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## Journal of Transnational American Studies

### Title

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### Permalink

https://escholarship.org/uc/item/8jv3t1m5

### Journal

Journal of Transnational American Studies, 17(1)

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### Publication Date

2026-09-05

### DOI

10.5070/T8.69029

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# Ruins and Resilience: Re-Membering Gi'was

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**Nature's Ruins**

At the beginning of her book *The Mushroom at the End of the World* (2015), Anna Lowenhaupt Tsing describes her trip to the Oregon Cascade Mountains in search of matsutake gourmet mushrooms. On the dry pumice ground she sees no plants other than the "thin sticks of lodgepole pine," in a "broken" and "ruined Oregon industrial forest" that "seemed like a science fiction nightmare [… ] miraculously out of time and out of place—like something that might jump out of a fairy tale."[1] As Tsing later finds out, the matsutake mushroom, once introduced from Japan, is one of the few organisms able to survive in the man-made ruin of that particular forest, and, similarly to other mushrooms, it actually aids the pine trees in their struggle for survival.[2]

The area around Crater Lake in the Cascades in southern Oregon had been a "ruined" landscape once, long before the arrival of the contemporary extraction industry that has changed the land with ecological death due to clearcutting and the imposition of a monoculture. Furnished with a deep geological history, Cascadia is indeed a place commemorated in "fairy" tales—more precisely in Indigenous landmark stories, which is not quite the same thing. The following text is dedicated to Crater Lake as both a "ruined" place and a storied place subject to transcultural contestation.

Canonized knowledge about American "prehistory," as I argue in *Embattled Excavations* (from which this is an excerpt), is primarily based on Euroamerican archaeological and geological reconstructions within which the use of Indigenous epistemic archives has been considered of secondary importance. Recent Indigenous and non-Indigenous scholarship promotes a more serious engagement with and inclusion of traditional Indigenous knowledge in reconstructions of the American deep past.[3] Here, I contribute to this ongoing discussion. Beginning with an account of the transcultural construction of an ancient geological event and guided by its material, it moves from an investigation of the narrative memory of a cataclysmic event to a

narrative of multispecies awareness and place knowledge, from a story of catastrophe to a story of survival and resilience.

About seven thousand seven hundred years ago,[4] a mountain in Southern Oregon exploded, dramatically altering the landscape in and around today's Crater Lake National Park. The first European pioneers marveled at the sublime landscape and gradually arrived at the geological knowledge we have today. In his book *Fire Mountains of the West*, geologist Stephen Harris gives an account of the reconstructed eruption.[5] Mount Mazama, the name given to the circa nine thousand feet–high mountain that was destroyed by the eruption (creating the caldera for the lake), had been active for many millennia previous to the cataclysmic eruption around 5700 BCE. Its awakening, Harris writes,

> was abrupt and violent. [...] Explosions ripped open a new crater in the broad glacial basin that then occupied Mazama's north flank. Huge volumes of rhyodacite pumice were hurled high into the air, where the winds carried the ashcloud many miles to the east and southeast, blanketing a large area with pumiceous ash. After the magma had blown off steam, the vent flooded with rhyodacite lava, which overflowed the crater rim and oozed a mile downslope. (111–112)

Comparing the eruption of Mount Mazama with the historically recent one of the Indonesian volcano Krakatau, which erupted and collapsed in 1883, Harris suggests that the climactic moment in Mazama's eruption began with its summit ejecting "a titanic mushroom cloud miles into the stratosphere," its pumice then "blanketing" the land for about five hundred thousand square miles. Even seventy miles north of the volcano, the initial ash fall was still a foot thick: "Thick sheets of rhyodacite pumice that fell from the plinian eruption column can be seen at the caldera rim" (115). The Mazama ash cloud, Harris calculates, "was certainly larger than that of any historic eruption," including those of Krakatau and, in 1980, Mount St. Helens. Its ash was spread "over a vastly larger area, including virtually all of Oregon, Washington, Idaho, northern California, western Montana, as well as parts of Nevada and Wyoming. Much of southern Canada also was blanketed, including southern British Columbia, Alberta, and Saskatchewan" (116). Although Harris does not mention the eruption of Tambora in Indonesia in 1815—which, as we now know, caused the catastrophic "year without a summer" in 1816,—he describes similar global effects of Mazama's activity: "The ash wafting through the stratosphere must have produced brilliant sunsets throughout the entire northern hemisphere. Ancestors of the Druids in England and Gaul may have observed this atmospheric phenomenon and wondered what it portended" (116). Nearby Native Americans "experienced the cataclysm more directly"—which is a way of saying that, like the inhabitants of the village Tambora, those close to the mountain all died and those farther away went through years of starvation due to the destruction of the vegetation.[6] For the Klamath, Modoc, Warm Springs, and other tribes inhabiting

the area, Crater Lake—or Gi'was, as the Klamath call it—is a place of sacred terror, as their ancestors experienced the cataclysm and then preserved that experience in their stories.[7]

What follows explores the concurrences between the two emerging story traditions—the Western geological one and the Indigenous one as it is preserved in various more or less "transculturated" documents of European collectors of "Native lore." Investigation of the geological and narrative archives has produced additional stories of ruination—of man-made destruction of debatable sublimity. That is to say, the "sublimity" of colonial war and deportation, of atomic bombs and termination programs that adds political significance to the geological ruins produced by nature thousands of years ago.

## A Tale of Many Archives

The most widespread version of the Klamath story about the destruction of Mount Mazama was collected in the 1950s by Ella Clark, a white schoolteacher and university teacher in Washington State who had worked as a fire lookout during World War II and become interested in landmark stories explaining the landscape of the Cascadian Range in the Rocky Mountains. Seeing that almost none of these texts were in print, she began to collect them from forgotten books, local archives, private documents of local families, and not least from the Indigenous people themselves who soon offered additional stories for her to record after her first book appeared—*Indian Legends of the Pacific Northwest* (1953). She had obtained the Crater Lake story, she writes, from the "private papers of Judge Colvig," using it with permission from his daughter, "Mrs. William Warner."[8] William Colvig, she writes, recorded the story after the end of the Civil War following his arrival at Klamath Agency as a 19-year-old soldier. Colvig writes that he had received the story from Lalek, the elderly "peace chief" of the Klamath, during the time of the tribe's forced social transformation (from independence to reservation life). Though certainly not a professional anthropologist, Colvig was pretty well prepared for documenting an Indigenous tradition, as he "had learned the Chinook jargon in childhood while playing with the Indian children who were his neighbors." While at Fort Klamath, "he spent many hours with the friendly old chief, then about eighty years old, and from him learned much about Klamath Indian lore and legendry."[9] Colvig's retelling of the story is preceded by a dialogue between Lalek and himself concerning a taboo placed on the Klamath visiting the area of Crater Lake. In the hope of loosening Lalek's tongue, Colvig fills his pipe and asks him for the reason for this taboo. Colvig later heard the same story "with some variations" from other elders, Clark writes.[10]

Though the way in which this record was created cannot be regarded as conventionally scientific, it comes pretty close to contemporary professional standards. Colvig and his interlocutor share a language: He has long been familiar with Native

Americans, which is documented in his narrative framing, and—perhaps most importantly—Colvig receives confirmation for Lalek's version from other elders. In the version of Lalek's story popularized by Clark and Colvig, the volcanic eruption is rendered a battle between two giant competitors for the favor of a human woman: "From their mountaintops the two chiefs"—the "Chief of the Below World" who inhabited the mountain now referred to as Mount Mazama and the "Chief of the Above World" who inhabited Mount Shasta to the south—"began a furious battle" (54). The battle culminates:

> Mountains shook and crumbled. Red-hot rocks as large as the hills hurled through the skies. Burning ashes fell like rain. The Chief of the Below World spewed fire from his mouth. Like an ocean of flame it devoured the forests on the mountains and in the valleys. On and on the Curse of Fire swept until it reached the homes of the people. Fleeing in terror before it, the people found refuge in the waters of Klamath Lake. (54)

During this extreme crisis, two medicine men sacrifice themselves to rescue the people and walk into the mouth of the volcano, the "entrance of the Below World" (55). The "Chief of the Below World was driven into his home, and the top of the mountain fell upon him. When the morning sun rose, the high mountain was gone" (55). This popular version readily entered scientific writing as geologist Stephen Harris uses it in his description as well:

> [The Native Americans'] … myths interpreting the great eruption as a battle between Llao and his rival the sky god Skell preserved memories of the event for many generations. In the late 19th century an aged chief of the Klamath tribe recounted the tale, including the collapse of Llao's mountain, to a soldier at Fort Klamath.[11]

Alongside this traditional story about the eruption and collapse of Mount Mazama, which formed the caldera that gradually filled with water to create Crater Lake, there is a second story relating to the lake that was collected by Clark. This story explains the creation of Wizard Island, a volcanic cinder cone in the waters of Crater Lake, and Clark traces it back to an 1898 manuscript by Moray L. Applegate. According to this version, based on Klamath and Modoc oral tradition, the island is the result of another violent battle between the same mythical figures. Captain O. C. Applegate, an agent at the Klamath Indian Reservation, recorded "The War Between Llao and Skell," describing the battle between the antagonists who now bear their mythological names. First, Llao and his followers (monsters and giant crawfish) from Crater Lake obtain Skel's heart and use it in a ball game on a field near Crater Lake. Skel's followers attend the event and recapture their master's heart during the ball game, bringing him back to life. Skel overpowers Llao and feeds the pieces of Llao's body to the creatures in Crater Lake, making them believe that these are the remains of Skel. Only when Skel throws Llao's

head into Crater Lake do the creatures realize they have been consuming their master's remains, and the head, which they leave behind in horror, is subsequently transformed into Wizard Island.[12] Two further stories relating to Crater Lake tell of the fate of Native American hunters who were punished for trying to swim in the hallowed lake, thereby ignoring the interdiction to do so. From then on, we learn, few people dared to look upon the lake again.[13] This story confirms the information Lalek gave to Colvig, that the place now called Crater Lake was a sacred place—too powerful to be visited by the uninitiated.

Douglas Deur, historian and author of *In the Footprints of Gmukamps*, a study of Klamath culture and Crater Lake, established a concurrence between Harris's reconstruction of the collapse of Mount Mazama and the Colvig-Clark account. He is nonplussed because that account coincides "so closely with the eruption of Mount Mazama as described by geologists."[14] While many tribal members therefore "take this as evidence of their ancestors' witness to these events," Deur is impressed by the remarkable similarity of the "descriptive detail" of the traditional narrative and Harris's geological reconstruction of the event.[15] Harris's text, however, is obviously written with knowledge of the Klamath story; as the above quote shows, it makes direct reference to the version preserved in Ella Clark's book. Indeed the "descriptive detail" is that element in the text that should cause doubt in readers even vaguely familiar with the language of myth.[16] Vine Deloria, Jr., who himself promotes the value of Indigenous, orally transmitted knowledge as a counterarchive to the scientific record and who should therefore be greatly interested in the veracity of the Colvig-Clark version is also the one who notes the exceptionality of this seemingly precise account:

> But did the Klamaths actually see this volcano erupt? The date of the explosion is estimated at 6,500 years ago, which would place these people at this particular location, as an identifiable group, for a longer period than any other group or nation of people that we know. Sandals and other evidence of human activity in the Crater Lake area have been found beneath the ash layers of this explosion, indicating that *some* humans were eyewitnesses to the event.[17]

"Did the Klamath see?" is of course shorthand for asking whether the ancestors of the tribes who now inhabit Klamath Marsh witnessed the eruption and formed stories about it to be passed down through millennia. Incredulous of the possibility that the oral text of the story remembering this event may have stayed in place for more than six millennia, Deloria then admits that "I personally don't know": "It is better to leave a few strings dangling against the day when we are given more information and can add to the story and extend its meaning. [… T]he question of Indian knowledge of the sequence of geological events [… is] intriguing."[18] It is the purpose of this text to add some knowledge to the dangling strings—not in order to dismiss the narrative most writers agree on, but to show the complexity of the transcultural interaction of which

it is the result as well as dig a bit deeper into Klamath and Modoc cultural memory. This will ultimately confirm the consensus about the antiquity of their collective knowledge and add further epistemic dimensions not considered by the widely circulated transcultural version.

The examination of this knowledge record carries us far beyond the brief versions printed by Clark and Harris and reproduced on the touristic plaques and brochures explaining Crater Lake at the site. It carries us deeper into the epistemic world of the Klamath and Modoc while allowing us to see the extent of the damage—in Ann Laura Stoler's terms, the *ruination*—left by colonialism in the field of knowledge, a ruination that persists today.[19]

Before the 1953 publication of the two major Crater Lake stories outlined above—one involving a description of the collapse of Mount Mazama and lacking any reference to the lake, and the other narrating a battle between Llao and Skel that ends with the dumping of Llao's body in Crater Lake and which does not mention a volcanic eruption. Of these, only the latter was in circulation. Both parts of this narrative diptych—the "lake monster" story and the "collapse" story—appeared in print for the first time in Clark's collection. Taken together, they present questions about the antiquity of the oral tradition regarding Crater Lake. The age of the story referring to Crater Lake as the dumping site of Llao's body as well as the point at which the punishment of the daring young men taking a swim is conceived has to remain unspecific, only ensuring that it postdates the formation of the lake some time after the eruption seven thousand seven hundred years ago. But what about the age of the collapse story?

The reason for Vine Deloria's excitement about the Klamath remembering the eruption is twofold: First, it would be a unique case for a piece of extremely ancient knowledge to have survived within an oral tradition without the aid of writing. And second, the proof of such ancient knowledge would add support to the claim of the surrounding tribes, especially the Klamath and the Modoc, that their ancestors had inhabited their land for millions of years without migrating. In other words, evidence of an oral memory of the eruption and collapse of Mount Mazama would defy colonial narratives of Indigenous nomadism and primitivism, which, as the legal predominance of the concept of "continuous occupation" demonstrates, still holds such sway in colonial discourse. Deloria's reason for examining this material in the first place was to problematize the colonialist insistence on proof of antiquity—as if Indigenous seniority were in need of any proof.

Deloria also realizes that the Pacific Northwest "is the perfect area to match Indian traditions and geological knowledge because of its many unique geological features," including volcanic eruptions, floods, and earthquakes.[20] What he does not particularly consider is that the oral record has to be treated with much hermeneutic care as it survives only in colonial texts in a seriously fragmented and partially interrupted form. Academically, the narrativization of the eruption of Mount Mazama is a most captivating test case for the transcultural construction of American early

history. All documents to be discussed in the following pages are the products of transculturation—some more and some less so. The task here is to burrow through a thicket of intercultural communication, translation and mistranslation, and colonial ideological inscription. Besides its obvious interest in pointing out the capacities of oral tradition as a medium, this chapter is also driven by the fascination with the processes of transcultural storytelling, of the transcultural creation of the myth of Mount Mazama or, to use its Klamath name, Gi'was.

In spite of Deloria's and Deur's doubts, historians of Crater Lake assert that the eruption must have been observed by humans but that the whole region must have become uninhabitable for many centuries after the cataclysm.[21] The websites of the Crater Lake Institute and the National Park Service (NPS) are remarkably willing to accept the Indigenous narrative's great antiquity. It is not impossible, the National Park Service writes,

> to suppose that human memory goes back several thousand years. Indians were known to have inhabited the area of Mount Mazama before its final eruption, and it is highly logical that the story of such a terrifying event could have become an integral part of tribal history and have been transmitted orally for thousands of years. Oral narration has always been an important part of Indian culture.[22]

However, the writer is also aware of the effects of transculturation: "There is no way of telling, however, how much of the nineteenth-century rendition that Colvig first heard was Klamath history and how much it had been embellished through the years by the imagination of various storytellers."[23] The NPS text also assumes that the memory of the eruption was retained in spite of centuries spent out of sight of the Crater Lake area. None of these two factors—interruption of residence and transculturation—is conducive to the belief that the eruption story was passed on with the "descriptive detail" about which both Douglas Deur and Vine Deloria have expressed their surprise. By comparison, the biblical story of Noah's ark is full of human drama but relatively weak in descriptive detail about the process of the postglacial rise in sea levels.[24]

The Western geological archive reconstructing the eruption of Mount Mazama is hardly less interesting than the Indigenous story we have seen so far. The methods geologists employ in first reading the landscape and then translating the lay of the land into narratives of deep temporal geological processes requires considerable hermeneutic and linguistic skill. These narratives are cases of emplotment reminiscent of other scientific plots, such as the often poorly translated plot of Darwinian evolution.[25]

The scientific narrative archive on Mount Mazama begins with Joseph Silas Diller, the first geologist who showed scientific proof for the former existence of a high mountain at the site of Crater Lake.[26] In his field report for the Smithsonian in 1897 he reconstructs the former existence of a mountain during the glacial period by reading

the landscape around the lake; the composition of the gravel consisting of pumice and lava "well rounded, smoothed, and striated by glacial action."[27] From the "polished" state of the rocks he concludes that the

> glaciers armed with stones in their lower parts, that striated the crown of the rim, must have come down from above, and it is evident that the topographic conditions of to-day afford no such source of supply. The formation of glaciers requires an elevation extending above the snow line to afford a gathering ground for the snow that it may accumulate, and under the influence of gravity descend to develop glaciers lower down on the mountain slopes. During the glacial period Crater Lake did not exist. Its site must then have been occupied by a mountain to furnish the conditions necessary for the extensive glaciations of the rim, and of the magnitude of the glacial phenomena indicates that the peak was a large one, rivaling, apparently, the highest peaks of the range.[28]

All geological indicators, Diller writes, "tell the same story": "we can reconstruct in fancy the great volcano, Mount Mazama, which once occupied the place of the lake, and, like Shasta or Rainier, formed a great landmark of the region." [29]

Diller's relatively sober scientific descriptions soon give way to romantic evocations of the former grandeur of the mountain. The Euroamerican descriptions of Crater Lake are dominated by the romantic language of the sublime. This discourse finds its highest expression in Stanton C. Lapham's book *The Enchanted Lake: Mount Mazama and Crater Lake in Story, History and Legend* (1931). Introduced by a quote from Emerson,[30] the book begins with, and continues to make frequent use of, the topos of indescribability:

> Words fail us and all poetry of color and form seem lacking and inadequate when we attempt to depict the beauty and mystery of Crater Lake. Our emotions are strangely moved as we gaze upon the indescribable blue of the Lake and begin to comprehend its placid charm and natural loveliness, girded about by beetling, broken crags, fiercely riven walls and mighty reaching cliffs. Here is harmony—a symphony in color and exquisite beauty beyond words, yet pressed about by awesome volcanism, molten destruction and towering crags, where the very heart of a torn, splintered mountain is half filled with water more blue than the arching sky above. [… ] Crater Lake is cupped in the melted-out heart of a mighty volcano, once proudly lifting its peak to the skies. From the towering, broken crests circling Crater Lake, there rose the sloping, icy sides of a great mountain, melted out, engulfed, vanished.[31]

Inspired by the nature spiritualism of John Muir (whom he quotes frequently), Lapham's transcendentalist homage is also a declaration of affective ownership. The "intimate nearness" that the inspired wanderers feel for the mountains, he writes,

turns the human observers into their owners: "We possess them. They are ours by right of discovery. No one can shut us from them. They are not subject to the scraps of paper upon which men inscribe their titles" (25). The language of spiritual or affective "possession" here mingles with the colonial language of rights and title deeds we have encountered in John Lloyd Stephens's writings.[32] No Indigenous claimants disturb Lapham's tête-à-tête with the beauty of nature.

Here, as elsewhere (e.g., the writings of John Muir), the ecopoetic encounter with America's wild nature is made possible by the, at best, fleeting presence of Native contenders. Though Lapham elsewhere in his volume evokes Indigenous story traditions and emphasizes his familiarity with Native Americans, his claim of aesthetic discovery is as exclusivist as most romantic nature writing. His "geopiety," as Robert H. Winthrop writes on the website of the Crater Lake Institute (referring to Yu-Fu Tuan's concept), manifests

> both strong similarities and differences with the Indian experience of the Crater Lake region. The similarities lie in the common recognition of an encounter with the alien, the weird, and the numinous in this ancient caldera. Yet the differences are also telling. For the American explorers and settlers, the encounter with Crater Lake appears to have yielded a deep emotional response, but not a deeper knowledge or transformation of self. Such testimonies as these suggest an awareness of the sacred, but it is a mute awareness, a matter of mood. Unlike the Indian visitors to Crater Lake, the Anglo-American travelers lacked the cultural models—the cognitive templates encompassing mythology, ritual practices, and knowledge of localized spirit beings—which allow such encounters to yield a message, to produce lasting understanding and personal change.[33]

As I will argue below, the difference between claims of possession that are affective and epistemically informed and those that are "mute" affective-material claims, is not only a difference in perception of natural sites considered sacred but also the result of the presence or lack of that "deeper knowledge" of the place, which was collectively available to the Indigenous peoples having lived in the area for millennia but unavailable to the newcomers who were only beginning to build up a relationship to the land (their relationship usually being of the extractive kind). The difference between Lapham's perception of Crater Lake and that of Indigenous people like Lalek is not merely the result of a different cultural attitude but an epistemic difference. Crater Lake could be a place of sublime beauty to the modern visitor oblivious of its history; to Indigenous people it was a place of sacred terror.

