, relocation, and termination. Though they may not have "recognized" rights to certain areas, unrecognized tribes, as well as federally recognized tribes, continue to exercise their biocultural sovereignty over land areas throughout California. This is why policies, procedures, methodologies, or experiments must account for the continuing presence of Indigenous peoples who may not be acknowledged through government policy or procedures but who are continuing their ecological processes based in their traditional ecological knowledge. Understanding, recognizing, and designing policy around this continued exercise of biocultural sovereignty is important to building programs, policies, and research projects that will not only work for both Indigenous communities and outside agencies, but also for the land and all of its inhabitants.

Tribes and tribal organizations are not only supporting the continuous bio-cultural sovereignty of Indigenous communities, they are also tasked with preventing attempts by the federal, state, and local governments to challenge and interfere with these practices. Modern attempts to "control" and "protect" the natural environment are often undertaken by agencies with no regard or a blatant disregard for the Indigenous management of these land spaces. In the past 10 years the State of California has set up regulations for gathering on coastal lands through the Coastal Commission and the Marine Life Protection Act (MLPA) (Middleton 2011a). Many of these policies were written without tribal consultation

and seem designed to degrade bio-cultural sovereignty, not only for California Indian tribes, but also without acknowledgement or understanding of the sovereignty and rights of the land itself. The attempts to regulate or "protect" these areas have resulted in a schism between Indigenous peoples and state, local, and environmental protection agencies. It is precisely the development of these types of policies and procedures that calls attention to why the support of bio-cultural sovereignty is so important. In order to interpret and understand ecological knowledge from an Indigenous perspective, research must be approached with the full acknowledgement and incorporation of bio-cultural sovereignty. The policy or research should explicitly acknowledge the Indigenous cultures and peoples of the area and their continued interaction with biota, landscape, wetlands, or environment. Any research or policy that involves land throughout the Americas should be written in a way that first acknowledges the Indigenous peoples of that land space. This language should be clear, concise, and fully supportive of the continued presence of Native peoples in the area. Even research or policies that do not specifically attempt "Indigenous"based projects should fully acknowledge that there is a continued Indigenous presence on, in, and with the land. The language used to provide this type of support can have significant consequences and influence for federal policy and protection of Indigenous rights. In some cases written policies have both directly and indirectly had the effect of divesting Native peoples of their rights and responsibilities to the land. In other cases clear, meaningful agreements that acknowledge the biocultural sovereignty of Native peoples have resulted in opportunities to utilize traditional ecological practices that protect and secure the environment for many generations to come.

Even the G-O Road has become an illustration of biocultural sovereignty that is accepted, acknowledged, and respected. The day that my aunt took me gathering up the G-O Road a U.S. Forest Service car pulled alongside us and a man stepped out of the vehicle. We cautiously walked over to him, half expecting that he would have numerous questions about what we were doing or maybe that he would challenge our gathering on federal land. Instead, he smiled and said, "You all must be here to gather beargrass. If you head up the road, there is a whole mess of it. And it's some pretty good stuff too. I was just checking it out the other day". It was a surprise and relief to me that he had some awareness of what we were doing. It seemed to illustrate what happens when people are educated about the continuing traditional knowledge and practices of Native peoples. While he did not specifically tell me if this was an official policy of the Forest Service in our area, he did mention that he was glad to see us out gathering that day. "It's good

that somebody is going to get some use out of this stuff," he said.

Our continuing to "go just up the G-O Road" was hard fought by the Native peoples who believed in the sanctity and sovereignty of this area. The gathering we do "just up the G-O Road" is a demonstration of the continuing revitalization of Indigenous societies, epistemologies, and world view. It is here that we gather, not just because it is important to carry on this tradition, but also because this continues the interrelationship the people formed with this land at the beginning of time. We gather not only because it is our right but because it is our responsibility, a responsibility that we have built through cultural and spiritual interaction with the land, and a responsibility that we must continue in order to maintain the bio-cultural sovereignty of our Indigenous spaces. We gather not only because it helps us to remember, or because it facilitates healing, but also because it allows us to demonstrate to all things (be it nature, humans, the universe, or the cosmos) that we will continue to represent, care for, and respect them "in a good way" until the end of time.

Ts'ehdiya.