While Lapham dispenses with poetic evocations of the crashing of Mount Mazama (it is related in his summary of the Klamath legend of the battle between Llao and Skel: 130), the Oregon archaeologist Luther Cressman began unearthing the remains of ancient sandals underneath the ash of the Mazama eruption in the late 1930s. Revisiting his earlier text in his 1981 preface to *The Sandal and the Cave*

(published originally 1962), Cressman states that continuous human presence in the caves at Fort Rock was most likely interrupted in a period between seven thousand seven hundred and five thousand years ago. He assumes the destruction of plant and animal life—the result of the eruption of Mount Mazama—to be the reason for this.[34] Knowing the magnitude of the disaster for humans inhabiting the eruption zone, in the first edition of his book Cressman is not aware of any tribal tradition referring to the disaster, although Clark's book had been out for almost a decade:

> What suffering, what terror these catastrophic events induced in the Indian population we shall never know, for no authentical folk tales of the disaster have come down to us. It is unlikely, however, that such calamities passed without some effort by imaginative minds to establish a rationale for them.[35]

Cressman was the chairman of the Condon Lectureship Committee of Oregon University, which organized a series of lectures with renowned Berkeley geologist Howel Williams. In various texts written in the 1940s and 1950s, Williams, expanding on the work of Diller, gives a full-fledged dramatic narrative of the eruption and collapse of Mount Mazama. His landmark study *The Ancient Volcanoes of Oregon* (1948) mentions no oral tradition or archaeological finds, but he imagines a human presence during the eruption based on knowledge of the archaeological digs Cressman had conducted at Fort Rock in the 1930s. Howel Williams assumes that the "Indians who occupied Oregon for thousands of years before the arrival of the white man must have witnessed countless eruptions," and he speaks of a "cataclysm seen from afar by the early Indians. They had long been familiar with the majestic ice-capped cone, for it rose to a height of 12,000 feet, a mile above its present ruins."[36] His scientific report of the final eruption of Mount Mazama makes use of a host of literary devices. The employment of narrative elements was not unusual in scientific texts at that time. Two of these devices are ekphrasis and metaphor: the animals, he writes, were "[a]larmed by the quakes" and fled while "the Indians, aware of the menace, withdrew to a safer distance":

> Finally, a plume of white vapor rose from the summit. Within a few hours, it changed to a towering column, becoming darker and more ominous as the content of ash increased. At first, the eruptions were mild, and the fragments falling from the cloud were no larger than particles of sand. But day after day, the intensity of the explosions mounted. Huge cauliflower clouds rose higher into the sky, to be drifted eastward by the wind. Night after night, the clouds were more brightly lit by incandescent ejecta describing fiery arcs in their flight. The roars from the crater grew louder, and frenzied streaks of lightning multiplied in number. Many of the fragments were not as large as a clenched fist, and showers of fine ash began to fall hundreds of miles away, on the plateau east and northeast of

> the volcano. In lands thousands of miles distant, men marvelled at the brilliant colors in the sky as the rays of the setting and rising sun shone through the dustladen air.[37]

The text continues in this vein. Williams produces this graphic description for his readers at a time when moving images of volcanic eruptions were still largely nonexistent. His text is written in the style of an eyewitness account and the detail included differs only slightly from the Colvig-Clark version in principle. Its style, however, vastly elaborates the language of the sublime. Not only that, Williams's recreation of the eruption of Mount Mazama was a multimedia event: in his book—as in a popular short version of 1941 also mentioned by Ella Clark—the twentieth-century eruption is accompanied by illustrations of the ancient eruption.[38] The images, unlike the drawings and photos included elsewhere in Williams's study, are reproductions of two paintings by a contemporary artist, Paul Rockwood (63) (*see* Figs. 1 and 2).



*Figure 1.* Paul Rockwood, *Mount Mazama Just Before the Destruction of Its Summit*, 1940. Source: National Park Service.



*Figure 2.* Paul Rockwood, *Mount Mazama Just After the Destruction of Its Summit*, 1940. Source: National Park Service.

Rockwood renders the volcanic event in the exquisite style of American landscape painting inaugurated by Thomas Cole and continued by Albert Bierstadt and Thomas Moran. Williams's descriptions of the geology at Crater Lake are in fact descriptions of Rockwood's paintings, which were in turn produced according to Williams's instructions. What captures our attention is the metaphor Williams uses to describe the Plinian column emerging from Mazama's top: he refers to it not as a Plinian cloud but as a "cauliflower cloud." This metaphor, I suggest, is an interesting case of semiotic slippage between two radically different cultural archives which nevertheless frequently intersect: It betrays the concurrence of the writing of Williams' geological story with photographs and moving pictures of another category of the sublime—representations of the "cauliflower" clouds of atomic blasts in Japan and, even closer to the publication of William's text, the hydrogen bombs dropped at Bikini atoll in 1946 (*see* Fig. 3).[39] The metaphor indicates that thinking about the deep past is always also inspired by the present—that a "ruinous" man-made mismanagement of the history of the present filters our perception of the distant past while preoccupation with geological time may displace our attention to the safer, natural ruinations of the deep past.

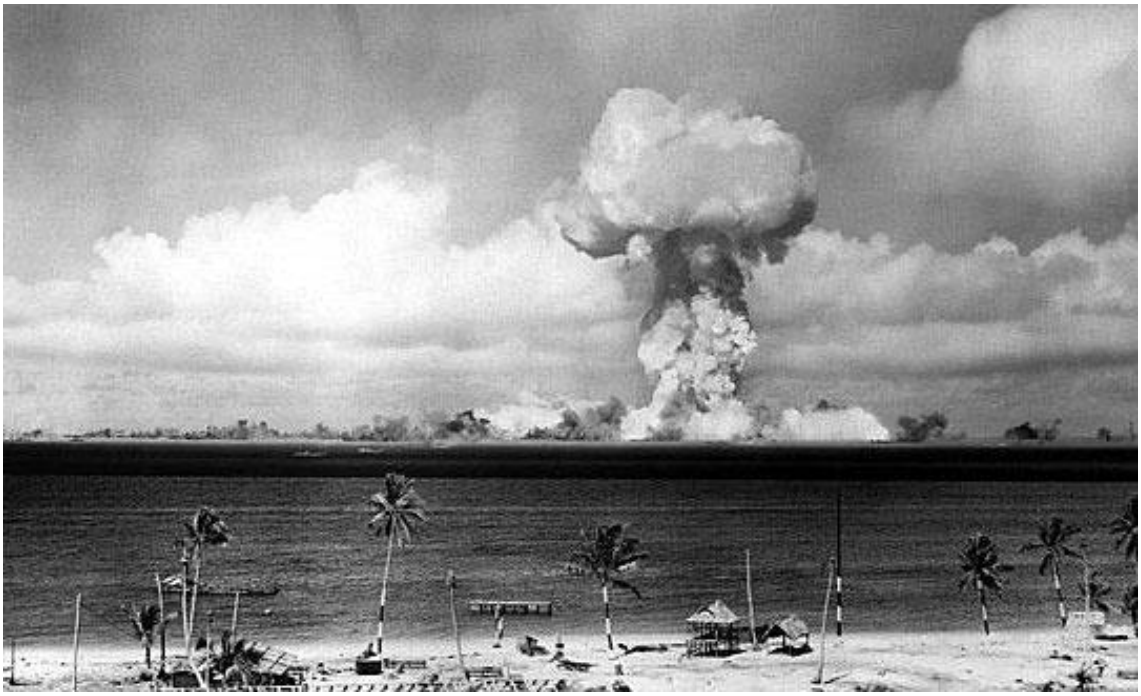


*Figure 3.* Atomic Test "Able" Operation Crossroads, Bikini, 1 July 1946. Source: Wikipedia.

The trope of romantic grandeur, displayed with reference to real or imagined volcanic eruptions, enjoys a long history in Euroamerican discourse, reaching back to Alexander von Humboldt's famous description of his climbing of the Chimborazo. In his study of volcanoes, Humboldt expected to approach the essence of the geological and climatic composition of the earth. The language of the geological sublime deployed in Euroamerican imaginings of such geologically impressive places and events is the Romantic equivalent for expressing a similar awe as expressed by the interdiction which Indigenous people impose on such powerful and sacred places. Indeed the colonial linguistic register abounds in uses of the sublime in reference to Crater Lake. Scanning a selection of newspaper accounts from the period before and shortly after 1900,[40] the concurrence of the romantic trope of the sublime and the trope of "fearful reverence" becomes conspicuous. The *Chicago Tribune* in 1873, employing good postromantic prose, claims that the Indigenous peoples saw Crater Lake "with great awe, visited it in their inspired moments, and spoke of it as a sublime fact to be held in fear and reverence."[41] The same article mentions that this "wildly majestic scene" was visited by Indians for reasons of spiritual devotion and to mourn the departed, leaving rock piles as tokens of their presence.[42] But in the 1890s, as the geological history of the place became manifest, the topos of "Indian fear and reverence" began to be reduced and simplified into "Indian fear." Thus the *Oregon Daily Statesmen* reports in an article in 1896 entitled "A Mighty Wound in the Brow of the Cascades" that "for a paltry sum the Indian will guide you thither but ere the lake be reached he will disappear amid the forests from when he came."[43] This statement

was repeated almost verbatim in *The Tennesseean* and the *Wichita Daily Eagle* in 1900. In a subsection of that piece called "Indians Fear It" can be read: "From time immemorial no power has been strong enough to induce him [the Indigenous guide] to approach within sight of it. For a paltry sum he will engage to guide you thither but before you reach the mountain top will leave you to proceed alone."[44] This behavior, the authors claim, is caused by a general fear of demons harbored by the savage mind as well as the legend of two young Klamath braves who once visited the lake. The first of them received spiritual powers but the other, who had followed the first, seeking the same powers, abused the sacredness of the place and was thus killed by the monsters dwelling in the lake. This story, which can be found in almost all publications about Crater Lake, was told by "Allin Davy, chief of the Klamath tribe."[45] It was collected by William Gladstone Steel, a journalist and jack-of-all-trades, from chief Allen David in 1885; he published the story in 1907 in his own widely circulated magazine *Steel Points*.[46] Steel had been one of the initiators of the petition to the US government to turn Crater Lake, that "unappropriated vacant domain of the government," into a National Park in 1885—a petition that was finally granted in 1902.[47] "Unappropriated vacant" suggests that the land was not claimed and not inhabited and could thus pass over into American possession by right of discovery, even without paying a "paltry sum" to the neighboring tribes who, as these texts testify, used that area for spiritual renewal.

The story of the two youths and their experiences at Crater Lake (one of them being rewarded for his devotion, the other punished for his greed) is often combined with the story of the lake monsters, also reprinted by Ella Clark: the battle between Llao and Skel, the killing and revival of Skel with the help of animals, the defeat of Llao, the feeding of Llao's body to his unsuspecting children, and the transformation of his head into Wizard Island (see above). This story, which popular sources trace to the Indian agent O. C. Applegate,[48] can be found, with some variations, in other more scientifically executed collections by Albert Gatschet and Jeremiah Curtin (on which more below).

The topos of Native fear increases around the time Crater Lake was turned into a National Park, and it coincides with the first reports of the volcanic origin of Crater Lake trickling in from 1897 onward. In 1916, *The Evening Herald* writes that "*even today* the Indians look upon Crater Lake with uneasiness and fear" and that in the old time only their "conjurers" would approach the lake (emphasis added).[49] In 1900, the already quoted pieces from *The Tennesseean* and the *Wichita Daily Eagle* quote Allen David, the major Klamath source, as regarding the fate of the Native swimmer as a warning to all Indigenous persons not to come near the lake ("and such shall be the fate of every Klamath brave who from that day to this dares to look upon the lake"). Phrased in this general way, the article excludes the further use of Crater Lake as a site for spiritual purposes as well, shunning Native visitors from it forever and preparing it for the exclusive use of Euroamerican visitors. This prohibition is phrased at a time when the tribes inhabiting the area had been subjected to severe assimilation,

reeducation, and deportation (in the case of the rebellious Modoc, who were deported to the Indian Territory after the Modoc War of 1872–1873). Around 1900, Crater Lake is semantically declared a tabula rasa, indeed an "unappropriated, vacant domain," reserved for the sole purpose of colonial science, tourism, and aesthetic enjoyment. The semantic division imposed on the place—its inscription with the trope of romantic grandeur on the one hand and the trope of "Indian dread" on the other—is conspicuous.

There is no consideration in the colonial journalistic texts of the possibility that this place inspired a feeling of terror in the Indigenous population because, in their collective memory, it was connected with the knowledge of a terrible event. The discourse of Indian dread of the place is, at best, a case of transcultural misunderstanding (non-Indians not understanding the fact that the place was not shunned for fear of monstrous Llaos but because it was a sacred place only to be visited for spiritual purposes). At worst the opposition of Indian dread and white rapture imaginatively prepares the place for exclusive possession by the whites. During all this time, the proposal to turn Crater Lake into a national park was extant, to be decided positively, after sixteen years, by Congress. "Indian dread" is a way of ignoring the fact that visitors from both cultures were affected similarly by the atmospheric uniqueness of the place, to which the knowledge of some deep historical catastrophe—inherited by one cultural group through stories and topological memory and scientifically reconstructed by the other—added affective substance. This double codification of the place (Indigenous "fear" leading to prohibition of access and taboo, and non-Indigenous sublime awe leading to touristic enjoyment) expresses the different forms of use of Crater Lake as a landmark which continues to exist in the present: It is a highly valued natural heritage site open for outdoor exercise and tourism while the local tribes continue to use it for spiritual purposes; a dual use that almost inevitably leads to conflicts. It should be conceded that the National Park Service has been able to handle the conflict relatively well, much better than in similar cases like Bear Butte in South Dakota where touristic and spiritual interests stand in brutal opposition. The Klamath, I was informed by their representatives, are able to carry out their spiritual ceremonies at certain times in the year without too much disturbance from hikers and other visitors.

I suggest reading the trope of Indigenous fear, whose function within colonial discourse is to divide the original inhabitants from their land, as pointing to a collective memory of a terrible event that once took place at Crater Lake. Alongside the stories already mentioned and those to be discussed below, that frequently noted taboo is a strong cultural indicator of the existence of an ancient collective disaster experience. "Native fear," readily welcomed by colonial society as a lack of territorial interest, is also evidence of the antiquity of that collective knowledge.[50] Yi-Fu Tuan lists natural disasters such as floods and droughts among what he defines as "landscapes of fear"—manifestations of omnipresent forces of chaos as well as human efforts to control them. Following Tuan, stories are told and philosophical systems invented in

part to domesticate the emotional consequences of such constant existential threats.[51] Mental landscapes of fear are surrounded by stories just as human homes, fields, and settlements are surrounded by protective boundaries. The stories about Crater Lake, then, may be viewed as hermeneutic enclosures of the landscape of fear that is also a sacred landscape (in accordance with the original semantic ambivalence of the Latin word "sacer" as both "sacred" and "damned").

To the extent that the trope of Native fear refers to Crater Lake as a place of spiritual renewal, its cultural meaning did not differ considerably from the one it held for whites whose admiration for the place, due to their lack of knowledge, was unmixed with any affect of terror. In surveying the media coverage of Crater Lake around 1900, it is conspicuous that the evocation of Indigenous fear happens concurrently with the emergence of stories of volcanic collapse. As early as 1896, the year in which the Diller expedition confirmed the eruption and collapse theory, "Prof." Irving E. Vining, after emphasizing that Indian guides will not go near the lake for fear, contributes the following romantic description to the *Oregon Daily Statesman*:

> "In ages past there arose on the present site of Crater Lake a mighty monarch of the mountains. Lifting his hoary head far into cloudland, he loked [sic!] down upon the snowy mantels of Hood and Shasta. A sentinel of the Westland, he cooled his brow in the air above Everest, the king of the East.
>
> Perhaps no human eye measured his altitude, no voice bespoke his grandeur—a silent monarch, he ruled o'er the silent realm. Then came the mighty battle of nature's forces. The bosom of the monarch heaved and trembled with the earthquake's shock; streams of liquid fire seared his spotless brow. Great seas of lava were hurled upon his kingdom below. The elements seemed bent upon his destruction. There is a mighty quiver, his foundations give way—down, down, down plunges the mountain monarch into the very bowels of the earth. Above him yawns a black, jagged, and smoky chasm—a veritable hell on earth. With his fall the elements become silent, the cliffs cooled, the pitying water gathered to lathe his scorched remains, filling the cavern to within two thousand feet of the top—twenty-three feet higher than the summit of Mount Washington.
>
> Thus was formed the beautiful, sublime, and awe-inspiring Crater Lake, one of the earth's greatest marvels. The ingenuity of nature never conceived a shrine of more impressive sublimity."[52]

As a professor of rhetoric and literature, as well as president of the Oregon State Chamber of Commerce, it seems Vining had advance access to the knowledge produced by the Diller expedition even before the official report was published in 1897. As early as August 21, 1896, the former mountain was ceremoniously christened

"Mount Mazama" at Crater Lake by members of the climbing organization called The Mazamas.[53] As Lapham reflects in *The Enchanted Lake*:

> There was enacted on that occasion one of the most unique ceremonies relative to geological fact and fancy ever witnessed in the naming and christening of a great ice-clasped, fiery volcano, once among the *mightiest*, consumed and fallen within the gulf containing Crater Lake. To dedicate a mountain whose great upper cliffs and peaks reached the heights of perpetual snow, upon its truncated slopes above the remaining awe-inspiring caldera, 4000 feet deep was as strange a scene as imagination might conjure.[54]

What is most interesting about this act of naming is that its object was no longer existent and had ceased to exist for about seven thousand seven hundred years. The ceremony was a ritualistic evocation of an absent mountain top. It illustrates the need of the young Western states to invent their own historical mythology which, in the seeming absence of human history (or in the presence of a human history from which the settlers could draw no identitarian capital) resorted to the language of superlative (comparing Mazama, the "sentinel of the Westland," with "Everest, the king of the East") and of the deep geological past of the Earth on which they made their homes. Together Vining's text and the Mazama ritual suggest that geologically, if not politically, Oregon could compete with, if not outweigh, the achievements of other lands. With the slight complication that the "silent monarch," like Jefferson's mammoth, had disappeared millennia ago: another instance, we might say, of American belatedness reminiscent of John Lloyd Stephens's unlucky ascent of the volcano in Mexico.[55]

The speed with which knowledge about the previous existence of the volcano was transmitted as well as the strange naming ceremony indicate the high value attached to this scientific discovery. But the geological cataclysm was also used to express resistance to colonial encroachments. *The Oregon Journal* of March 24, 1904, integrates the collapse of Mazama into a longer story of an old Modoc relating, to a group of white settlers, the story of a white woman who had disappeared during hostile activities in the 1850s and whose skeleton was discovered by a white scouting party in the Lava Fields during the Modoc War in 1872–1873. The woman, as the old Modoc narrator reveals, had been taken captive by a brave but then killed by him when his other wives resented her presence. The narrator combines this story with a statement of rights, made in clear defiance of the situation of defeat caused by the recent lost war, as a result of which the rebellious Modoc leaders had been killed and their companions deported to the Indian Territory. Having chosen to remain in his ancestral land and to move to the Klamath reservation, the narrator tells his white listeners that the Indians

> had inherited the land from their ancestors, and that it had descended from one generation to another for ages before the great Crater mountain whose snowy summit once pierced the clouds dissolved in flame and smoke and was blown away and left a deep, dangerous lake inhabited by a monster serpent, aye, long before the white man was, the Modocs possessed this goodly land, and it was theirs by every right of inheritance and prior occupancy.[56]

This use of the eruption story as support for a legally precise formulation of territorial rights is pitted against the well-known colonial mythology of female captivity which dominates the text and which has from its beginnings been used as a legitimizing strategy for territorial theft (see Kolodny, *Lay of the Land*). Whether the old Modoc himself inserts that volcanic story or whether the journalist did so, taking his poetic liberties: the article testifies to an understanding of the political significance of such ancient knowledge in the Western cultural contact zone. Whether or not these words were really spoken by the aged Modoc, the example shows the protean flexibility with which the collapse story entered into different narrative contexts—from narratives of natural grandeur and narratives of native fear all the way into this narrative of gendered colonial conflict and native defiance. With the Modoc conquered and deported, the Mazama story began to congeal into a romantic tale of a "race" facing extinction for its uncivilized deeds.

The Mount Mazama collapse story as handed down by William Colvig and Ella Clark still enjoys great popularity and has been frequently reprinted and amended, both by the National Park Service and the Crater Lake Institute with their elaborate historical websites, and more recently also by the Klamath and Modoc tribes themselves. Some scholars express mild surprise at the precision of the geological details—the "red-hot rocks" being "hurled through the skies," the "burning ashes" falling "like rain." Perhaps most impressively, the pyroclastic flows are described as "an ocean of flame" that "devoured the forests on the mountains and in the valleys."[57] The great ekphrastic precision, so untypical of ancient mythical texts, raises the question of whether the geological information was added to the story after Diller's expedition.[58] It all depends on the precise date of Colvig's report, later printed by Ella Clark.