Endnotes

^aAnderson provides one of the most comprehensive scholarly approaches to the knowledge and management practices of natural resources by Native California Indians in her book Tending The Wild: Native American Knowledge and the Management of California's Natural Resources. Her books focuses on "how California Indians managed economies" and were "active agents of environmental change and stewardship, shattering the hunter-gatherer stereotype long perpetuated in the anthropological and historical literature of California" (2005). Anderson's book is a seminal work in California Indian environmental studies, and it thoroughly explores and shows the numerous ways California Indian peoples utilized their traditional knowledge, shattering the idea that any of the area we now call "protected wilderness" in California was ever an untouched landscape. Anderson also thoroughly explores many points brought up in this article and provides accounts of historical ecological and environmental practices such as gathering.

bIt seems in some cases the designation of "huntergatherer" rests on the perceived lack of agricultural-based practices, specifically as it pertains to the forced domestication of plants. There are, however, a number of key examples of California Indians undertaking domestication of plants and forms of agriculture, though the fundamental building blocks of this type of agriculture were not based in forced domestication, forced use, or manipulation of resources for convenience of the human population. As Lowell Bean and Thomas Blackburn

write in their book *Native Californians: A Theoretical Retrospective*:

- Wild tobacco was planted and grown by the Digueno, Cahuilla, Wintu, Maidu, Miwok, Yokuts, Panamint, Hupa, Yurok, and Karuk.
- The Digueno sometimes planted seeds from wild plants or transplanted wild plants to areas where they could be better tended.
- Cahuilla medicine men cultivated their own special plots of medicinal herbs and tobacco. (Bean and Blackburn 1976)

^cDigger was a common slur used to refer to California Indians during the Gold Rush and the period immediately following. It was said to refer to the "digging of roots" that was practiced by many California Indian tribes. Its similarity to the derogatory term that refers to African Americans probably also played a role in its growing popularity.

d"no:'olchwin-ding, no:'olchwin-te" is a traditional blessing for the Hupa people. It is also a fundamental part of their societal values. Translated it means "to grow old in a good way".

^eThe Seventh Generation Fund is an Indigenous organization that serves communities throughout the world. On their website SGF notes, "We have long recognized the critical need at the Native grassroots community level for access to resources, technical assistance and training to address an overall need for healthy and sustainable environments. Our work throughout the Americas has consistently been based on traditional Native concepts of holistic ecological stewardship. SGF and the communities we serve have long understood the direct relationships between a healthy environment, social justice and community well-being. We remain focused on supporting grassroots development through Native community empowerment and action". This organization is one of many examples of Indigenous peoples coming together to exercise and protect their rights as well as to support and grow their communities. For more information visit: http://7genfund.org/.

fThe Native Women's Collective is a grassroots non-profit organization that supports the continued growth of Native American arts and culture through public education, workshops, exhibits, research, cultural preservation projects, programs, and technical assistance. The collective works to advance emerging and established artists and creative professionals by providing a network and forum for artists to share their work and exchange ideas with others. For more information visit: http://www.nativewomenscollective.org.

^gAnother central tenant of the *Lyng* case was the application of the American Indian Religious Freedom Act

(1978). AIRF was written in support of American Indian religious practices and required that federal government agencies "consult" with Indian tribes. Justice O'Connor wrote for the majority opinion that there was no part of the Act which required that the government follow recommendations from these consultations. However, the AIRF still applies to government agencies and requires consultation with Indian tribes.

^hThe American Indian Religious Freedom Act (1978) could also offer a means by which to compel agencies to include Indian tribes through consultation. This act mandates consultation by federal agencies with Indian tribes.

Competing interests

Competing interests are minimal. CRB is the founding Executive Director of the Native Women's Collective. CRB refers to the collective in the article as a demonstration of ways that California Indian people have created organizations to support continued traditional ecological knowledge. In addition, the NWC has previously received funding from the Seventh Generation Fund, which is another organization mentioned in the article.

Author's information

CRB (Hupa, Karuk, Yurok) is a scholar, instructor, and PhD Candidate in Native American Studies at the University of California, Davis. Her research is largely interdisciplinary and incorporates her interests in contemporary Native American society, politics, literature, and California Indians. CRB is an enrolled member of the Hoopa Valley Tribe with ties to the Yurok and Karuk peoples. She was born and raised in northern California and grew up practicing the traditional ways of her people. This knowledge was passed on to her from a very young age by experts, elders, and activists. She learned ecological management and best practices for gathering and tending to the environment from world-renowned basket weavers. In 2007 CRB founded the Native Women's Collective, a nonprofit organization, to support arts and culture projects in the Native American community. This organization has prioritized research, revitalization, and the continued practices of traditional culture. She has led workshops on weaving and gathering and builds into her research traditional epistemologies that she learned growing up in her Native community. CRB is currently a PhD Candidate in Native American Studies at the University of California – Davis. She also has her M.F.A. in Fiction and Literature from San Diego State University and her B.A. in Psychology with a special focus in Health and Development from Stanford University. She is a Ford Foundation Pre-doctoral Fellow and the recipient of numerous scholarships and grants. She is also part owner of Wren Usdi Productions.