The manuscript by William Colvig, which Clark used for her book, is still extant. It is in a box in the private possession of the Colvig family, now kept by Tim Colvig, a lawyer in Oakland, California.[59] Surprisingly, the text is dated to 1921, not 1892, as Ella Clark had claimed. In that text, Judge Colvig relates how he had lost his Civil War diary in which he had recorded his conversation with Lalek in a boat accident in the Little Kanawha River near Burning Springs, Oregon. However, Tim Colvig confirms information we have from other sources that William Colvig kept telling the Crater Lake story publicly and privately, to his children. The story had become part of his personal repertoire, even before 1921.

Unlike Clark's print version, the manuscript contains quite a few Chinook expressions, which may function to authenticate the text. The similarities are numerous enough to allow us to assume that this is the manuscript that Clark consulted—if she had access to it.[60] Her note on her manuscript materials certainly creates this impression.[61]

However, there is some confusion about the geological detail in the two versions. They appear in the scene when the Klamath medicine men, in order to save their people from the fire and rocks being hurled through the air as a result of the fight between the two Chiefs, walk to the home of the Chief of the Below World in order to sacrifice themselves. While the Colvig MS here speaks of tumbling mountains in the plural, the text by Clark speaks of a single mountain. After the medicine men enter the fiery pit of the house of the Chief of the Below World, "[t]he mountains were riven and the earth trembled upon its foundations. The God of Punishment was driven into his house below, the mountains fell upon him."[62] In Clark, we read: "This time the Chief of the Below World was driven into his home, and the top of the mountain fell upon him. When the morning sun rose, the high mountain was gone."[63] Indeed the Colvig MS, although written in the knowledge of what had happened at Crater Lake, locates the Chief of the Below World both at Lao Rock, an elevation at Crater Lake that is part of the present layout, but also on top of a snow-capped mountain standing in that place. His home is the crater itself which, at the time of the narrated events, was still a cauldron of fire. Now of course Crater Lake is located at such an altitude that the rocks surrounding the caldera are at times clad in snow. In any case, Clark cleaned up some of the ambivalences of the Colvig text, but she also brought it into closer alignment with the account of the geologists.

Another possibility is that she based her text not directly on Colvig's MS but on the account of Stanton Lapham in his book *The Enchanted Lake* which had been in print since 1931 (the "Crater Lake Legend" is on pages 126–132). Lapham, who gives a whole collection of different stories without trying to clarify their relationship or sort out the different identities of the mythical personnel, narrates the collapse of Liao's mountain at two instances, both times as a consequence of the medicine men's self-sacrifice (126, 132). Lapham makes very vague references to his sources but names a Colvig MS[64] and the published texts by Steel and Applegate, "together with information obtained by the author in the summer of 1930" (138)—a formulation that produces more questions than answers. From whom did Lapham obtain this information? From Klamath elders? From other amateur story collectors like himself?

Taken together, these popular Westernized sources[65] lack serious attempts to do comparative investigations of the relevant mythological material. In modern terms, these texts, together with the newspaper versions mentioned earlier, did a good copy-and-paste job but lack scientific exactitude. They are examples of popular intercultural myth-making and as such entered the cultural discourse about Crater Lake in the form of various media, including most recently, the Internet. The modern Klamath readily, and very creatively, participate in this modern myth-making, reinscribing their ancient

mythical narratives of the battle between Llao and Skel with the geological information adopted from Western scientific discourse.[66] This is what myth does. In its many different forms, myth exists in order to explain phenomena that are otherwise inexplicable in a way that reconciles conflicting social interests, quenches social fears, and promotes social cohesion.

The dates are of course crucial for ascertaining the antiquity of the Indigenous geomyth.[67] We only have Colvig's assertion of its existence prior to 1897, when the geological theory of the volcanic origin of Crater Lake became widely known through Diller's text. No corroborating version of the collapse story predating the geological reconstruction has so far been mentioned. There is a story tradition about the lake monster, but no mountain collapse story.

This, of course, is no proof that Colvig invented the whole tale. Both Colvig himself and the newspapers corpus suggest that Klamath elders did possess knowledge of a collapsing mountain. The question remains how that information was transmitted—whether the elders had been informed about the geological theory by their interviewers, or whether the interviewers, in their romantic mood, put these stories into the mouths of the elders. We will never know. It appears conspicuous that Ella Clark, who was most certainly responsible for the date shift, must have considered the extraordinariness of the story's age when she printed it in her collection of Indian legends of the Pacific Northwest. Her publication allowed the story to enter the wide circulation that it enjoys today, indeed it turned it into a classic of Indigenous geomythology (to use Dorothy Vitaliano's term).

Today, the practice of shared knowledge is continued by the historians of the National Park Service and the Crater Lake Institute in charge of websites and print publications. The Indigenous aspect of the history of Crater Lake is widely documented, as is the conviction that the present-day Indigenous inhabitants' ancestors were witnesses of the eruption of Mount Mazama. The Klamath themselves contribute to the contemporary narrativization of Crater Lake by adding knowledge gained from the scientific reconstruction of their country's past, not to forget some gothic flavor, to their own traditions—whether orally transmitted or printed or both. This is how the modern Klamath storyteller Barbara Alatorre rendered the story in 2002 and how it appears on the website of the Crater Lake Institute:

> One day, Great Spirit Beings pushed ice through a hole in the sky to build a great mountain, Moyaina (Mount Mazama). Then the spirits climbed down to Earth and created the Klamath terrain by digging tunnel-like caverns beneath the earth and pushing up the Cascade Range. Hundreds of rivers, marshes and lakes emerged from underground, and trees, meadows and plants sprang up everywhere.
>
> All of the Spirits returned to the Nolis-Gaeni, the afterworld, except the Spirit chief Gmo'Kamc, who made a new home inside Mlaiksi (Mount

Shasta). Gmo'Kamc created human beings to live on the lake shores around him: the Klamath Lake People, the Modoc Lake People (Modoc Lake is now called Tule Lake), and Yahooskin People on the water now known as Goose Lake.

Chief of the Below World, Monadalkni, envied Gmo'Kamc's beautiful Indian domain and return[ed] many times to watch the Ma'Klaks [i.e. the Modoc]. One day he spied an extraordinary maiden surrounded by brave warriors who wanted to marry her. Loha was the daughter of the Klamath chief, and she refused to marry anyone. Still, Monadalkni dispatched Skooks, his trusted emissary, to propose on his behalf.

On the night of the Ma'Klaks coming-out ceremony, Skooks suddenly appeared, hooded in dark wolf skin. Interrupting a ceremonial dance, he stepped before Loha and her family bearing lavish gifts: beaver pelts, valuable feathers of the red woodpecker, horses and white deerskins.

"My Chief sends these offerings for your hand in everlasting marriage," he said. "Eternal life will be yours as you become one and live in a big mountain abode forever."

As Skooks' hideous crimson red eyes gaped at the maiden, the Ma'Klaks of the village watched her other suitors disappear in a flash of orange light. Loha raced to her father's tule lodge crying out, "No, I don't want to live in a mountain!" The Klamath chief quickly called elders and medicine men to council in his lodge. They decided that Loha must be whisked away to their Modoc brothers to the south.

Skooks returned the next night demanding Loha's whereabouts, but no one in the tribe would speak. When Monadalkni learned of the maiden's disappearance, he shook with violent anger and threatened fiery vengeance on Loha's people. Monadalkni began running back and forth in the passageways beneath Moy-yaina [sic!], throwing lightning bolts and causing the mountain to explode with such force that molten lava rained like hot pitch upon the People of the Lakes. Giant fireballs shot out of the mountain as it erupted in deafening booms — five times in succession! Women and children took refuge in Klamath Lake, crying and calling out for the Great Spirit to save them.

Monadalkni ran to the top of the mountain and faced Gmo'Kamc. They fought enraged, silhouetted against the red glow illuminating the rumbling Cascades. The good chief finally forced the Chief of the Below World back underground and collapsed the mountaintop onto the

> entrance of the underworld. A huge crater remained where the peak used to be.
>
> Medicine men sang their sacred songs for rain to put out the fires. The rains came, filling the crater with water and creating the lake called Gii-was. Cradled in the bosom of Tum-sum-ne (Klamath/Modoc for "the big mountain with top cut off"), Gii-was became a holy place the Ma'Klaks kept secret for more than 7,000 years, until one day in 1852 when a white man accidentally discovered it.
>
> In 1902, Gii-was became Crater Lake National Park.[68] (Alatorre)

Alatorre's version includes a few of the elements known from the Colvig-Clark version, but it performs a much greater cultural work, integrating into her narrative scientific information about the geological formation of the landscape by the creator figure Gmo'Kamc (Kmu'kamsh).[69] The mountaintop battle here takes place between two figures—Gmo'Kamc and his antagonist Monadalkni ("Llao" in the other versions)—but involves only one mountain, not two as in the Colvig-Clark version. And this version readily includes postconquest information, such as the addition of the Yahooskin to the tribal alliance of the Klamath and Modoc, which is the result of the colonial reordering of the tribes in that area, and of course the somewhat ironical reference to the "accidental discovery" of Gi'was in 1852, after having been commemorated for six thousand years in Indigenous stories. "Gii-was" is the Indigenous name of Crater Lake already mentioned in 1931 by Lapham as "Gay-was … a High Place and sacred to the tribe."[70] The figure "Skooks" may have an origin in Klamath mythology but may also have been borrowed from modern popular gothic lore. Alatorre gives a particularly striking description of the eruptive event, illustrated by Monadalkni's running back and forth in the "passageways" within the mountain. Indeed one rock chasm at the Crater Lake site is called "Llao's Hallway." The Colvig version has no equivalent for Alatorre's "giant fireballs" shooting "out of the mountain as it erupted in deafening booms—five times in succession." Lapham's strongly westernized version mentions that the battle lasted for "seven days."[71] The strongest and most memorable image present in all three major versions introduced so far (Colvig's, Lapham's, and Alatorre's) is that of the mythical figures fighting on top of the mountain, causing its collapse.

### A Litany of Geomyths

There was never any doubt that Indigenous stories about Crater Lake were genuinely Indigenous, however modulated by intercultural misunderstandings and romantic aestheticization. These stories are not colonial inventions such as the myth of the "Lover's leap" analyzed by Jared Farmer with regard to Mount Timpanogos in Utah—a colonial story about an Indian "princess" jumping to her death after being rejected

by her lover.[72] In 1953, the same year in which her story collection was published, Ella Clark published the first of two articles for the *Spokesman Review* of Portland: "Colorful Indian Legends are More Than Mere Fancy," to be followed by "According to Tribal Legends, Coyote, Great Indian Spirit, Piled Up Rockies and by this Deed Carved Regions Rivers" in 1954.[73] As the titles reveal, the main purpose of these essays was to raise awareness for the richness and in particular the historicality and scienticity of the traditions referring to geological landmarks in the Pacific Northwest.[74] Beginning with a comparison between the Crater Lake stories published in her book (especially the collapse story) and the reconstruction of the eruption of Mount Mazama by geologist Howel Williams in his booklet *Crater Lake: The Story of Its Origin* (1941), Clark, adopting a term from the folklorist Hartley B. Alexander, promotes the theory that these stories were indeed "science in infancy."[75] Adopting Alexander's definition, she writes: "'Myths that detail causes are science in infancy, and they are perhaps the only stories that may properly be called myths. … Stories which satisfy curiosity about causes are true myths.'"[76] Her concordance between the story as rendered by Colvig and Williams's quite colorful recreation of the event was later adopted by other writers.[77]

In promoting the theory of "science in infancy," Clark compares the Mazama case with the case of the "Bridge of the Gods"—a former dam across the Columbia River which was caused by a major geological revolution, probably including an earthquake and volcanic activity. There are Indigenous stories about such an event which destroyed the "bridge" (rather a land connection consisting of massive rocks in the Columbia River). The geological event that caused the destruction of the "Bridge of the Gods" is much more recent than the Mazama eruption, being dated to anywhere between 1450 and 1760 and possibly related to the great Cascadian earthquake of 1799.[78] Based on the oral testimony, Clark assumes the mid-eighteenth century as the time of the destruction of the rock bridge—in which case this knowledge would fall into the category of oral history rather than oral tradition.[79] An indicator of the former category is the fact that one of Clark's interlocutors said that when he was a small boy, "'my grandfather, then an old man, remembered when it had happened.'"[80] The latter category (oral tradition) is characterized by the related information (e.g., a geological event) already being culturally packaged—personified and rendered as a drama between mythical giant beings. We can see how difficult it is to keep these two categories separate in some cases.

In the second essay, "According to Tribal Legends," Clark continues her correlations between Indigenous stories and modern scientific reconstructions of the geological past of North America. She insists that there are indicators that the tribal stories remember geological revolutions causing the redirection of the Upper Yellowstone River in the Early Pleistocene as well as the flood-causing spills of the Pleistocene Lake Missoula. "Indian statements about these ancient lakes," she asserts, "are too old (one appears in a story published in 1863, said to have been related in 1853), too frequent, and too well integrated in the myths to be recent insertions."[81] Such source criticism as to age, frequency, and mythological coherence is indeed

required—and very difficult to conduct under the circumstances of colonial dispossession, reeducation, and deportation.[82] Though not published in a scientific context and not formally scientific, Clark's essays show a substantial knowledge of both archives she seeks to bring into dialogue. While the geological knowledge has increased immensely since the 1950s, research of the historicality of the Indigenous traditions she refers to is sadly lacking. Being familiar with the tribal people, many of whom she interviewed and some of whom came to her on their own accord to have their stories recorded, Clark knows that these tribes took great effort in handing their knowledge down to the future generations. They had specially trained experts who ensured that their knowledge would be passed on to younger assistants (Clark's word is "understudy") who were selected on the basis of having a keen interest and a good memory.[83] She makes a strong case for the geological reasoning informing the stories (of their scienticity), comparing them to the way geological knowledge was formed in the Old World before the emergence of scientific method:

> [T]he origin of these phenomena, which are of great interest to geologists, are explained by myths once told by Indians in the region. Their explanations may seem absurd in this scientific age, for again Coyote was the geologic wonder-worker. But we might remember that in spite of books and universities and laboratories, it has not been long since peoples of European culture thought that the world was flat, that tomatoes were poisonous, that the speed of falling bodies was determined by their weight and that the germ theory of disease was ridiculous or heretical. … The myths referred to here reveal that some Indians had two traits necessary in modern science: keen observation and the inquiring mind. From the mythmaking past have come the Indians' history of cataclysmic changes and their answers to the questions how? and why? about phenomena they observed. The imagination of some story tellers, in addition to entertaining the listening group, helped to satisfy curiosity about causes and to explain the majestic and mysterious world in which the Northwest Indians lived.[84]

While the Lake Missoula stories are today dateable due to reconstructions of the Pleistocene events when the gigantic lake spilled its contents and significantly changed the landscape of the Pacific Northwest, the stories certainly do not refer to one single event but to a series of events, according to the slowness of the emptying of the lake, which was intermittently melting and freezing up again. This was a process of many years. Things are different in the case of Mount Mazama, as geologists only record one single event leading to the caving in of the mountain. While the possibility of an oral tradition reaching back several hundred years (as in the case of the Bridge of the Gods) or condensing a series of catastrophic events from the more distant past (as in the case of Lake Missoula) is generally accepted, such a graphically specific memory as the one recorded by Colvig/Lapham/Clark, which refers to a specific event seven thousand seven hundred years ago, is another matter altogether.

Clark is of course aware of the problem. She wonders whether Colvig may have taken his liberties with the story told him by Chief Lalek and whether he may have sneaked in information from the geological reports. It is all a matter of chronology:

> The Crater Lake area had been surveyed before 1892, but the report published in the Portland Oregonian in 1886 contains only an indirect reference to its origin. Not until 1897 does there seem to have been published a statement of the theory that the crater had been formed by engulfment of the top of an old volcano after copious eruptions of lava down the sides of the mountain. *The scientific investigations may have prompted Colvig to record the myth again, but they seem not to have affected what he wrote.*[85]

The last sentence contains a significant paradox: It is to be assumed that a report that "prompts" Colvig to repeat the story also "affected what he wrote." Lacking any corroborating evidence, we have to leave the question open whether Lalek told Colvig of a collapsing mountain in 1865 or whether Colvig added that part only later, in light of the geological investigations. What also has to remain unresolved is whether there ever existed an 1892 version of the Colvig text or whether Clark backdated the 1921 manuscript that is in the box today. She would have had reasons for doing so, as her journalistic initiative in favor of the capacities of oral traditions makes evident. She accordingly wonders: "Could any oral tradition, even one describing such a terrifying experience as the eruptions of volcanoes, be transmitted for nearly 6500 years?"[86] Clark's correspondence of the years 1950 and 1951 with other experts on Klamath mythology shows that she was very preoccupied with the question of the story's authenticity.[87]

Clark's position in her *Spokesman Review* essays of 1953/54 is unexpectedly modern for her time. The dominant opinion about Native American knowledge was in the 1950s still ruled by the discourse of primitivist savagism. The idea that Indigenous storytelling might form "science in infancy"—that it may be equivalent to scientific knowledge, if in a different epistemic register—is much more prominent in our own time. It may connect with the recent work on Traditional Ecological Knowledge (TEK) or Nimachia Howe's linguistically informed reading of the Blackfoot Naapi stories.[88] With reference to the geographical area discussed here, Julie Cruikshank, Ruth Ludwin, and Coll Thrush have provided elaborate investigations of the mnemonic qualities of Indigenous stories.[89] The sociologist Julie Cruikshank, for example, has convincingly shown how the spatial memories of the Indigenous inhabitants of the Yukon Territory cohere with scientific reconstructions of glacier movements, landslides, and the like. In her celebrated book on topological stories from the Yukon, *Do Glaciers Listen?* (2005), Cruikshank treats all reports about geological events, whether written down or transmitted orally, whether cultural or scientific, as collective memory narratives. Similarly, Ruth Ludwin and Coll Thrush triangulate the science of geology and

Indigenous oral traditions, rejecting the notion that science and stories form two separate and mutually exclusive archives and instead viewing them as two different ways of coming to terms with a very mobile landscape:

> As the peoples of Cascadia struggled over millennia to come to terms with the geological realities of their homelands, they developed interpretations of seismic events that simultaneously reflected and shaped their lived experiences of place. Earthquakes and tsunamis were central components or relations between human beings and the other, nonhuman beings who inhabited the coastal regions. […] [E]arthquakes and tsunamis were understood to be moral events reflective of relationships between and among human people and the other residents of Cascadia.[90]

Following Ludwin and Thrush, we can contend that all stories, whether scientific or not, are hybrid products of specific cultural constellations. They are hybrid, first, in themselves (their semantic reference is always to the real world *and* to a community's symbolic repertoire), and second, they are hybridized by the colonial epistemic encounter, being the result of crosscultural exchange and transculturation. Oral traditions, then, require to be seriously investigated as a valuable cultural archive in their own right, not as alternatives or supplements to scientific accounts but as different narrativizations of an ever-changing earth. Though not technically equivalent to scientific reports because they are subject to different generic and mimetic rules and mnemonic processes, orally transmitted Indigenous traditions offer an alternative geoepistemological access to the world of the past and the present.

While place can be an archive for remembering stories (as William Turkel writes),[91] stories can also contain information about topological events of the (distant) past. Colonial science, however, more often than not discredited oral traditions as inaccurate evidence because they did not adhere to rationalistic logic and because their textual status was "adulterated." The fact that the analysis of traditional stories is in the domain of various disciplines (folklore studies, anthropology, literature, history) did not help to raise their status. Consequently, this very precious corpus remains today seriously understudied. In addition, non-Indigenous scholars (like myself) face the additional ethical problem of offering readings of Indigenous stories from outside the social groups in question, which may be seen as yet another act of colonial appropriation, regardless of the positive use of bringing these texts into circulation in an academic context.

Next to these epistemic reasons for neglecting the study of oral traditions, a colonial settler society may have additional ideological reasons for dismissing oral traditions which testify to alternative, and more ancient, forms of ownership of the land. As historian Edward Chamberlin titled his 2003 book, *If this is Your Land Where are Your Stories?*, stories express an affective and epistemic relationship to the land that is equivalent to *owning* that land.[92] He takes this sentence from a Gitskan

(Tsimshian) elder of northwestern British Columbia who used this question in response to a government official offering to buy the tribe's land.[93] The anecdote suggests that the state of "owning" a place involves more than a commercial transaction; that it crucially depends on collective and deep historical knowledge of that place. Within a decolonial and historical–materialist research paradigm, this additional ideological reason urges a serious confrontation with these problems and asks that an attempt at filling the epistemic and archival gap be made.

My search for the corroborating of Colvig's Mazama collapse story remained fruitless, except for another version of it (from 1912, also in the box) where Colvig himself claims ownership of the story.[94] The oral traditions of the tribes of the Pacific Basin and Northwest Coast are generally rich in catastrophic material due to the geological activity of that area, but no other Crater Lake story materialized. It was only when I broadened my perspective and searched for Klamath and Modoc stories more generally, and then read them over and over again, that my search was rewarded. I am now convinced that the corroborating evidence existed all along, in two meticulously collected books on Klamath and Modoc stories by the Euroamerican scholars Albert Gatschet and Jeremiah Curtin—books that were available to Ella Clark (she mentions Curtin's book in her correspondence) and that were widely in print and shelved in American and European libraries.[95] Like Poe's Purloined Letter, these texts were not hidden at all physically but only hidden from our too narrow epistemic framework which makes it difficult for Western-trained scholars to read mythological texts of non-Western origin.[96]

Vine Deloria dreamed of the day when more information would become available on the narrative coverage of the Crater Lake cataclysm, but actually more information *has* been available for more than a hundred years. It simply has not been used properly, not even by Ella Clark, who includes the sources in her bibliography. The oral archive, as all oral archives, is culturally deep, complex, polyvocal, and at times, for an inexperienced reader, culturally unintelligible. It does have things to say about the history of Gi'was.

## Cataclysmic Storytelling

As the oral historian Jan Vansina suggests, even deep–historical oral traditions can serve as historical evidence.[97] For a long time discounted as mere myths and "fabulous tales," certain Native American oral traditions, especially those relating to demographic and geological events, contain information that may confirm, but also contest, the epistemological claims of written colonial records. Both archives pose methodological challenges that have to be tackled by employing refined strategies of critical analysis. Oral sources can "testify despite themselves" in containing information that may be marginal to the story told but crucially relevant in other contexts. According to Vansina, this even makes the information revealed more reliable (27). He establishes certain criteria which an oral tradition has to fulfil in order

to count as historical evidence, such as a temporal reference to the event related, as well as a link between observation and record (29, 30). Historians have to be aware of the length of time and number of removes that separate the tradition from the present (29). In dealing with recorded traditions (traditions not directly related to the historian), it is of utmost importance to investigate who the author of the recorded version was: "If he was a professional, did his performance belong to a genre reserved to professionals? Was he entitled to perform or not? Was he a 'person of memory' or not? That is, was he or she interested in the past history of that community to the point of having learned many traditions and having produced his or her own vision of the past?" (55). All of these facts will "influence the contents of the message performed" (55). Furthermore, the performativity of the recording has to be considered: Was the recording "incidental" or is it the result of systematic research (57)?[98] Perhaps most difficult to assess in investigating oral tradition is the dimension of time because it is ephemeral and culture-specific (173). Vansina introduces the concept of "ecological time" to refer to the relatedness of oral memories to seasonal cycles (174). Elsewhere he mentions the significance of landscape as a mnemonic prompter, a "powerful mnemonic device" (45). Finally, he holds that "[e]xtraordinary events, usually calamities which disrupted life," were a mode of reckoning time: "One would say: before the drought, volcanic eruption, earthquake, epidemic, forest fire, comet, eclipse, or after" (175).[99] As to the length of time a historical event can be preserved in oral memory, Vansina is rather reluctant. He usually assumes that an event can be remembered for a few generations (175), but he knows of cases, for example in Polynesia, where a memory, though completely unaided by any form of writing, reached back sixty generations (176). Thus, Vansina and other experts of oral tradition do not exclude the possibility that a cataclysmic event can remain within the collective memory for millennia.

But one would not expect an account with such graphic detail. As anthropologist Rick Budhwa writes when comparing cataclysmic events and story traditions in the Pacific Northwest, such events never existed in and by themselves but came to be integrated into existing stories involving supernatural beings, moral lessons, and the like.[100] Over time, those sections caused by the geological event may cease to signify as a concrete memory and become part of a seemingly streamlined tale whose composite character was no longer visible. This, of course, is a main function of all literature; it is called emplotment. "Eventually, over successive generations," Budhwa writes, "the witnessed event may become fully integrated with the moral philosophy, giving the appearance that it only is part of the metaphoric tale, with no basis in scientific fact."[101] At other times, certain significant events may leave their traces in the traditions of various tribal groups, who exchanged their stories during long winter days when meeting in the winter camps. Over time, the contents of the stories adapted to new needs, elements might wander between stories or become condensed within one long story. Names and animal avatars might change while the protagonists' actions remain the same. All of these features can be observed in the Klamath-Modoc corpus.

As a modern European reader of the Klamath and Modoc stories, I can confirm geologist Ruth Ludwin's description of her reading experience. In an email to me, Ludwin described her hermeneutic process of "decoding" Indigenous stories for evidence of geological events:

> in order to envision the context of the stories I took the flat page of all my knowledge and being and slipped it through a crack into another dimension. Another way of putting it is that I went back and forth and hither and thither through many resources and multiple forms of the same stories or different stories with the same figures until light dawned. This was not easy for me as a scientist trained in European conventional traditions. [… ] [T]he precepts that filtered down to me made indigenous knowledge perhaps more difficult to recognize.[102]

The Klamath and Modoc tribes do possess a rich oral tradition containing numerous references to geological and cataclysmic events in the Cascadian range and basin located to the south and east. Most of their stories available in print contain a significant amount of geomythical material. As Leslie Spier, one of the early ethnologists of the Klamath, notices, "there is hardly a mile of Klamath territory but has its mythical reference […O]ne looking over the countryside finds it rich in religious connotation."[103] Paradoxically, Spier then continues by virtually ignoring the imaginative wealth of Klamath mythology: "Klamath religion is quite unsystematized. There are no deities and the spirits as such hardly figure in the tales. [… ] The Klamath lack all architectural feeling in conceiving their spiritual beings."[104] Adhering to a strict descriptive structure himself in his assessment of the tribes' material culture, Spier notices a lack of formal order in a historically grown mythology.[105]

One of Spier's sources is the two-volume linguistic study by Albert Samuel Gatschet, who makes a similar observation about the strong sense of place among the Klamath, reading it as a sign of their sedentariness:

> This people belongs to the autochthonic nations of America, called so because they have lost all remembrances of earlier habitats or of migrations. […T]he first man is said to have been created by their national deity, K'mukmatchiksh, at the base of the lofty Cascade Range, upon the prairie drained by Wood River.[106]

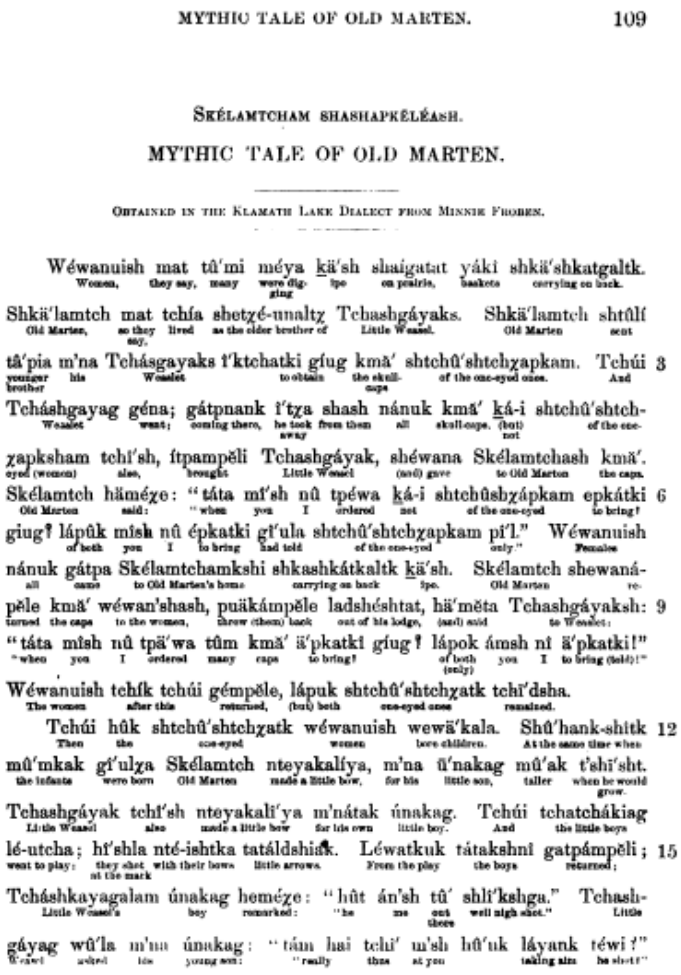
Indeed, the Klamath creator figure Kmu'kamsh (also called Skel or the Old Marten) is the protagonist of the traditions relating to Gi'was.

Our investigation into Indigenous knowledge about the collapse of ancient Mount Mazama thus leads us to two collections containing stories from the oral traditions of the Klamath and Modoc: Albert S. Gatschet's *The Klamath Indians of Southwestern Oregon* (1890), a two-volume grammar and ethnographic study of the Klamath conducted in the 1870s for the US Geographical and Geological Survey of the

Rocky Mountain Region; and *Myths of the Modocs*, a story collection assembled in 1884–1885 by Jeremiah Curtin, a freelancing writer and translator. Curtin's volume was published posthumously in 1912, which means that he was unaware of Gatschet's text when he recorded his stories from Klamath and Modoc elders in Oregon and Oklahoma, but Gatschet's volume had been out when Curtin's was finally published. By then, both of them had died (Curtin in 1906; Gatschet in 1907).

The books by these two members of the colonial society—Gatschet, a Swiss immigrant with the typical scientific rigor of a linguist, and Curtin, a far-traveled polyglot collector of traditional stories around the globe, contain Klamath and Modoc cultural knowledge at a stage *before* the Diller expedition caused the geological reconstruction of what happened at Crater Lake in circa 5700 BCE. In fact, they contain all the ingredients of a cataclysmic event having taken place at Gi'was/Crater Lake, with the exception that they do not offer a description of the mountain's collapse reminiscent of the style of writing in geology and similar to the one we find in Colvig and Clark.

Though available in print, stories collected before the Diller expedition are hardly in circulation anymore. In Gatschet's case, the reason for this is certainly that the stories, though they are there, are really *not* there because they are practically unreadable: The linguist meticulously reproduced the original wording of the stories told to him by Dave Hill, Minnie Froben, and other Klamath interlocutors, accompanied by interlinear translations of them printed directly underneath the Klamath texts but in a font size that makes the English version very difficult to read (Fig. 15). In fact, those later scholars who make use of Gatschet's volume (among them Barker, Harris, and Deur, *Footprints*) only use Gatschet's introduction, where he summarizes the contents of the stories, as well as his extensive (mostly linguistic) notes placed after each story. Only one scholar whose work I have consulted—Claude Lévi-Strauss—shows knowledge of the contents of the stories themselves.[107]



MYTHIC TALE OF OLD MARTEN. 109

SKÉLAMTCHAM SHASHAPKÉLÉASH.

MYTHIC TALE OF OLD MARTEN.

OBTAINED IN THE KLAMATH LAKE DIALECT FROM MINNIE FROBEN.

Wéwanuish mat tû'mi méya kä'sh shaigatat yáki shkä'shkatgaltk.
Women, they say, many were dig- ging tpo on prairie, baskets carrying on back.

Shkä'lamtch mat tchía shetxé-unaltx Tchashgáyaks. Shkä'lamtch shtûlí
Old Marten, so they say, lived as the elder brother of Little Weasel. Old Marten sent

tâ'pia m'na Tchásgayaks t'ktchatki giug kmä' shtchû'shtchxapkam. Tchúi 3
younger brother his Weasel to obtain the skull- caps of the one-eyed ones. And

Tcháshgayag géna; gátpnank t'txa shash nánuk kmä' ká-i shtchû'shtch-
Weasel went; coming there, he took away from them all skull-caps. (but) not of the one-

xapksham tchí'sh, ítpampĕli Tchashgáyak, shéwana Skélamtchash kmä'.
eyed (women) also, brought Little Weasel (and) gave to Old Marten the caps.

Skélamtch hämézxe: "táta mí'sh nû tpéwa ká-i shtchûshxápkam epkátki 6
Old Marten said: "when you I ordered not of the one-eyed to bring

giug! lápûk mísh nû épkatki gí'ula shtchû'shtchxapkam pí'l." Wéwanuish
of both you I to bring had told of the one-eyed only." Females

nánuk gátpa Skélamtchamkshi shkashkátkaltk kä'sh. Skélamtch shewaná-
all came to Old Marten's home carrying on back tpo. Old Marten re-

pĕle kmä' wéwan'shash, puäkámpĕle ladshéshtat, hä'měta Tchashgáyaksh: 9
turned the caps to the women, threw (them) back out of his lodge, (and) said to Weasel:

"táta mísh nû tpä'wa tûm kmä' ä'pkatki giug! lápok ámsh ní ä'pkatki!"
"when you I ordered many caps to bring! of both (only) you I to bring (held)!"

Wéwanuish tchík tchúi gémpĕle, lápuk shtchû'shtchxatk tchí'dsha.
The women after this returned, (but) both one-eyed ones remained.

Tchúi hûk shtchû'shtchxatk wéwanuish wewä'kala. Shû'hank-shítk 12
Then the one-eyed women bore children. At the same time when

mû'mkak gí'ulxa Skélamtch nteyakalíya, m'na ú'nakag mû'ak t'shí'sht.
the infants were born Old Marten made a little bow, for his little son, taller when he would grow.

Tchashgáyak tchí'sh nteyakalí'ya m'nátak únakag. Tchúi tchatchákiag
Little Weasel also made a little bow for his own little boy. And the little boys

lé-utcha; ht'shla nté-ishtka tatáldshiak. Léwatkuk tátakshní gatpámpĕli; 15
went to play: they shot at the mark with their bows little arrows. From the play the boys returned;

Tcháshkayagalam únakag heméze: "hût án'sh tû' shlí'kshga." Tchash-
Little Weasel's boy remarked: "he me out there well nigh shot." Little

gáyag wû'la m'na únakag: "tám hai tchí' u'sh hû'uk láyank téwi?"
Weasel asked his young son: "really thus at you taking aim he is-it?"

*Figure 4.* Albert Gatschet, *The Klamath Tribes of Souther Oregon* (1890), I. Beginning of the "Mythic Tale of Old Marten."

Albert Gatschet (1832–1907),[108] born in Switzerland and trained as a linguist in Bern and Berlin, emigrated to the United States in 1868, where he became one of the leading experts on Indigenous languages. In Europe, he had already specialized in the study of toponymy and toponomastics (in relation to Swiss place-names)—an expertise he put to good use in his study of the Klamath language. In 1877, he was hired as an ethnologist for the United States Geological Survey; his linguistic studies,

grammars, and dictionaries, which include many historical and mythological sections, were published for the Smithsonian Institution by the US Department of the Interior. Gatschet's Indigenous interlocutors, or consultants, include Dave Hill and Minnie Froben, both of whom must have been professional storytellers.

The other editor, Jeremiah Curtin (1835–1906), was an illustrious personality himself.[109] He had spent time with the survivors of the Modoc War in 1884, both on the Klamath reservation in Oregon and in the Indian Territory (Oklahoma) where he met Modoc men and women who had been deported after their unsuccessful struggle against the colonial powers, which had ended in the Lava Beds of northern California. Curtin names two main interlocutors. One of them is Ko-a-lak'-ak-a ("Hard Working Woman"), an elderly woman whom he interviewed in Oklahoma. His main consultant on the Klamath-Modoc reservation was Old Sconchen, the older brother of John Sconchen (one of the leaders of the Modoc War). Like Ko-a-lak'-ak-a, Sconchen was quite old when Curtin interviewed him, but "[t]hough old and infirm, his mind was still clear and active. For years, in the prime of his life, he was chief of his people, and in his old age they revered him."[110] M. A. Curtin,[111] editor of the Modoc myths collected by Jeremiah, describes Ko-a-lak'-ak-a as

> a woman who was then old and feeble, but who as late as Aug. 1, 1912 [the year of publication], was still living, the oldest woman of the Klamath-Modoc tribe of Indians. At the time she told the myths she was remarkable for her intelligence and her wonderful memory. In childhood her grandfather had instructed her in the religion of her people, in other words, taught her all the myths of the Modocs, and to old age her tenacious memory retained many of them. For years Ko-a-lak'-ak-a was the most unhappy of all the exiles.[112]

This comment takes up a fair space in the very short introduction. It expresses the editor's sympathy for this woman displaced from her homeland as well as admiration of her cognitive capacity. The first sentence reveals that Curtin's widow must have inquired after Ko-a-lak'-ak-a before taking the book to the printer, while the last sentence contains a hint as to why the Modoc elder entrusted Curtin with the stories: it may have been her last attempt to rescue her tribe's knowledge for a future time in which it was not certain whether her people would live. Curtin's posthumously published *Memoirs* confirm Ko-a-lak'-ak-a's expertise: She

> was a woman who had in her mind all the lore her people possessed a hundred years ago. She was the daughter and granddaughter of a chief and when a child her grandfather taught her the wisdom of the Modocs. She had a wonderful memory. Though she was no longer young and her health was poor, she was willing to give me the myths and beliefs of her tribe. She had more stories in her head than I dreamed it [was] possible for any one to learn and keep without aid of books.[113]

Oral traditions, as we know, have only the human body as their medium; they disappear when the bodies disappear, or when the human minds are being systematically "reeducated." The body is a very precarious medium.[114] The destruction of oral traditions is thus a particularly vicious act of biopolitical control by physical or cultural erasure (what Fernando Ortiz called "deculturation"[115]). In deciding to enter into transcultural dialogue and to share their tribe's most sacred knowledge with strangers, Ko-a-lak'-ak-a, Sconchen, and the other tribal savants laid the foundation for ensuring the cultural survival of their tribes. They knew that social identity and cohesion depend on a shared tradition and heritage, and they engaged representatives of the colonizing culture as curators of that heritage. It is important to view these so-called interlocutors as historical agents in their own right who understood the advantage of print technology and who hired the journalists and scientists (instead of just being hired by them) for the purpose of saving their ancient knowledge.

Mary Alma Curtin knew that the people her husband had talked to and whose stories he had collected were traumatized by the loss of their way of life, by war, and by deportation: "Exile for the Modocs was a crushing sorrow," she writes in her introduction. "When I saw them, in 1884, they were still mourning over their changed condition, and for the Klamath country,—the country Kumush created and gave to them."[116]

Despite lacking the original Klamath script contained in Gatschet's texts, Curtin's volume remains a treasure trove of Indigenous storytelling, containing some stories that run up to fifteen pages and next to sixty interrelated stories altogether. Many mythical stories, plots, and materials are similar to those found in Gatschet's volume, although names may differ. Mary Alma Curtin demonstrates her sensibility for the topophilia of the Indigenous people. What's more, she admits a lack of such affective relation to the land on the part of the settler culture. To the Modoc, she writes,

> the valley of Lost River and the lands around Klamath and Tula Lake are sacred. We, who endeavor to trace our origin back to a monkey or, still farther, to a bit of protoplasm, or who believe in and search far and wide for the Garden of Eden, cannot revere a country which is ours simply by chance of birth as the Indian reveres the country where his tribe originated. We cannot estimate the love an Indian has for his country. His holy places are not in far-off Palestine; they are before his eyes in his own birthplace, where every river, hill and mountain has a story connected with it, an account of its origin.[117]

Arguably, it is a certain nostalgia for a lifestyle that still knows and honors the surrounding nonhuman world that had caused Curtin (and to an unknown extent his wife) to collect the stories in the first place. Gatschet, as already mentioned, had even made human emotional and epistemic engagement with the land his first profession (before turning ethnologist as an emigré). Both Gatschet and Curtin, then, possessed sufficient

linguistic knowledge, knowledge of other cultures, and a sense of the cultural significance of the land that these stories indeed transport. Though being members of the colonizing culture, they had the necessary empathy and motivation to listen to what their interlocutors had to say.

The books of both contain narrative sequences repeated in different stories, and especially the longer stories show the bricolage method by which narrative elements are combined in different contexts, some reaching further back than others, some continuing where others leave off. A further element that may be unsettling for a reader not skilled in mythical corpora are the many inversions and changes of personnel, as when the hero of one story becomes the culprit in another. But in spite of these variations, accountable to the passage of time and the divarication of the texts, it is surprising to find a fair amount of character continuity in this corpus. Especially the creator figure Kmu'kamsh (also called Shkä'lamtch/Skel/Tskel or Old Marten or Mink),[118] has a defined field of activity and personal characteristics typical of an "earthy," geological figure. His adopted son Aishish, and his younger brother and sidekick Weasel (also called Tchashgáyaks/Tcûskai), also appear with very similar characteristics in the various tales.[119] These figures belong to a massive tradition in no way less impressive than that of Nordic mythology and its main characters, or indeed, in some cases, the Spanish picaresque novels (Weasel in particular has the traits of a picaresque figure; most of them have trickster-transformer qualities). Kmu'kamsh's and, to a lesser degree, Weasel's main characteristic is their ability of disguise and their scheming disposition. Aishish, as will be seen, is a more human-like figure and one of the few figures in this mythology not bearing the name of an animal: His name means "the hidden one," the secreted or concealed one.[120] Besides relating the heroic and less heroic deeds of the ancients at a time before the division of "people" into animals and humans (many stories end with their transformation into animals), the stories in Curtin's volume also contain numerous references to topologically important sites and to geological events. Some of these events, as we shall see, are less topographically specific than others, which is perhaps the result of the Modoc's ancestors having traveled from the area around Lower and Upper Klamath Lake, Crater Lake, and Klamath Marsh to an area further south, around Tule Lake and Mount Shasta in today's Northern California.