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References

- Anderson K (2005) Tending the wild: Native American knowledge and the management of California's natural resources. Univ of California Press, Berkeley
- Bean LJ, Blackburn TC (1976) Native Californians: a theoretical retrospective. Ballerina Press, Ramona

- Bibby B, Crocker Art Museum (1996) The fine art of California Indian basketry. Crocker Art Museum in association with Heyday Books, Sacramento
- Carpenter K, Katyal SK, Riley A (2009) In defense of property. Yale Law J 118:1024–1124
- Cuero D (1968) The autobiography of Delfina Cuero, a Digueno Indian. Malki Museum Press, Los Angeles
- Deloria V, Deloria B, et al. (1999) Spirit & reason: the Vine Deloria, Jr., reader. Fulcrum Publishing, Golden
- Echo-Hawk W (2010) In the courts of the conqueror: the ten worst Indian law cases ever decided. Speakers Corner, Golden, CO
- Forbes J (1982) Native Americans of California and Nevada, revisedth edition. Happy Camp, Calif
- Frank G, Goldberg CE (2010) Defying the odds: the Tule River tribe's struggle for sovereignty in three centuries. The Lamar series in western history. New Haven, Conn
- Hoopes C (1975) Domestic or exterminate: California Indian treaties ungratified and made secret in 1852. Redwood Coast Publications
- Kallenbach E (2009) The California Indian Basketweavers Association: Advocates for the Use of Museum Collections by Contemporary Weavers. Mus Ant Rev 3(1):1–13
- LeBeau M (1998) Federal land management agencies and California Indians: a proposal to protect native plant species. Environs Envir Law Pol J 21(2):27–48
- Lightfoot KG, Parrish O (2009) California Indians and their environment: an introduction. Univ. of California Press, Berkeley
- Madrigal A (2008) Sovereignty, land & water: building tribal environmental and cultural programs on Cahuilla & Twenty-Nine Palms Reservations. California Center for Native Nations, Riverside, Calif
- Margolin M (1981) The way we lived: California Indian reminiscences, stories, and songs. Heyday, Berkeley
- Middleton BR (2011a) Advocating for traditional Native American gathering rights on US Forest Service lands. In: Sikor T, Stahl J (ed) Forests and people: property, governance and human rights. New York
- Middleton BR (2011b) Trust in the land: new directions in tribal conservation. University of Arizona Press, Tucson
- Miller R (1990) Correcting Supreme Court 'errors': American Indian response to Lyng v. Northwest Indian Cemetery Protective Association. Environ Law Rev 20:1037–1062
- Nelson B, Bayer L (1988) Our home forever: The Hupa Indians of northern California. Howe Brothers, PO Box 6394, Salt Lake City
- Norton J (1979) Genocide in northwestern California: when our worlds cried. Indian Historian Press, San Francisco
- O'Connor S (1988) Lyng v. Northwest Indian Cemetery Prot. Assn. et al., 485 U.S. 439. http://laws.findlaw.com/us/485/439.html. Accessed 7 February 2013
- O'Neill S (2008) Cultural contact and linguistic relativity among the Indians of northwestern California. Norman, OK
- Rosales H (2010) The intertribal Sinkyone wilderness: ten tribes reclaiming, stewarding and restoring ancestral lands. Int J Wilderness 16(1):8–12
- Secrest W (2003) When the great spirit died: the destruction of the California Indians, 1850–1860. Word Dancer Pr, Sanger
- Spence M (1999) Dispossessing the wilderness: Indian removal and the making of National Parks. Oxford University Press, Oxford
- Theodoratus D, et al. (1979) Cultural resources of the Chimney Rock section, Gasquet-Orleans Road, Six Rivers National Forest. Theodoratus Cultural Research, Fair Oaks
- Tolley SL (2006) Quest for tribal acknowledgment: California's Honey Lake Maidus. University of Oklahoma Press, Norman
- Varese S, Chirif A (2006) Witness to sovereignty: essays on the Indian movement in Latin America. Iwgia, Copenhagen
- Warrior RA (1994) Tribal secrets: recovering American Indian intellectual traditions. U of Minnesota Press, Minneapolis

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