How can these stories help us find answers to the question, articulated by Deloria, about Indigenous knowledge of the geological events around the eruption and collapse of Mount Mazama and the formation of Crater Lake about 5700 BCE? Some of the stories refer directly to a place called Gi'was (or Gi'wash), as the place now called Crater Lake, while others refer to cataclysmic events having taken place at Gi'was. But how, we may ask, can a mythical story contain historical and geographical information of this kind? After all, it is not the principal function of myth to document historical events. As Greg Dening, the eminent expert on Polynesian history, writes, myth is always true but also never true;[121] its truth is not the same as the truth of a positivist historian's reconstruction or the truth of a police report (we know how true

those can be!), but it rather inherits materials, both event-related and imaginative, from the past in the process of passing on important knowledge to future generations. As Claude Lévi-Strauss writes, mythical texts "can never be reduced to their appearance" only.[122] While an older myth criticism practiced in the nineteenth and early twentieth century concentrated on establishing kinship lines and links between various mythical stories based on their surface similarities, Lévi-Strauss's own mythological method begins

> from the principle that a myth can never be reduced to its appearance. However diverse appearances may be, they conceal structures which, although probably less numerous [than surface similarities] are also more real. They present themselves as absolute objects, from which nothing can be subtracted and to which nothing can be added: they are matrices which, by means of successive deformations, engender types which can be arranged in series and should enable us to determine the most minute shades of meaning in each myth, considered as a concrete, individual entity.
>
> This method does not always need to appeal to history, but neither does it completely disregard history. [… [I]t raises historical problems suggesting hypotheses that history, left to itself, might otherwise not have thought of.[123]

The mistake of an older generation of mythologists, Lévi-Strauss continues, was that they tried to understand the myths "by means of a single and exclusive code, when in fact several codes are always in operation simultaneously. It is impossible to reduce the myth to any one code, nor can it be explained as the sum of several codes."[124] Borrowing a term from psychoanalysis, we could say that mythical language is always semantically overdetermined; not unlike the language of the unconscious as described by Freud, the language of myth uses processes of semantic condensation and displacement as well as symbolism and its meaning is not necessarily exhausted by understanding the plot of each individual story. In fact, following Freud's concept of secondary revision (from his dream analysis), the plot of a myth may simply be the glue binding together the breccia fragments of the mythical material (*Vorlesungen* 188).

Lévi-Strauss concentrates on the transhistorical and translocal structures of these myths—in particular the recurring motifs of the hidden boy and what he calls the bird-nester. Both motifs are part of the Aishish cycle, as we will presently see. While there is very much to learn from Lévi-Strauss's extensive discussion of the Klamath-Modoc corpus, his contention that mythical structures form "absolute objects" is not satisfactory to anyone interested in a historical investigation. Instead of declaring the mythical structure as a non plus ultra (nothing to subtract, nothing to add), we should make the attempt to historicize, that is further investigate, the very element that he identifies as the "absolute object."

So no streamlined, organized, complete account of a historical past can emerge from a reading of the Klamath-Modoc corpus; rather, hopefully, a sense of how an oral tradition, already affected by the trauma of colonial ethnocide and documented under non-ideal conditions, would survive the cultural clash— at a time when neither the Western collectors nor the Indigenous interlocutors knew whether the tribal cultures, or even the tribal people, would survive the collapse of their way of life. These stories are part of their legacy. In addition to the imperative to remember, these texts forcefully present us with an immensely imaginative storyworld that is not the product of any single author but rather of a millennia-old narrative tradition, suddenly stopped short by violent dispossession and deportation, which may have left the most recent trace on the texts (the sadness surrounding the disappearance of the culture hero Aishish may be a sign of this impact). The documents are products of what Richard White has called the middle ground, an intermediate period in which two or more cultures grappled with each other both physically and epistemologically; they are more likely to be records of misunderstanding or "misreading of meaning," to use Greg Dening's term, than any definite single "truth" (White, quoting Dening, in "Indian Peoples" 93). Although these records were made with the utmost care for precision by linguistic experts desiring to salvage the culture if not the human beings themselves, they are of course hybrid documents of the colonial contact zone. Above all, this mythology does communicate a sense of loss, in spite of the craftiness and the sheer liveliness of many of its characters.

We will start with two stories from Albert Gatschet's *The Klamath Indians of Southwestern Oregon*. He picked up these stories in 1873 at Klamath Agency and in the Indian Territory to which Modoc survivors had been deported (LXXXV), but also uses manuscript versions of stories collected by Jeremiah Curtin. In his "Letter of Transmittal" (to the Smithsonian Institution) he writes that he considers "language to be the most important monument of the American Indian. Archaeology and ethnography are more apt to acquaint us with *facts* concerning the aborigines, but language, when properly investigated, gives us the *ideas* that were moving the Indian's mind, not only recently but long before the historic period" (I: vii).[125] Gatschet's main informant is the Klamath woman Minnie Froben, daughter of a Klamath woman and a French settler, who had worked as an assistant teacher at the boarding school for native children at Klamath Agency. Although Gatschet praises her and his other consultants' excellence, the stories relayed by her are far exceeded in length by the Modoc corpus collected by Curtin.

From Minnie Froben, Gatschet has collected the "Mythic Tale of Old Marten" (Gatschet I: 109-18; see Fig. 15 above). The dramatis personae include Old Marten or the Pine Marten, one of the shapes of the creator deity Skel, also called Kmu'kamsh, the main transformer figure of Klamath mythology. Weasel, Kmu'kamsh's younger brother, assistant and sidekick, frequently travels underground (being a weasel). In his behavior, he is one of the most human of all mythological figures and generally disrespectful of Kmu'kamsh's orders.

The adventure of Old Marten (Shkä'lamtch) and his little brother Weasel (Tchashgáyaks) begins with women digging for ipo roots in the prairie. Marten advises Weasel to go and get the women's skull caps (their woven hats), but only those of the one-eyed women—a detail that Lévi-Strauss interprets as a reference to the lunar cycle (44). Weasel, who is generally of a disobedient disposition, brings the caps of all women upon which Marten scolds him (l. 6). All women, following their stolen caps, come to Marten's house but he sends all but two one-eyed women back. Soon the two women each bear a son to Marten and Weasel. The two boys, out to shoot squirrels, accidentally almost kill each other (110, l. 2). Later, following their fathers' advice to shoot back if attacked, they do kill one another (110, l. 12–17). Marten and Weasel discover the dead bodies, mourn over them and cremate them. After this moral lesson, dissuading the listeners from instigating their children to commit wanton acts of violence, a new section begins, its relationship to the previous one not clear: Marten entices Weasel to go and get the heads of the North Wind and the South Wind by going to their houses and chopping off their heads. After some discussion (Weasel wants to go to the same house as Marten/does not want to follow Marten's orders), they do as Marten had devised. Little Weasel "dies" (i.e., faints) when the South Wind rears its head so Marten has to chop off both heads (111, l. 4–11). Marten then announces he will visit the Thunders ("Leméish"). On the way to their abode, they encounter a woman who asks for their help as she is being pursued by one of the Thunders. Marten locks her into a pitch pine log and continues on his way. The woman is discovered and killed by her persecutor (111, l. 12–17). The rest of the English version of Gatschet's original interlinear translation is here rendered in grammatically correct syntax:

> Old Marten then arrived at the lodge of the Thunders [Lemé-isham]. Two decrepit old Thunders, the parents of the Thunders, lived there. Old Marten stepped into the room wearing the North Wind's head upon which everything in the lodge/room froze to icicles. The inside ladder, too, became slippery with ice. Gray Wolf, Marten's kinsman, returned from the hunt, and he and his children did not freeze from the ice. The Thunders returned home, bringing many Indians. The Old Thunders reported and said to their sons, "some stranger with more power than us has come into the room!" The oldest Thunder said, "whatever stronger man has come, I can certainly enter where he is." He went out then, climbed up, stepped on one step only of the inside ladder and hurried out again, crying "tututu!" After running home this Thunder so reported, and another one said: "Some kind of stronger one is sitting inside." Going out over there he went on top of the winter lodge, put his foot on only two steps of the inside ladder and stepping on it he ran out again. Crying "tututu!" he skipped away. Joining the others in the *kayata* [the old Thunders' lodge], another went out there, mounted up the ladder, went in. Having climbed down he hurried out again while tutut-crying, "To be sure, this one is much stronger than we are!" The

last one also rushed out, "What kind of stranger is this?" Entering the lodge he sat down on his couch but starting up and ran out again.

After some time Gray Wolf came home, bringing some venison. The Thunders said to Gray Wolf, "Someone far stronger than us has come." Old Wolf climbed the lodge, he shouted to Old Marten, "Take off your hat!" And Marten, unhatting himself, laid down his hat; all the icicles disappeared again. Old Wolf and the Thunders entered the lodge, rebuilt the fire and had a meal. They heated the stones and threw in people, using a large flat bucket to stew the people. When the stones were hot they took them out and cooled them in *kála* water. As soon as [the people] were stewed the Thunders handed them as food to Marten. Old Marten with the little finger moved more Indians toward the *kála.* Then Old Marten began to eat; Weaslet pinched Old Marten insisting for human flesh. But Old Marten did not give him any, saying it was bad; he whispered to Little Weasel, "later on I will give you venison meat." Then he ate all up, not giving any to him. As he returned the bucket to them, Old Wolf also began roasting the meat. When it was done, putting it on a paddle, he gave it to Old Marten who gave some of it to Little Weasel. Having done eating, they went to bed, Old Marten feeling sleepy as soon as he lay down.

*The (5) Thunders* plotted how to kill Old Marten, *constantly walking up and down*. Only Blackbird observed the Thunders and was not asleep. And the Thunders approached to look at Old Marten, whether he was asleep, proposing to kill him. The Thunders pushed arrow-heads into Blackbird's eyes; from then on he would no longer go to sleep though looking as if sleeping [cf. explanation in Curtin: "Káhwas had bright eyes; when he was asleep the Leméis brothers thought he was awake" 79]. At midnight the Thunders went to sleep. Old Marten, awakening, went over to the Thunders' place, tied together the hair of the Thunders and put swords in their hands to make them believe that his younger brother was about to kill them. Then he ordered Gray Wolf and his children to leave the lodge. *Old Marten set fire on the lodge, and standing on its top he waited for the Thunders to rush out*. He hearkened standing outside; at last, when the fire blazed strongly, the Thunders awoke. They stabbed each other with the long blades, "Marten's younger brother is killing you!" But they stabbed only each other.

Then all perished by blazing up; one heart exploded while flying off. Looking on, Old Marten struck one heart in the fire; again one exploded. Old Marten struck again; and another one burst when Old Marten struck. Little Weasel said, "Old Marten! I will also strike one!" Then burst one again. But Weaslet missed and the heart went to the sky; Magpie and blackbird

> flew after it and picked it to pieces while it flew. Old Marten said, "You will be good for nothing; you will frighten the people in vain!"
>
> Then Old Marten burned the Old Thunders [the parents].[126]

This story, which is a prime example for the condensed patchwork style of oral story-telling, addresses, among many other things, an existential conflict between figures protecting humans and evil monsters who kill and eat them. Kmu'kamsh/Skel/Old Marten intervenes in favor of preserving human beings and kills the Leméish/five Thunders.[127] Although the place of the action is not indicated, we should assume the "lodge" of the Thunders to be of gigantic proportions. Already the North Wind and South Wind are references to mountains, the North Wind (Yámash) inhabiting Yámsi Mountain.[128] The thematically related story "Wind and Thunder" [129] in Curtin's collection adds the detail that the five Leméish brothers have their house "in a deep place, and there are great rocks around it. The tallest tree in the world wouldn't reach to the bottom of the house."[130] This "house" or "lodge" is clearly not a human-sized hut but a mountain. The culmination of the battle is reminiscent of the dramatic climax of Colvig's account of the battle between Llao and Skell hurling rocks as large as hills from their respective positions on top of Mount Shasta and Mount Mazama.[131] Comparing the texts, it also becomes clear that in the Colvig version, evil "Llao" occupies the same site as "Skell" in the Gatschet account: as in Alatorre's version, there is only one mountain. The "hearts" of the Gatschet version are rocks in Colvig's, written in the conviction that the story must relate to the Mount Mazama eruption.[132] In addition, the Gatschet version of the mythical battle shares elements with Alatorre's version absent from Colvig's: the Thunders constantly walk up and down their lodge ("Monadalkni began running back and forth in the passageways beneath Moy-yaina" in Alatorre's rendering), which I read as suggesting the pre-eruption rumbling), and there are five of them. All versions share the iconic image of the superhuman hero Kmu'kamsh/Skell standing on top of the "lodge" of the Thunders hurling fiery stones/hearts at them while they emerge "blazing" from the lodge.

Gatschet, who in 1873—when he collected the material—and in 1890—when his book was published— had only vague information about the geological history of the area, reads the story as explaining the origin of thunder and lightning (116), and this reading is more or less supported by Curtin's version ("Wind and Thunder" in *Myths*), which puts even more emphasis on the fact that Skell sets the Thunders' house on fire by filling all the holes in their house with pitch and piling pitch wood around it:

> When the house began to burn, the five brothers sprang up; that made their hair pull and they began to fight one another with their long flint knives. Soon they were all dead. Their bodies were burned up, but their hearts flew out of the fire. Tcûskai and Tsekl were watching, and as soon as a heart came out they pushed it back into the fire. They did this till each heart burst and the spirit came out and went away. Four of the hearts were

> destroyed, but the heart of the youngest and strongest brother got away from Tskel. It went up to the sky and became Leméis. Leméis is up there yet; we hear him when he travels around.
>
> Klamath Indians think that Thunder is a little fellow with very long hair.[133]

The last remark is ambivalent: It may refer to a difference in the way the two tribes imagined the size of Thunder (as Curtin's consultants are Modoc, not Klamath); it may also refer to a reduction of fear among the people since the ancient times when thunder was created by Tskel. What both stories have in common is that they locate the origin of thunder deep down in the earth.

Although the story could be read as a fictionalized account of a volcanic eruption—the "hearts" symbolizing rhyodacite rocks (which still scatter the landscape around Crater Lake as if they had been hurled last year); the giant figure of Kmu'kamsh/Skel/Marten standing on the top of the Thunders' "lodge" as a pictorial rendering of a Plinian column[134]—neither version contains a reference to Crater Lake. In fact, there is no mention of any lake. As we know from the reconstructions of the geological history of the Cascade Mountains, there were other volcanoes which likely erupted after Mount Mazama, namely Mount Shasta in Modoc country which has been calculated by geologists to have last erupted in the eighteenth century.[135] So even if the story of the killing of the Leméish had been inspired by witnessing a volcanic eruption, neither its place nor its rough date can be deduced from these narratives. We have to dig deeper into the myth corpus.

In his "Ethnographic Sketch," under the entry for "Giants," Albert Gatschet states that

> [g]iants are often the originators of geological revolutions of the earth's crust. Thus, the giant Léwa represents the circular, lofty island lying within the waters of Crater Lake or Gíwash. He went by an underground passage (fissure?) from his seat over to Yámsi Mountain to wrestle with Skē'l, the all-powerful pine marten, whose home is at Yámsi. After conquering him, he carried him through the same passage again to Crater Lake for the purpose of feeding him to his children, and his daughter, Léwam pé-ip, struck him with a heavy flint-stone.
>
> Like the walls of that lake and the whole Cascade range, the island in question is of volcanic origin. The natives avoid going near the lake or even ascending the surrounding heights.[136]

In this unfinished version of the known lake story (in which Skel takes his revenge on Llao by feeding him to his children), the name of Skel's antagonist is Léwa. Both his personality and actions identify him with the figure Llao of Colvig's version and with the Leméis of Gatschet's and Curtin's versions. The island mentioned by

Gatschet refers to today's Wizard Island, also referred to as Llao's Head. Léwa is one of the Leméis—the Klamath word for thunder, and the word used by both Gatschet and Curtin to refer to the Five Thunders.[137] Gatschet's additional remark about the volcanic origin of Wizard Island as well as the treatment of the place as off-limits for normal people (which some Western visitors erroneously interpreted as primitive fear) is also interesting. Writing in 1890, Gatschet was unaware of Diller's reconstruction of the collapse of Mount Mazama; he did not know that the lake area housed the ruins of a former peak but rather thought that the crater was the top of a submerged volcano and Wizard Island a remnant of the eruption.[138]

Gatschet himself established no link between his little note on giants and his story of Kmu'kamsh/Skel/Marten killing the Thunders; rather he confirms the lake monster story of the Western reports to be of Klamath origin. In the dictionary section of his text, Gatschet reveals that Léwa is in fact a homonym. Alongside referring to the giant trying to feed his children with Skel, he reports that "léwa" also means "to play" and "to play a ball-game."[139] This is of course precisely what the giant Léwa is doing with Skel's head, which is why the two words are not a case of homonymy but derivations of each other (whichever term came first we cannot tell). Léwa is an Evil Gambler—a common figure in North American mythology, from the Wendiigo of Anishinabe culture to the Ck'o'yo magician of the Southwest (immortalized by Leslie Marmon Silko in her novel *Ceremony*). Llao/Léwa is the Klamath/Modoc manifestation of this evil principle, and like the other Evil Gamblers in North American mythology, he eats humans.

It is only through the long sequential story "Mink and Weasel" collected by Curtin (288–309) that a link is established between the place Gi'was (site of the battle between Skel and Léwa which ends with Skel feeding the giant's children in Crater Lake) and the battle with the Thunders also involving Marten/Skel and Weasel but devoid of any reference to the lake. In the Modoc version of the killing of the Leméis-Thunders, Skel and Tcûskai, after leaving that place, meet an old man who refers to himself as "kin" of the Leméis brothers and demands that Skel wrestle with him. In this Modoc version, the evil brothers had already forced Skel and his companions to join them in a wrestling match as soon as their lodge warmed up again.[140] Skel had defeated the evil Thunders with the assistance of Gäk (Crow) whom Skel had furnished with arm-twisting magical powers. The narrative element of the wrestling contest here replaces that of the incineration of the Thunders' lodge contained in the two stories quoted above. The mysterious old man whom Skel and Weasel/Tcûskai met after having defeated the Leméis tells them "I hear that he has killed all the Leméis people. I am their kin. I have come to wrestle with him" (295). In the narration of the myth, the old man then wrestles Skel down, wraps him in a blanket, puts him on his horns,

> and carried him down in the water and off under the ground. He carried him a long distance, then came out near a large lake. He took Tskel off his horns, unrolled him, and said: "Look around, before I kill you."

> Tskel saw that they were on a narrow ridge of rock that ran, like a little trail, to the middle of the lake.
>
> The old man said: "When I get to the end of this trail, I will cut you into small pieces and throw you to my children. They are hungry for your flesh …" (Curtin, *Myths* 295)
>
> But Skel outwits the monster and kills him with his stone knife just as the old man reaches the end of the trail leading into the lake:
>
> Then he cut the body up and threw it piece by piece into the lake. As he threw the pieces, he called out: "Here is Tskel's shoulder! Here are Tskel's ribs! Here are his legs! Here are his arms!" As fast as he threw the pieces, the old man's children caught and ate them. At last he threw the head. It was an awful-looking thing, enough to scare any one. (296)

The same action is repeated with the monster's daughter (298-99). The action is largely identical with the widely circulated transcultural lake story, mentioned above, of Llao abducting Skel and Skel avenging himself of his opponent by feeding him to his children.

Though unnamed in this story, the figure of the old man has all the features of the one-legged giant Yahyahaäs who likewise confronts people by requesting them to wrestle with him (there are three more stories in Curtin's collection particularly dedicated to Yahyahaäs). Another story, "Frost and Thunder" has the same character stealing the wives of animal people.[141] They take their revenge with the help of Frost (Tsasgips), a "little fellow" with great power as he freezes and cracks the five rocks protecting the giant's subterranean house. After breaking all five rocks, the people "killed Yahyáhaäs with arrows, but his spirit went up in the air and became Thunder" (147).[142] The five brothers of the version already known are replaced here by five rocks, but both stories share the element of freezing the giants with Gatschet/Froben's story of Marten and Weasel outwitting and killing the five Thunders. The exploding Thunders version is found in "Wind and Thunder" (76-80), mentioned above, which is very similar to Gatschet's version but has the additional characters of Gäk (Crow) and Káwhas (Blackbird). Kaiutois (Grey Wolf) is also part of the action; as in the version recorded by Gatschet, he is a relative of Skel who offers his guests roasted deer meat which Skel and Tcûskai eat while Gäk and Káwhas eat the human flesh the Leméis offer them. The Leméis then go to sleep and are "fired," as in the Gatschet-Froben version.

We have two sets of stories then, one referring to the contest between a giant (Léwa, Yahyahaäs, the old man) and Skel, ending with the dumping of the giant's body parts in the waters identified by Gatschet as Gi'wash/Crater Lake. This story appears in diluted form in the version of Applegate and Steel. The figure of the evil giant links these stories to the second set, the stories about the destruction of the five Thunders/Lemeís(h) related by both Gatschet/Froben and Curtin. This of course does

not "prove" that the latter actions are also spatially related to Gi'was—myths don't work that way. But there are sufficient circumstantial indicators that these two existential contests between Skel/Kmu'kamsh/Marten/Mink and the giants inhabiting deep underground places, though they may belong to different times, share the same geographical place, the place the Klamath today still call Gi'was.[143]

The word "Gi'wash" deserves more attention, because, as Gatschet's dictionary reveals, the Klamath name of Crater Lake, like "léwa," has more than one meaning. There are two places named Gi'wash—"Gī'wash É-ush, meaning "*Crater Lake*, a volcanic basin filled with water, having an island with a high peak in its southwestern part and no visible outlet; a short distance west of Crater Mountain"; and "Gī'wash " or "Gē'wash" meaning "*Crater Mountain*, 20 miles north of Fort Klamath; an extinct volcano, height about 8000 feet" (II: 49). Elsewhere in his section on place names, Gatschet identifies "Gíwash/Géwash" with Mount Scott, the peak just east of Crater Lake (I: xxx). In fact, one of the lower elevations in the Crater Lake area located north of the lake is called "Gaywas Peak" (6,700 ft., located about midway between Crater Lake and Mount Thielsen). In other words, "Gi'wash" refers to the whole area surrounding today's lake; but the eruption and destruction of Mount Mazama is the only cataclysmic event of this magnitude that took place in that area during the Pleistocene.[144] All minor volcanic activity in that area has occurred within the caldera formed by the ruined mountain.[145]

**Buried Storyworld: The Aishish Cycle**

Although, as I am arguing here, knowledge of the Mazama eruption remained part of the Klamath and Modoc story tradition for more than seven thousand years, where over the centuries and millennia it "petrified," fused with other cultural materials, and finally assumed a relatively stable form (the three main versions of the Marten and the Thunders story agree on crucial aspects), other knowledge can be even less coherently retrieved. One such element is the second signified of the signifier "Gi'wash." According to Gatschet, the name of the Crater Lake area is also applied to a "*blueish-gray squirrel*, of the size of the marten: *Sciurus Douglassii.*" But to indicate a semantic difference, Gatschet adds that "in this term, the *g* is differently pronounced from the *g* in the word preceding" (II: 49). Elsewhere he insists that the similarity between the two words is a "paronym," differing in one or two sounds (II: 245).[146] Apart from the possibility that a minor language shift may have taken place within seven thousand years of language history, the pine squirrel Gi'was, contrary to its name, leads a mythical life more worthy of the weasel or marten than of its own species. Both the pine marten and the Douglas species of the pine squirrel—"of the size of the marten"—seasonally change the color of their fur: probably one of the reasons why the marten is the animal shape of the wily transformer Kmu'kamsh. Both obviously live in pine trees; the squirrel keeping its food stores in holes high up in the trees.[147] In *The Mountains of California* (1894), John Muir renders a delightful account of this animal,

regarding it as one of the most impressive creatures of the Western mountain area. He emphasizes its transformative powers and its great impact on seed distribution which makes the pine squirrel appears as the "master forester" of the pine forest.[148]

The squirrel Gi'was, then, shares certain qualities with the mythical pine marten Kmu'kamsh—especially the power to rebuild the world, which lay in waste for many decades, even centuries, after the catastrophic destruction. While Kmu'kamsh, the Old Marten, is a geological figure, Gi'was the pine squirrel is a key figure associated with the vegetation. This is interesting since a squirrel plays an important part in the cycle about Kmu'kamsh and Aishish, which both Lévi-Strauss and Gatschet regard as the spiritual center of the whole corpus. We will never learn whether the two squirrels were once mythologically related, at least not on the basis of this "dead" archive collected in colonial times.

These stories concern the actions of Kmu'kamsh and his adopted son, Aishish, a beautiful and very attractive figure who is also a culture hero. As known from other belief systems, like the Mexica deities Huitzilopochtli and the mythologically younger culture hero Quetzalcoatl, Kmu'kamsh and Aishish can structurally be seen to represent the gradual emergence of a more refined culture deity from an original "geological" creator god whose frequently rough character traits match the occasional unreliability of his actions.[149] Translated to Christian mythology, Aishish is to Kmu'kamsh what Jesus Christ is to the Jehovah of the Old Testament: a figure of love and suffering bringing great cultural gifts (in the case of Aishish, music, refined clothing, jewelry, and artful weaponry) but also the object of the primal god's jealousy and violence. No wonder then that, as Gatschet writes, Aishish is the figure from traditional Klamath mythology which Christian missionaries utilized in their conversion attempts.[150]

Gatschet has two Aishish stories which overlap due to having been collected from two different consultants. In "A Mythic Tale About Aishish," collected from Dave Hill,[151] Kmu'kamsh covets one of Aishish's wives and, in order to distract him, asks him to help look for an eagle's nest in a pine tree. Kmu'kamsh suggests that Aishish climb up the tree to obtain the young eagles, but the tree begins to grow. Instead of finding young eagles, Aishish finds "the young ones of a lark [skû'lelam]" (100). Kmu'kamsh takes Aishish's clothes, dresses himself in them and seduces Aishish's wife Squirrel (Stû'kuaksh). Little Squirrel and Aishish's other wives become suspicious, assuming that their husband was in reality Kmu'kamsh. The next day Kmu'kamsh, still disguised as Aishish, leaves in order to go gambling with Aishish's gambling companions. According to Klamath tradition, on the way to the game grounds he lights a fire. As his fire is not clear, straight up and blue but rather smoky and flat, the other gamblers suspect that he is really Kmu'kamsh but they play with him nevertheless. They defeat Kmu'kamsh and then go home, "for they missed Aishish" (101). Meanwhile Aishish's wives mourn and search for their lost husband and two butterflies discover him, reduced to a skeleton, way up in the pine tree. They manage to rescue him with much ado. Aishish tells them his story of having been ordered to climb the tree but finding only larks instead of eagles. The butterflies spread a wildcat's skin in a basket and take

Aishish down from the tree. Aishish recovers. Here the story, as related by Dave Hill, ends.

The version rendered by Minnie Froben, "K'múkamtsch Attempts the Destruction of his Son Aíshish" (Gatschet I, 94–97), contains the continuation of the story. Froben narrates that Aishish, after his rescue, finds his wives as they for dig roots. He walks up to his wife Tshika (Snowbird) who does not recognize him. But their little son identifies him as his father. They go back home and Aishish gives his wives necklaces made of porcupine quills. When Kmu'kamsh comes back, Aishish orders his little son to snatch away Kmu'kamsh's pipe and throw it into the fire, which the boy manages to do after several attempts. By burning his pipe, they "kill" Kmu'kamsh (96). After a long time Kmu'kamsh comes to life again and continues his efforts against his son:

> There (he) all over pitch daubed on the sky; then he set on fire the sky so after doing. For this reason Aishish a tray held extended; he said, "Not me he may kill ever" […] The pitch turned into a lake all over the world, Aishish's home only remained dry. Then Mud Hen [one of Aishish's wives] put its head out, the pitch then to it dripped on forehead; which thing since then stuck on Mud Hen." (96-97; interlinear translation)

Here the story ends. The general conflagration caused by Kmu'kamsh taking revenge on his son (whom he had almost killed before out of envy) returns in a version collected half a century later by Mohammed Barker and published in 1963. This version shows obvious signs of the impact of missionary activity, and the symbolically slippery "pipe" is exchanged for the heart:

> The hero [Aishish] ordered his little son to throw Kmúkmach's hearts (the informant believed he had several) into the fire. They popped *up (out)* and dripped like pitch all over the earth. Aishísh put his family into a cave, but Mudhen wanted to look out and see what was happening and brown spots dripped on to her nose.[152]

The storyteller does not remember what happened after this. The conflagration, the cave, and the curious wife are obviously elements familiar from the story of Sodom and Gomorrah to which the Klamath had probably been exposed in the mission schools. Besides this interesting case of syncretism, however, we also see how Barker has difficulties making sense of some of the details, especially the plurality of hearts and the direction in which they popped from the fire—"up," not "out." What we have here is a complete reversal of Kmu'kamsh's heroic role as he is now the one experiencing the same punishment as the five Thunders while Aishish and his wives, like Lot and his daughters, survive the disaster by hiding in a cave. This story fuses the destruction of Kmu'kamsh at the hand of his grandson with the destruction of the Thunders which appears like an intrusion from another kind of story altogether. The

pitch is now not daubed on the sky, eventually turning into a lake due to Kmu'kamsh's power, but it is dripping from his popped-up hearts. We are beginning to see how these stories relate to one another, how individual elements travel from one realm to the other and how they are combined into different narrative and semantic constellations, depending on the speaker, the degree of intercultural intervention, and the cause of narrating. We also see how elegantly the Klamath storytellers integrate new (biblical) elements where they fit the purpose: this is indeed what myths are known to do. The (lake of) pitch dripping all over the earth can be interpreted as a pyroclastic flow emitted by a volcanic eruption, or a lava flow coming from one of the shield volcanoes in the area of the Lava Beds. This power is adequate for the geological power that Kmu'kamsh evidently represents, and that passes on to his grandson in the Barker version. The more recent "geologized" versions of the Gi'was story are further examples of this imaginative creativity; they testify to the continuing vibrancy of the oral tradition.[153]

In order to get a clearer understanding of the spiritual significance of Gi'was in Klamath and Modoc culture we have to turn to two more stories, both taken from Curtin's collection. Because here we learn about the birth of Aishish and about how he becomes instructed as a spiritual person by Kmu'kamsh—how the older god, so to speak, passes down the torch of wisdom to his successor.

In "Látkakáwas," the first story in Curtin's collection (in my view the most important of all stories, also discussed at length by Lévi-Strauss), we learn how Aishish came into the world and how he became Kmu'kamsh's son. The woman Látkakáwas lives on the south side of Klamath Lake with her five brothers. Every day her brothers go to fish from an island in the lake. The young men from the western shore sneak up on Látkakáwas when her brothers are gone, but she is beautiful only when outside of her house and old and ugly when at work inside.[154] One man does not take part in this activity: "a young man as blue and beautiful as Látkakáwas herself. His father kept him in an underground place; no one ever saw him except when he went out to bathe or swim" (2). Although the young man is not particularly motivated to go after her, his father takes him out of his underground place and gives him a particularly powerful "cap that could never be destroyed." Putting on his clothes, the man is "beautiful beyond anything in the world; he was blue and gold and green [… ] He could run in the air and under the ground. He had great power" (3). When he watches her through a crack in the wall, she does not become old and ugly as usual. But then the brothers take Látkakáwas in their boat and out onto the lake. Without their knowledge, the young man follows them in the shape of a salmon and the brothers accidentally kill him (4). Back on the shore, the siblings burn the body and discover a disk in the ashes. "The disk was as bright as the sun in the heavens. This was the crown of the young man's head" (4). Látkakáwas takes the disk to Kmu'kamsh who lives east of the lake, in order to ask him to bring her lover back to life. On the way to Kmu'kamsh's house, "just as the sun came up," she gives birth to a child. Kmu'kamsh brings the man back to life but kills him both out of jealousy and in order to obtain the disk for himself (5). When he

burns the body of Látkakáwas's lover, the woman tells him to put more wood on the fire and then jumps into the pyre with her baby strapped to her back (5). Kmu'kamsh is just able to save the child and the disk. The baby chooses the name of Aishish (spelled "Isis" in Curtin), and Kmu'kamsh appropriates the disk by planting it into his own body, claiming fatherhood for himself: [H]e was the father of Isis, for the disk was the father of Isis" (6). As Aishish grows up, Kmu'kamsh instructs him to undergo a series of cleansing rituals in all the powerful places of the world in order to obtain wisdom and strength. He sends him to various mountain lakes and ponds and teaches him how to pile up stones, swim in the ponds, fast and dream.[155] The aim is for Aishish "not to have riches in the world" but "to have mind" (8). One of the places he visits on his spiritual quest is "Gewásni, a pond deep down among the rocks on the summit of Giwásyaina" (8). Of all the "gauwams," or swimming places, this seems to be the most powerful. "Giwásyaina" means the mountain of Gi'was ("Yaina" is Klamath for "mountain"). As in Gatschet, who tentatively locates Gi'was at Mount Scott, the place is here identical with the location of the mountain lake ("Gi´wash e-ush," according to Gatschet).[156]

Aishish continues on his topological quest and, when he is finished, he and Kmu'kamsh travel the land looking for the ideal spot for their home. They settle down on a mountain, away from the places where people settle (11). While Kmu'kamsh continues to travel around and do his usual creative work (i.e. to plant seeds by throwing them into different directions, etc.), Aishish becomes the favorite of many women, each of whom he marries until he has acquired about a dozen of them (12). Kmu'kamsh begins to desire the women for himself and sends Aishish to a tree to get eagles' feathers for his arrows. What follows is the bird-nester sequence as told above from the stories in Gatschet. Kmu'kamsh disguises himself as Aishish, enjoys his women, and then sets out for the gambling ground, lighting the wrong kind of fire. The wives, especially Wálwilegas (the butterflies), save Aishish from his prison in the tree and bring him back to health. Aishish follows Kmu'kamsh who now feels guilty about his behavior. He takes revenge on his unfaithful wives by first burning their feet and then changing them into normal animals. He then throws Kmu'kamsh into the fire (15–16). But Kmu'kamsh, though burned to ashes, cannot die because he has the disk. He is awakened by the morning star and Aishish understands that Kmu'kamsh will "last as long as the disk and the morning star" (16). Acting on this insight, Aishish moves away, Kmu'kamsh following him. After many years he overtakes him but Aishish rejects his offer of kindness by saying, "'After what you did to me you may go wherever you want to in the world, and I will to where I want to. You are not my father. I feel that. I hope that of the people, who are to come into the world hereafter, no father will ever treat his son as you have treated me.'" They move to different places (16).

Lévi-Strauss emphasizes the geographical aspect of this story. The protagonists of stories such as this one, he writes, "modify the original landscape, leaving their mark as they travel by creating sources of food or surface irregularities, such as fish, vegetation and rocks, which are still in existence in each locality."[157] In other words, this story is, in one of its functions, a landmark story. It also shows a certain doubling of

imaginative geography, as it partly refers to places in Klamath territory and partly to sites in Modoc land; in fact, as Lévi-Strauss shows, there is a certain topographical similarity between these two areas, with Klamath territory centering on the Upper Klamath Lake, Sprague River, Klamath Marsh, and the mountains between today's Crater Lake and Mount Yamsay (Yamsi, Kmu'kamch's abode in Klamath mythology). Transferred to Modoc territory, about forty miles further south, the same stories apply to a similar topological arrangement consisting of Tule Lake, Lost River, and Mount Shasta to the south.[158] Many stories make reference to "Klamath Lake" without specifying whether Lower or Upper Klamath Lake is meant. These imaginative displacements produce and represent a certain topographical flexibility that is typical of mythical geographies.[159] Nonetheless, the societies inhabiting Upper California and southern Oregon are among those most skilled in geographical knowledge. The displacements are not the result of a lack of geographical precision but rather an answer to the inherent dynamics of mythical discourse.

Lévi-Strauss shares earlier mythologists' readings of Aishish as an astronomical figure,[160] but his main interest lies in determining the deep structure of this myth cycle which he discovers in the recurring motif of the hidden child (Aishish's name is "the hidden one"), coupled with the motif of the bird-nester. He also speculates on the significance of various female bird-figures in the stories: the loon woman, an incestuous and vindictive sister seeking sexual union with her hidden brother;[161] the self-sacrificing Látkakáwas (the tanager, a black and red bird nesting in conifers), and the meadowlark who, in the Modoc story "The Star Brothers"[162] protects her two unborn children from the loon woman's destructive fire and, in a version collected by Mohammed Barker in the 1950s, does so by bending over them while being herself burned to death.[163] In fact, the daughter of the meadowlark woman is the equivalent of Látkakáwas in the Barker version—the woman who commits self-immolation and whose son is Aishish. Meadowlark can be read as the mother of Látkakáwas.[164]

Confusingly, meadowlarks feature again in the same version[165] as the birds discovered by Aishish in the top of the tree to where Kmu'kamsh bans him (49). This is doubly confusing as meadowlarks are ground-breeders and never breed in trees. Ignoring this paradox and in spite of noting the zoological knowledge, Lévi-Strauss reads meadowlark woman and tanager woman as oppositions of the evil loon woman but also as opposing each other according to their breeding habits and their capacities as mothers (79). But this is how the language of myth functions: chunks from different times and places in the mythical universe become recombined and rearticulated while the personnel undergoes certain shifts as well.[166] This language can only be grasped incompletely through the lens of structuralist anthropology; its adaptability to changing sociocultural environments is much closer to the aesthetic described by Édouard Glissant: a relational aesthetics, a poètique de la relation.[167]

A symptomatic reading, alternatively, notes the contradiction of the bird discovered in the pine tree being the meadowlark instead of one of the species normally found there: the eagle, tanager, pine squirrel (Gi'was), or pine marten. The

image of the children being born as a result of the meadowlark mother's corpse lying in the ashes of the conflagration caused by one of the avatars of Léwa/Llao's evil daughter is compelling indeed, as are the repeated and frequent references to fires, immolations and self-immolations, including the "wrong" fire started by Kmu'kamsh after hiding his son in the pine tree. In comparison to Aishish's pure fire, that of his father, the original creator, is smoky and flat, reminiscent of the slash and burn technique used by agricultural societies in producing charcoal to enrich the soil.[168] If this is what the fire of Kmu'kamsh represents, and we simply cannot know for sure,[169] his power to destroy the world by a conflagration of pitch and fire, reminiscent of the biblical story of Sodom and Gomorrah, is all the more impressive.

**Pyroclastic Storytelling**

Assessing the mythical corpus as a whole, there is a conspicuous multitude of references to destructive fires, people burned and children barely saved from the flames in order to effect the survival of the people. What if we read the motif of the son sent up the pine tree not as the *opposite* but a *repetition* or *variation* of that of the precious boy hidden away from his murderous sister? This frequency of deaths by fire and hairbreadth survivals from the all-consuming flames, the hiding away of the human offspring either in pits or caves or in high trees is in need of explanation. That explanation should be historical, not merely structural. Whether these stories remember one specific conflagration (the eruption of Gi'wasyaina in circa 5700 BCE) or also subsequent smaller eruptions or both can no longer be ascertained; but volcanic eruptions—whether pyroclastic ones or the lava flows of the shield volcanoes east of Mount Shasta—are a central element, if not *the* central geological element, in the storyworld of humans whose lives are existentially threatened by the presence of fire mountains and who yet decided to stay in the marsh areas east of the mountains because of their fertility.

As already indicated, modern geologists and archaeologists have reconstructed the process of the eruption as well as calculating the effects of the event on life around Gi'was. Archaeologists who have excavated the remains of human habitation underneath the ashes of Mount Mazama at Fort Rock offer different assessments of the magnitude of the eruption but they agree that it abruptly interrupted life in the vicinity of Crater Lake for many years to come. During and directly after the cataclysm, a radius of about forty miles around Crater Lake was affected by pyroclastic flows which were, Harris writes,

> mowing down and incinerating thick stands of timber [… ] Southeastward, the pyroclastic flows raced down Sand Creek, continuing for more than ten miles across the flatlands beyond Mazama's base. Some flows reached into Klamath Marsh, from which masses of floating pumice washed down the Williamson River into the Klamath Lakes.[170]

A thick layer of ash spread across the land, and men and animals must have been severely affected by volcanic fumes and acid rains, according to Stephen Bedwell's reconstruction of the eruption when comparing it with more recent and better documented events.[171] Dennis Jenkins, in his modern introduction to Luther Cresswell's archaeological classic, estimates the impact to have been somewhat less severe than assumed by Bedwell, but if you translate his scientific language into more humanistic terms, he still describes a human catastrophe.[172] The general barrenness of the land caused by the eruption of Mazama apparently combined with an extensive period of drought. Edible plants were burned, and ash that fell into the rivers and lakes may have killed off the fish.[173] Bedwell also assumes that occupation of the caves in the Fort Rock area likely discontinued because of the "catastrophic effects of the Mazama eruption" rather than because of the gradual warming of the climate and the increase of aridity.[174] He reasons that a number of fauna must have been drastically reduced, especially the big animals, while the smaller ones who better tolerated arid conditions probably endured.[175] Of the flora, the piñon pine was probably most resistant when faced with the post-eruption conditions.[176] Botanists today know that the Douglas fir, too, is relatively fire resistant and thrives in biotopes that have been ravaged by fires ("Douglas fir"). In the light of this information, it is perhaps no coincidence that the most resilient characters in Klamath and Modoc mythology are inhabitants of pine trees: pine squirrels and pine martens. Even more than that: As Muir so acutely observes in *The Mountains of California*, the pine squirrel, through its indefatigable activity, has the capacity to restore the forest:

> Go where you will throughout the noble woods of the Sierra Nevada, among the giant pines and spruces of the lower zones, up through the towering Silver Firs to the storm-bent thickets of the summit peaks, you everywhere find this little squirrel the master-existence. Though only a few inches long, so intense is his fiery vigor and restlessness, he stirs every grove with wild life, and makes himself more important than even the huge bears that shuffle through the tangled underbrush beneath him. Every wind is fretted by his voice, almost every bole and branch feels the sting of his sharp feet. *How much the growth of the trees is stimulated by this means it is not easy to learn, but his action in manipulating their seeds is more appreciable. Nature has made him master forester and committed most of her coniferous crops to his paws.* Probably over fifty per cent. of all the cones ripened on the Sierra are cut off and handled by the Douglas alone, and of those of the Big Trees perhaps ninety per cent pass through his hands: the greater portion is of course stored away for food to last during the winter and spring, but some of them are tucked separately into loosely covered holes, where some of the seeds germinate and become trees. But the Sierra is only one of the many provinces over which he holds sway, for his dominion extends over all the Redwood Belt of the Coast Mountains, and

> far northward throughout the majestic forests of Oregon, Washington, and British Columbia.[177]

Muir's extensive description, which romantically personifies the pine squirrel, characterizes it as a creative, hard-working, powerful, smart and articulate animal that seems to directly address human intruders when they enter its territory. The pine or Douglas squirrel (gi'was) here appears like an animal gardener who ensures the increased propagation of the trees by collecting, forgetting, and thereby spreading their seeds. In other words, the pine squirrel possesses all the qualities of a culture hero. The post-eruptive forests owed their renewal to the activities of this animal, which survived in the relatively fire-resistant Douglas firs. Both the fir and the squirrel can be read as symbols of resilience and survival—a fact that the stories transport and which characterizes them as bearers of traditional ecological knowledge.

There is here a recurring story of a culture hero hidden away in a (pine) tree who escapes the conflagration caused by his irresponsible father, assisted by the examples of animals who are either adjusting to a life remote from the ground (meadowlark) or who live in trees and keep their food caches there (pine squirrels) or who can fly (butterflies). The motif of death by fire and the mysterious escape from conflagration may be regarded as a deep mythical element or root paradigm in this cultural area (to use the terminology of structuralist anthropology).[178] What makes it so difficult to grasp any specific meaning is both the age of the tradition and the nature of the oral medium itself, whose principal work is not to preserve a piece of knowledge in its original state and pass it down unchanged through the generations but which, rather, labors to constantly rearticulate and reform existing content in response to ever-changing social and natural conditions. The fact that in the sixty stories in Curtin's collection we find only a handful of references to the recent arrival of the white people, in turn, shows that stories do not change abruptly in the light of radically new events but that responsible storytellers (such as the women and men Curtin and Gatschet listened to) knew which "mix" was appropriate to meet present needs.

One more story has to be included here to round things off, not least because it shows the bricolage method used in a mythical corpus of this age and size, the cultural success of which depends on its ability to shift plot segments and characters as necessary. The theme of the power quest so dominant in "Látkakáwas" is repeated in a story that could easily be missed because of its trivial-sounding title and nonclassic characters. In the narrative "Wus Wants to Marry a Butterfly,"[179] Wus (Fox) is the protagonist. Middle-aged and living with his mother, he missed out on undertaking vision quests when still young enough to do so and now wants to gather power not for spiritual reasons but because he covets the beautiful Wálwilégas (butterfly) women (the women who save Aishish in the other stories). Under the guidance of the elderly and experienced Djaudjau (the Flying Squirrel), Wus completes a series of vision quests and cleansing rituals similar to those Aishish undertook in "Látkakáwas" under the guidance of Kmu'kamsh. However, in this case, the story has a less archaic and

more modern ring to it. Although Djaudjau suspects that Wus is being dishonest about his motivation for undertaking the spiritual endeavor and is only interested in acquiring sexual gratification, he guides him through the series of quests, peppered with many injunctions and prohibitions. After conversing with the earth on a snow-capped mountain, Wus returns home to his mother. His arrival is announced by a big fire on top of the mountain built by the mountain itself.[180] After this experience, Curtin reports, "Wus was changed. He didn't look as he did when he went away; he looked better and stronger" (216). Then, after a ten-day fast, Wus finally encounters a group of Wálwilégas women. They are washing roots in a creek, reject his overtures and walk away. "Mad in his heart," Wus leaves for his mother's house. On the way there he comes to a house inhabited by a couple called Guíwas who give him food to eat. The woman tells him that the butterfly girls are "bad" and proud girls, and Wus informs her that the girls will soon no longer be people but will instead be turned into conventional butterflies. This causes the Guíwas woman to become extremely fearful that Wus might turn her family into animals as well. Wus returns home to his mother and they subsequently move away from the foot of the mountain where they had been living. His elderly teacher Djaudjau, however, announces that he himself will stay: "'I am named for the mountains and I will never leave them.' Old Djaudjau is hunting on those mountains yet. People who travel on high mountains often hear him calling his own name. Wus and his mother went to Klamath Lake, and people say that they live there now" (218).

Wus combines the action of the culture hero Aishish with the lecherousness of Kmu'kamsh, the wiliness of Weasel, and, of course, the craftiness of the animal after which he is named. According to Northrop Frye's typology, we would categorize him as a low mimetic or comic hero (in contrast to Kmu'kamsh, the mythical hero, and Aishish the hero of romance).[181] The story of Djaudjau and Wus, it seems, repeats, in a slightly comic register, Kmu'kamsh's spiritual teachings to Aishish by sending him to all the powerful places in the world. What is conspicuous about this short narrative is the presence of both the Flying Squirrel who shares his name with the mountains where he lives and the couple by the name of Guíwas, whose animal identity is not given and whose plot function seems limited to admonishing Wus to become a responsible member of society. The signifier "Guíwas," Klamath for both the location of Crater Lake and the pine squirrel, is here semiotically attached to a couple who live near the fire mountain and possibly share its name (the example of Djaudjau shows that proper names can be identical with place names). This story is evidence of the spiritual practice of swimming in the lakes, probably including Gi'was e-ush. Seemingly insignificant and unrelated to the Kmu'kamsh-Aishish cycle, it can be seen to spell out its crucial concern: the need for young men to overcome their primitive desires and to become initiated into the world by seeking dreams and listening to the mountains at sacred places, such as the fire mountains at Gi'was.

What also becomes obvious is that a story such as "Wus Wants to Marry a Butterfly" is not sufficiently described as oral *tradition*; it is a case of oral *literature*. Its

function is not exhausted by passing on knowledge, it also dramatizes and aestheticizes relationships between human and nonhuman persons, and it gives its protagonist a novelistic (low mimetic) personality. In spite of its apparent simplicity and focus on entertainment value, it is full of wisdom and remembers important mythical figures and places.

The Gi'was stories of the Klamath and Modoc do carry knowledge of a catastrophe wrapped in plots that teach the art of resilience—expressing man's ability to defeat brute violence and take smart action, such as hiding from conflagration (Aishish in his cave). Gi'was is not a place of dread to the Indigenous people (as colonial sources claimed) but a sacred place, a site of power. There is nothing gothic about it for those who observe the rules. Rather, this special place is part of a larger attitude to an inhabited landscape far removed from the Christian ideology which assigns a hostile power to nature. To the Indigenous population, the nonhuman or more-than-human world is a force to be reckoned with, a force to know and to adapt to.

**Gi'was and its Transcultural Raconteurs**

At the end of a long "dig" into the storyworld of the Klamath and Modoc as it existed at the moment of the colonial encounter, we may feel a bit like Wus: having set out on a particular quest—to find evidence, following Deloria's question, of ancient Indigenous knowledge of the eruption of Mount Mazama, we have not only discovered significant indicators of the existence of such knowledge, but we have also been initiated into a world of the imagination hitherto largely obscured by colonialism: a literature rich in ideas, mystery, moral lessons, historical knowledge, landmark knowledge, and wonderful characters. Had these stories not been abruptly interrupted due to the colonial society's cultural arrogance and assimilationist ideology, they would be retold today in the form of modern literature, comic strips, games, and movies. These stories could today serve as encouragement for coping with catastrophe.

The polyvocality and the protean character of this archive is a challenge even for experienced literary critics—apart from the semi-readability of the Gatschet material mentioned above. Yet, a decolonial approach to the history of colonial interaction requires such labor against the grain of the archive—and sometimes with its grain, as Ann Stoler writes. A decolonial critic cannot expect the material to be laid out in perfect order; the messiness and semi-visibility of the archive is part of the imperial machine that has also driven the Modoc into the Lava Beds and then into exile in Oklahoma and the Klamath to cultural quasi-extinction through termination, against the effects of which they continue to struggle.[182]

In spite of the recalcitrance of the archival situation, there is comprehensive evidence—both orally transmitted and documented in writing during the peak of colonial dispossession—that Gi'was is one of the oldest sacred places, still used as such, in human history. This is the historical dimension that has to be recognized: the temporal scope covered by this tradition indeed extends to seven thousand seven

hundred years. If the name and the stories can be traced back to the cataclysmic events around the eruption of Mount Mazama—and there is strong indication that they can—this would mean that the age of this "church" can compete with that of the most ancient Old World sacred places—unless future archaeologists will one day trace the original site of Noah's Ark (or the site of the Garden of Eden). Heinrich Schliemann's spectacular discovery of Troy on the basis of a topological reading of Homer's *Odyssey* (based on oral traditions) is the only comparable Old World example that comes to mind (and that indeed came to Deloria's mind).[183] The Kmu'kamsh-Gi'was story complex, connecting the destruction of the Thunders and an active fire mountain with the place where today Crater Lake is located, is cultural evidence for a collective memory whose long-term preservation was only possible because the Klamath had resided in the area for many millennia: an almost uncanny example in sedentariness, unmatched by any European "tribe." It is also perhaps the oldest account of the cultural effects of a volcanic eruption in world history. Besides Pliny the Younger's short account of the eruption of Mount Vesuvius in 79 CE, the only other case of such an impressive aesthetic coverage of the traumatizing effects of a collapsing volcano would be that of Tambora, Java, in 1815, which caused starvation and disease throughout the world and has left its cultural imprint on poems by Lord Byron ("Darkness") and especially Mary Shelley's *Frankenstein*.[184] The whole oral tradition to which these stories belong can be seen as a cultural attempt to close the wound around a historical trauma—if not a spiritual trauma in response to the incomprehensible actions of the creator Kmu'kamsh who, like the Christian God, is both creator and destroyer of the world inhabited by his sons and daughters, who are both animals and humans. In fact the stories represent an episteme that regards human and nonhuman animals as related; its non-anthropocentric logic offers an intellectual alternative to the ubiquitous anthropocentric perspective (whose ubiquity is hardly mitigated by the discourse of the Anthropocene).[185]

The geological and volcanic situatedness of these cultural groups is demonstrated exceptionally by the fact that the Modoc, during their stand-off against the troops of the US Cavalry in the winter of 1872–1873, took shelter in the Lava Beds, south of Tule Lake and northeast of Mount Shasta, in today's northern California. The endurance of a small group of Modoc against the numerically and technologically superior American troops can be accredited to the Madoc's familiarity with the lava landscape and the particular features of that arid region. "The fortification," writes Clifford Trafzer, is "an amazing geological phenomenon. Every feature of the most sophisticated man-made fortresses was formed by nature, and the Modocs knew every inch of it."[186] Together with a heavy fog, their knowledge of this area enabled them to hold out. But it did not protect the survivors from deportation to the Indian Territory after their defeat and the execution of their leaders.[187]

In the 1950s, after having survived the first brutal wave of colonization, the Klamath and Modoc tribes became subjected to the US government's Termination program. Their economic independence was crushed, which led to "legal

extinction"[188] and the loss of all tribal lands as non-Indigenous companies bought up their land and lumber mills. Even after the revocation of Termination, today the tribes continue to struggle for economic independence, the political recognition of their water rights, the return of tribal lands, and for restoration from social ruination.[189]

One of the results of reeducation and Termination was of course the death of language and oral tradition. Thus, Ella Clark writes that her search for corroboration of the printed versions of Indigenous stories she had found in archives saw her travel to meet the Indians themselves, visiting fourteen reservations (*Indian Legends* 2). She regrets the waning interest of the younger generation in preserving the stories: "In almost every village I visited, someone said, 'If you had only come last year! The person who could have helped you most died last winter'" (2). Clark worked intimately with Indigenous consultants, some of who contacted her after the publication of her first volume in order to entrust her with further stories that they knew.[190] Although her books never stood the test of science, they have been used by both scientists and government institutions. Clark made an important contribution to preserving Indigenous oral knowledge about landmarks and historical events at a time when anthropology was primarily interested in studying kinship systems, material culture, and religious ceremonies. Neither did Clark bend to the popular desire for funny stories about Coyote and other tricksters, which, more often than not, are deformations of serious stories that functioned to come to terms with collective transformation and trauma.[191] For Clark, as for the activist-scholar Vine Deloria, the land was the most crucial topic to address, and she dedicated much space in her collections to preserving Indigenous knowledge about the land. Today, her stories are used on tribal websites and printed publications.

Intellectually, Ella Clark positions herself in a way that anticipates the thought of a later generation of scholars working under the impact of postcolonial and decolonial theories that critique Western scientific discourse's denial of epistemic coevalness (Fabian) and make suggestions for fixing this serious error. Having no academic or theoretical aspirations in her own work, Clark nevertheless paved the way toward reactivating Indigenous knowledge today, as Deloria well understood and appreciated.

The other European-American agents might be divided into two groups—those who had a more or less scientific in-depth knowledge of the societies whose stories they recorded due to having learned their languages and having spent time with the Indigenous consultants, and those who worked as multipliers popularizing the stories as part of the local lore of the states where they lived. The earlier generation of academically skilled Euroamericans—Albert Samuel Gatschet, Jeremiah Curtin, and Muhammad Abd-al-Rahman (née Phillip) Barker—are all illustrious personalities in their own right. Gatschet (born 1832 near Bern) was a recent immigrant from Switzerland where he had already worked on landmark knowledge. Being a linguist, his approach to another culture is necessarily through language, not the study of customs which, as he correctly remarks, are inevitably presentist and ahistorical.

Language for him is the "most important monument of the American Indian." Archaeology and ethnology are good for "facts," "but language, when properly investigated, gives us the ideas that were moving the Indian's mind, not only recently but long before the historical period."[192] In other words, the language and the stories of a culture are for Gatschet historical archives, and it is only through its history—i.e., its language and its stories—that any culture can be properly known.[193] Jeremiah Curtin (born in Detroit in 1835) was not only a translator collecting perhaps the most extensive corpus of Modoc stories; he also translated Henryk Sienkiewicz novels, including his masterpiece *Quo Vadis*. He published various other volumes on mythological texts (e.g., from Ireland) (Wiki). Barker, born in Spokane, Washington, in 1929, converted to Islam on a trip to India while doing research on Urdu and Asian studies of which he later became a professor; he wrote his dissertation on the Klamath language. He became probably best known as an inventor of games and an author of SciFi novels (Wiki).

What unites these three men is that all of them traveled extensively and that they had a genuine interest in other cultures and other languages. They were academically trained, which means that their approach was guided by a general knowledge of other cultures and earlier historical times. Unfortunately, this also meant that they assumed that a more or less homogeneous Native American culture and mythology existed, as was the academic custom in the late nineteenth and early twentieth century.

In spite of his knowledge of the trade language Chinook, William Colvig seems to have retained less contact with tribal people than the aforementioned. His intention was primarily to contribute to the making of the history of the land newly settled by immigrants and in urgent need of a tradition and a heritage. Judge Colvig was actively engaged as a citizen; filling the land with stories was one expression of this, as is testified by his numerous accounts of Crater Lake legends, which he gave at various public occasions, as well as a radio interview in Chinook late in his life. In 1914, *The Morning Oregonian,* in its section "Locals and Personals," praises Judge Colvig as a public persona

> who knows more about Crater Lake than Will Steele, who put it on the map and had the Govt. make a park around it. An old Indian medicineman [sic] once told the Judge the legend of the volcanic disturbance that made the lake. The Judge had probably improved on the story, like the polished raconteur that he is but it's worth the price of admittance alone to hear him tell it. He is a skookum storyteller.[194]

Regarded from a transcultural perspective, these personalities not only contributed to today's knowledge of Indigenous stories but they were also influenced by the stories they popularized. Colvig is known to have related them to his children;

his public persona was significantly shaped by his early experience with the Klamath in the post-Civil War era.

And yet the notion of a peaceful transcultural construction of Crater Lake as a mythic site does not lack ideological conflict. William Colvig's box contains two typescripts from 1912 with a short and rather romanticized version of the Mount Mazama story, preceded by Colvig's copyright claim: "The following legend is the personal property of Judge Wm. M. Colvig, who intends to make use of and copyright same. Meanwhile it should not be published."[195] The name of Chief Lalek no longer appears.[196] As the United States held sway not only over its "domestic" former enemies but also over "savages" elsewhere in the world (Hawai'i, the Philippines), the discursive conditions were seductive enough for appropriating an Indigenous story—apparently not for material reasons but explicable only on a more subliminal, psychological level. At the darkest time of cultural genocide, the colonial epistemic order secured possession of Indigenous knowledge archives while excluding the human beings from further serious consideration. Physical conquests, this example shows once again, are always accompanied by appropriations of intellectual heritage and the silencing of the defeated societies.

One conclusion from the previous description could be that the stories about Gi'was are the products of friendly cultural interaction, of a story world made anew through intercultural interaction. My preferred reading, however, is that this was a process of painful transculturation—vastly asymmetrical, leading to an emptying out of the Indigenous peoples' symbolic claim to the land they inhabited.

**Ruination**

The less westernized versions of the Kmu'kamsh stories are—among other meanings—explanations of the geological layout of the land and the ecological interdependence of its inhabitants. They testify to the sacredness of the land and the more-than-human world. The disruption of the bond between humans and animals is always narrated as a moral punishment for some social misbehavior while the great majority of the stories show a conviction that the fates of humans and other animals are intricately related—that humans, animals, and plants are indeed "companion species" entangled with one another in intricate webs of mutual dependency.[197] In this sense, this corpus connects with relationalist epistemologies as expressed by Arturo Escobar, Edouard Glissant, Elizabeth deLoughrey, and others—an ethical aesthetics seeking to integrate non-Western, Indigenous grassroots worldviews that "escape the division of nature and culture" and effect an ethical empowerment of nonhuman agents, including "mountains, water, soil, the forest."[198] The ancient, fragmentary record of the cultural discourse about Crater Lake/Gi'was, based on the coevalness of all living creatures, reveals an aesthetic of "ruins" and "ruination" (Stoler; Cliff) that unites two radically different meanings: "ruins," the colonial, anthropocentric repertoire for nostalgically dwelling on the catastrophic passing of empires; while

"ruination" emphasizes the cyclical restorative force of nature. The critical assessment of the ruins of empire can provide the soil for cultural resilience: "To think with ruins of empire," writes Stoler, "is to emphasize less the artifacts of empire as dead matter or remnants of a defunct regime than to attend to their reappropriations, neglect, and strategic and active positioning within the politics of the present."[199] In Michelle Cliff's understanding (more than in Stoler's), "ruination" refers to the new growth of vegetation gradually covering the physical ruins of colonial plantations in the Caribbean, to the way in which land formerly used for agriculture is lapsing back into "bush," ensuring new life.[200] Indigenous and transcultural storytelling transports this utopian sense of resilience and repair in addition to remembering the processes of geological and man-made destructions of the land and its inhabitants.

In 1931, the ecopoetically minded Stanton Lapham reached out to the Indigenous inhabitants in evoking Crater Lake as the source of a common spirituality; he wished to "join our brothers, of the tribes of Klamath, in proclaiming it the shrine of the gods, Land of Gay-was, devoted to the sacred and beautiful, where we too may commune with the Great Spirit."[201] Lapham's offer to affectively "own" the land in transcultural piety is a welcome alternative to the continuing practices of ecocide and cultural genocide. To the Indigenous inhabitants of the land, Gi'was had always been much more than a marvelous object of aesthetic contemplation. A place of terror and fear but also of resilience and renewal, Gi'was teaches a moral lesson about the stuff of survival. The fire, the exploding hearts, the ocean of pitch covering the land, and the recurrent motif of starvation, remember the disaster haunting this special place. But the storyworld's many human-animal survivors—like the pine squirrel, the flying squirrel, the pine marten, and the weasel burrowing tunnels underneath the soil—make us remember Gi'was not only as a landscape of fear but of fertility and nurture. The ancient geological trauma, transmitted in the Indigenous story tradition for thousands of years, transports strategic knowledge about "staying with the trouble" (in Donna Haraway's words).[202] They do so in the presence of contemporary devastations resulting from the fossil extraction economy fueled by an anthropocentric, propertarian ideology whose "works" Anna Tsing observed while gathering mushrooms in the "ruined" Cascadian forests. The cross-species, storied landscape of Gi'was, in speaking of ruination, bears the signature of survival.

## Notes

We are very grateful to Gesa Mackenthun and Waxmann Verlag for generously allowing us to reprint this full chapter from the author's book *Embattled Excavations: Colonial and Transcultural Constructions of the American Deep Past* (Waxmann Verlag, 2021).

[1] Anna Lowenhaupt Tsing, *The Mushroom at the End of the World: On the Possibility of Life in Capitalist Ruins* (Princeton University Press, 2015).

[2] Tsing, *The Mushroom at the End of the World*, 13–14.

[3] Keith Basso, *Wisdom Sits in Places: Landscape and Language Among the Western Apache* (University of New Mexico Press, 1996); Vine Deloria, Jr., *Red Earth, White Lies: Native Americans and the Myth of Scientific Fact* (Fulcrum, 1997); Roger C. Echo-Hawk, "Ancient History in the New World: Integrating Oral Traditions and the Archaeological Record," *American Antiquity* 65, no. 2 (2000): 267–290; Adrienne Mayor, *Fossil Legends of the First Americans* (Princeton University Press, 2005); Julie Cruikshank, *Do Glaciers Listen? Local Knowledge, Colonial Encounters, and Social Imagination* (University of British Columbia Press, 2005); Ruth S. Ludwin and Coll Thrush, "Finding Fault: Indigenous Seismology, Colonial Science, and the Rediscovery of Earthquakes and Tsunamis in Cascadia," *American Indian Culture and Research Journal* 31, no. 4 (2007): 1–24; and Gesa Mackenthun and Christen Mucher, eds., *Decolonizing "Prehistory": Deep Time and Indigenous Knowledges in North America* (University of Arizona Press, 2021).

[4] Sources differ up to a thousand years about the date of the eruption. Dates range between seven thousand seven hundred years ago and six thousand six hundred years ago.

[5] Stephen J. Harris, *Fire Mountains of the West: The Cascade and Momo Lake Volcanoes* (Mountain Press Publishing Company, 1988). Further references to this work will be cited in-text using parentheses.

[6] The Tambora eruption, according to Gillen d'Arcy Wood, had destroyed a population of about one hundred thousand people, the temperature of the fire exceeding that of Pompeii in 79 CE (Gillen D'Arcy Wood, *Tambora: The Eruption that Changed the World* [Princeton University Press, 2014], 17–19).

[7] For the sake of readability, I have decided to use the variant Gi'was. Gatschet's spelling is Gi'wash; Alatorre's Gii-was. Other spellings are Gi-wash, Giiwas, Guiwas and more. On the semantics, see below.

[8] Ella Elizabeth Clark, *Indian Legends of the Pacific Northwest* (University of California Press, 1953), 218.

[9] Clark, *Indian Legends*, 53.

[10] Clark, *Indian Legends*, 53.

[11] S. J. Harris, *Fire Mountains of the West,* 116.

[12] Clark, *Indian Legends*, 56–58.

[13] Clark, *Indian Legends,* 58–61, 60.

[14] Douglas Deur, *In the Footprints of Gmukamps* (National Park Service, 2008), 57.

[15] Deur, *In the Footprints of Gmukamps*, 57 and 58.

[16] When analyzing Australian Aboriginal oral traditions relating to ancient meteor impacts, Hamacher and Goldsmith, referring to the various changes taking place within long-term oral memories, write "we would not expect to find "accurate" details of a meteorite impact in oral tradition after thousands of years" (Duane W. Hamacher and John Goldsmith, "Aboriginal Oral Traditions of Australian Impact Craters," *Journal of Astronomical History and Heritage* 16, no. 3 (2013): 303, http://www.aboriginalastronomy.com.au/wp-content/uploads/2020/02/Hamacher-2013-Aboriginal-Oral-Impact-Craters.pdf

[17] Vine Deloria, Jr., *Red Earth, White Lies: Native Americans and the Myth of Scientific Fact* (Fulcrum, 1997), 178.

[18] Deloria, *Red Earth,* 178 and 179.

[19] Ann Laura Stoler, "Introduction," *Imperial Debris: On Ruins and Ruination* (Duke University Press, 2013).

[20] Deloria, *Red Earth,* 204.

[21] The text on the National Park Service website reads: "The eruption was undoubtedly witnessed by humans, a never-to-be-forgotten occurrence immortalized by detailed and descriptive legends. That man was nearby at the time is attested to by archeological investigations at Fort Rock Cave about fifty-five miles northeast of Mount Mazama in 1938 that uncovered one hundred woven-sagebrush sandals covered, baked, and charred by the mud flow and ashes from Mazama's eruption. For miles around plants would have been buried and burned and lakes and marshes clogged, suffocating the fish population and depriving upland game birds and waterfowl of sanctuary. With living conditions so difficult, human activity here probably ended for several centuries" (National Park Service).

[22] National Park Service (NPS), *Crater Lake Historic Resource Study*, https://www.nps.gov/parkhistory/online_books/crla/hrs/hrs1.htm

[23] National Park Service, *Crater Lake Historic Resource Study*.

[24] The comparison with the biblical story of Noah may sensitize us to the temporal dimensions at stake: Although some experts of "big" history tend to write about Neanderthals as if they lived around the corner until just last year, it is important to understand that the oral preservation of an event over seven thousand seven hundred years would be an extremely rare case of collective memory, and expectedly culturally filtered and mythologized. The region around Ararat was first

mentioned in conjunction with the Noah story in the Hebrew Bible around 1400 BCE (as "rrt"); the name "Ararat" was first used in that context in 425 CE by the church historian Philostorgius (*NoahsArkSearch*).

[25] Gillian Beer, *Darwin's Plots: Evolutionary Narrative in Darwin, George Eliot and Nineteenth-Century Fiction* (Routledge, 1983).

[26] Joseph Silas Diller, *Crater Lake, Oregon*, excerpted from the Smithsonian Report for 1897 (Government Printing Office, 1898). Diller confirms an earlier assumption by the military man Franklin B. Sprague, who, observing the surroundings of "Lake Majesty" in 1865, had expressed the opinion that Crater Lake was the result of a volcanic eruption: "[Y]our thoughts wander back thousands of years to the time when, where now is a placid sheet of water, there was a lake of fire, throwing its cinders and ashes to vast distances in every direction. The whole surroundings prove this lake to be the crater of an extinct volcano." His report was published in the *Oregon Sentinel* in 1869 (Franklin B. Sprague, "Lake Majesty," *Oregon Sentinel*, September 9, 1869, https://www.nps.gov/parkhistory/online_books/crla/hrs/hrs1.htm).

[27] Diller, *Crater Lake, Oregon*, 372.

[28] Diller, *Crater Lake, Oregon*, 372.

[29] Diller, *Crater Lake, Oregon*, 374.

[30] "Every press of my foot to the earth springs a hundred affections;/They scorn the best I can do to relate them" (Ralph Waldo Emerson quoted in Lapham, *Enchanted Lake*, 1).

[31] Stanton C. Lapham, *The Enchanted Lake: Mount Mazama and Crater Lake in Story, History and Legend* (J. K. Gill, 1931), 7–8.

[32] See Mackenthun, *Embattled Excavations*, chapter 2.

[33] Robert H. Winthrop, "Crater Lake in Indian Tradition: Sacred Landscapes and Cultural Survival," *Nature Notes from Crater Lake*, vol. 28, 1997, Crater Lake Institute online library, http://www.craterlakeinstitute.com/nature-notes-at-crater-lake/51-volume-28-1997/

[34] Cressman, *Sandal and Cave*, 7.

[35] Cressman, *Sandal and Cave,* 34. He estimates the Mazama eruption to have been 8.5 times as strong as that of Mount St. Helens in 1980. Cressman also claims that Fort Rock had been occupied before the last glaciation about ten thousand years ago and that the population there developed independently from more recent groups

coming from the north. This thesis has been confirmed by DNA analysis of human coprolites found in Oregon's Paisley Caves.

[36] Howel Williams, *The Ancient Volcanoes of Oregon* (University of Oregon, 1948), 45.

[37] Williams, *The Ancient Volcanoes of Oregon*, 46.

[38] Williams, *The Ancient Volcanoes of Oregon*, 45; Howel Williams, *Crater Lake: The Story of Its Origin* (University of California Press, 1963), 63.

[39] There is an intense semantic interaction between the languages describing volcanic clouds and atomic blasts. It is conspicuous that Williams does not use the volcanic term (Plinian cloud) of Pliny's own pine tree comparison. After initially referring to atomic clouds as "cauliflower clouds" the image was later replaced with the mushroom metaphor more familiar today.

[40] A great many thanks to Ben Truwe of Medford for playing research assistant and freely providing me with numerous digital copies of newspaper accounts as well as translations from Chinook and knowledgeable comments on local history and geology.

[41] *Chicago Tribune*, August 3, 1873, 5, adopted from the *New York Times* of July 27, 1873.

[42] *Chicago Tribune*, August 3, 1873, 5.

[43] *Oregon Daily Statesmen*, "A Mighty Wound in the Brow of the Cascades," August 29, 1896, 5.

[44] *The Tennesseean,* Nashville, February 12, 1900, 8; *Wichita Daily Eagle*, February 18, 1900, n. pag.

[45] *The Tennesseean,* Nashville, February 12, 1900, 8. The *Oregon Daily Statesman* of 1896, quoting Professor Irving E. Vining, has a longer version of this story: The young brave falls asleep on the cliffs and hears strange voices. The next night he comes back to the lake, being irresistibly pulled to this place. Again he falls asleep and hears the soothing voices. After many times he descends to the water and bathes in the lake. He sees strange shapes gliding to the surface. After returning and swimming there many times he becomes hardier, acquiring stronger powers than all the other members of his tribe. Other young men follow his example but when one of them kills a fish, the Llaos arise from the lake, tear him to pieces and feed his body to their children in the water. Dread has haunted the Klamath since then and made them shun the lake. And again the known sentence echoing literary works of the imperial gothic: "For a paltry sum the Indian will guide you thither but ere the lake be reached he will disappear amid the forests from whence he came" (5).

[46] William Gladstone Steel, *Steel Points* 2, January 1907, 35–37. Issue on Crater Lake.

[47] Steel, *Steel Points* 2, January 1907, 68.

[48] Steel, *Steel Points* 2, January 1907, 75; and Clark, *Indian Legends*, 56.

[49] *The Evening Herald,* Klamath Falls, Oregon, June 8, 1916, 2.

[50] The show of fear may of course also have been a precaution taken by Indigenous informants to dissuade colonials from trespassing on that sacred area.

[51] See Yi-Fu Tuan, *Landscapes of Fear* (University of Minneapolis Press, 2013), 6. "In a sense, every human construction—whether mental or material—is a component in a landscape of fear because it exists to contain chaos. Thus children's fairy tales as well as adults' legends, cosmological myths, and indeed philosophical systems are shelters built by the mind in which humans can rest, at least temporarily, from the siege of inchoate experience and of doubt" (Tuan, *Landscapes of Fear*, 6). Quite a few landscapes of fear could be added to Tuan's list—among them all kinds of man-made "sacrifice areas" like pit mines, nuclear power plants, and poisonous garbage dumps. I owe the reference to Tuan's book to Winthrop.

[52] Irving E. Vining, "A Mighty Wound in the Brow of the Cascades," *Oregon Daily Statesman*, August 29, 1896, 5.

[53] "Mazama" is the name that was given to the former mountain by the mountaineering organization called the Mazamas (established 1894). Diller mentions the ceremony in his report for the Smithsonian, with due emphasis on the fact that the named object has disappeared (Diller, *Crater Lake, Oregon*, 373). The word presents a case of semantic and geographical sliding—a process we will encounter again. It is derived from the Nahua word for deer, "mazatl," but was then applied to the local mountain goat found in the Rockies of the Pacific Northwest—a completely different animal (Wikipedia entry "Mazamas"). As in so many other cases of colonial naming processes, the climbers preferred transporting to their nonexisting mountain a Nahua word, misapplied to an Oregon goat, instead of trying to find out about the existing name for the place—Gi'was.

[54] Lapham, *Enchanted Lake*, 120.

[55] See Mackenthun, *Embattled* Excavations, chapter 2.

[56] "The Sad Fate," *The Oregon Journal*, March 24, 1904.

[57] Clark, *Indian Legends*, 54–55.

[58] The fact that the world generally seems to accept the Colvig-Clark account as a genuine historical memory shows how little it knows about the language of myth.

[59] I am deeply grateful to Tim Colvig for opening the box for me, and for a wonderful conversation about his ancestor, stories, and politics. Also for the wonderful lunch at Lake Merritt.

[60] The relevant passage relating to the battle between the two "chiefs" reads: "Then commenced a conflict between these gods in which all the gods of earth and sky took part. The mountains crumbled beneath the tread of the giants who from their summits hurled the *Curse of Fire* over all the land. Fire spewed from the mouth of Kequila Tyee, and *like an ocean of flame devoured the forests and swept on till it reached the homes of the people*. Red hot rocks, as large as the hills, went hurling athwart the midnight skies. Burning ashes fell like rain. The people rushed into the waters of the lake in order to escape the fiery curse" (Colvig, MS "The Legend of Crater Lake"; emphases added).

[61] She writes that the manuscript and another one "are among the private papers of Judge Colvig and are used by permission of his daughter, Mrs. William Warner" (Clark 1953, 218).

[62] Colvig, "The Legend of Crater Lake."

[63] Clark, *Indian Legends*, 55.

[64] Linguistic evidence supports the assumption that Lapham did have access to Colvig's texts, probably the 1921 version. There are conspicuous similarities in naming ("Talima" as another name for Kmu'kamsh, "Tyee" spirits, etc.) (Lapham, *Enchanted Lake*, 126–132).

[65] The Christian elements are somewhat toned down in the published versions but Colvig's manuscript contains strong elements of a sin and punishment discourse which is not logically explicable in the story. At the same time, he suspects his informant, ancient Lalek, of having let his story be intruded by the story of Genesis.

[66] Barbara Alatorre, "How Crater Lake Came To Be: A Klamath Indian Legend Special for the Herald and News." Crater Lake Institute. *Herald and News*. February 24, 2002. http://www.craterlakeinstitute.com/crater-lake-new-archives/2002-2/2002-02-6/?hilite=%27Alatorre%27.

[67] Dorothy Vitaliano distinguishes between two kinds of geomyth: first, "myths and legends" that register geological events which were actually witnessed by humans, and, second, "etiological" myths that explain geological features and "striking landforms" (*Legends of the Earth*, 1; see also her essay "Geomythology").

[68] Alatorre, "How Crater Lake Came To Be".

[69] The integration of modern elements, including scientific knowledge, into ancient oral traditions has been observed by Hamacher and Goldsmith as well (Duane W.

Hamacher and John Goldsmith, "Aboriginal Oral Traditions of Australian Impact Craters," *Journal of Astronomical History and Heritage* 16, no. 3 (2013): 306, http://www.aboriginalastronomy.com.au/wp-content/uploads/2020/02/Hamacher-2013-Aboriginal-Oral-Impact-Craters.pdf); it's a sign of the adaptability and vibrancy of oral record–keeping. Obviously, this quality of storytelling (from oral to digital) does not make it easier to reconstruct which geological-historical knowledge existed before the scientific accounts became known. Hamacher and Goldsmith have no access to written documentation of such knowledge; in our case, such knowledge is available if searched for in the right place. See below.

[70] Lapham, *Enchanted Lake*, 134 and 126.

[71] Lapham, *Enchanted Lake*, 130.

[72] It would be surprising, however, if Mount Timpanogos had never had any cultural significance for Indigenous inhabitants, as Farmer suspects, not having found any stories among the Ute (143). As in many other cases, though, such stories may have disappeared under the pressure by settlement, forced migration, and reeducation of colonial society. See Jessica Joyce Christie, ed., *Landscapes of Origin in the Americas* (University of Alabama Press, 2009).

[73] Ella E. Clark, "Colorful Indian Legends are More Than Mere Fancy," *The Spokesman Review*, December 27, 1953, 9; and Ella E. Clark, "According to Tribal Legends, Coyote, Great Indian Spirit, Piled Up Rockies and by this Deed Carved Regions Rivers," *The Spokesman Review*, January 4, 1954, 10–11.

[74] Lynn Hunt defines historicality as "the definition of what constitutes the historical" (*Measuring Time* 124). Equivalently, "scienticity" would refer to the criteria for defining what is scientific.

[75] Williams, *Crater Lake*, and Clark, "Colorful Indian Legends."

[76] Clark, "Colorful Indian Legends"; see Alexander, *Native American Mythology,* xiv.

[77] Doug Deur, for example, gives a concordance, exchanging Williams with the more recent description of Stephen Harris which I used above (Deur, *Footprints* 58).

[78] See Stefan Krause, "Tanmahawis: The Bridge of the Gods," *American Antiquities,* https://www.iaa.uni-rostock.de/forschung/laufende-forschungsprojekte/american-antiquities-prof-mackenthun/landmark-stories/bridge-of-the-gods

[79] Experts on oral tradition distinguish between old mythical structures and more recent concerns separating oral tradition (reaching into the distant past) from oral history (reaching back up to about seven generations). They frequently identify a "floating gap" between the two (Bruce Granville Miller, *Oral History on Trial:*

*Recognizing Aboriginal Narratives in the Courts* [University of British Columbia Press, 2011], 98–99).

[80] Clark, "Colorful Indian Legends," 9.

[81] Clark, "According to Tribal Legends," 10.

[82] Unfortunately, some of the original sources Clark names are virtually out of print and only accessible through later texts quoting them. One such text is G.P. Kuykendall's "extensive collection" of stories in *A Graphic Account of the Religions or Mythology of the Indians of the Pacific Northwest*, used by Elwood Evans in his *History of the Pacific Northwest* (1889) but unavailable itself.

[83] Clark, "According to Tribal Legends," 11.

[84] Clark, "According to Tribal Legends," 11.

[85] Clark, "Colorful Indian Legends," 9, emphasis added. "1886" refers to the US Geological Survey party led by Captain Clarence Dutton in 1886.

[86] Clark, "Colorful Indian Legends," 9.

[87] The correspondence also shows that in 1951 Clark had not yet had access to the Colvig manuacript. She must have found it shortly before her book went into print.

[88] See Nimachia Howe, *Retelling Trickster in Naapi's Language* (University Press of Colorado, 2019). Howe argues that most trickster figures discussed today in the context of Native American Literature are products of colonial/transcultural invention. The Naapi figure, as her reading of oral Blackfoot traditions show, cannot be fitted into a binary model (112).

[89] Cruikshank, *Do Glaciers Listen?*; and Ludwin and Thrush, "Finding Fault: Indigenous Seismology, Colonial Science."

[90] Ludwin and Thrush, "Finding Fault," 6.

[91] See William J. Turkel, *The Archive of Place: Unearthing the Pasts of the Chilcotin Plateau* (University of British Columbia Press, 2007).

[92] Edward Chamberlin, *If this is Your Land Where are Your Stories? Finding Common Ground* (Vintage, 2004).

[93] Chamberlin, *If this is Your Land Where are Your Stories*, 1.

[94] See William Colvig, "Klamath Indian Legend of Crater Lake," 1912, manuscript, private archive Tim Colvig.

[95] Albert S. Gatschet, *The Klamath Indians of Southwestern Oregon*, 2 vols., US Department of the Interior/US Geographical and Geological Survey of the Rocky

Mountain Region (Government Printing Office, 1890), Vol. 1, https://babel.hathitrust.org/cgi/pt?id=chi.35750446&view=1up&seq=197&size=125. and Jeremiah Curtin, *Myths of the Modocs* (Little, Brown, and Company, 1912).

[96] Edgar Allan Poe, "The Purloined Letter," in *Poetry and Tales*, ed. Patrick F. Quinn (The Library of America, 1984), 680-698.

[97] Jan Vansina, *Oral Tradition: A Study in Historical Methodology* (Routledge, 1965).

[98] Ruth Finnegan adds the criterium of genre which Vansina somewhat neglects (Finnegan, *Oral Tradition* 142-44).

[99] Calamities, according to Vansina, can be a device for temporal ordering (Vansina, *Oral Tradition*, 179).

[100] Rick Budhwa, "Correlations Between Catastrophic Paleoenvironmental Events and Native Oral Traditions of the Pacific Northwest," MA thesis, Simon Fraser University, 2002.

[101] Budhwa, "Correlations Between Catastrophic Paleoenvironmental Events and Native Oral Traditions of the Pacific Northwest," 104.

[102] Email to GM, March 21, 2017.

[103] Leslie Spier, *Klamath Ethnography* (University of California Press, 1930), 100.

[104] Spier, *Klamath Ethnography*, 100.

[105] It would be an interesting experiment to apply his categories to the Old Testament and other belief "systems"—a term that already articulates an absurd expectation. A mythology, after all, is not a sonnet.

[106] Gatschet, *Klamath Indians*, Vol 1: xlii.

[107] See Claude Lévi-Strauss, *The Naked Man*, Vol. 4 of *Introduction to a Science of Mythology*, English translated by John and Doreen Weightman (1971; Harper and Row, 1981). The process of invisibilizing continues in the modern print-on-demand facsimile of Gatschet's first volume (whose original contains the stories) that only reproduces the Introduction and ends with the section "Hints for the Study of the Texts." No actual texts follow. Disinterest in the traditions of another people could hardly be more evident. However, the volumes are available online from Hathitrust, and there is even a copy at Rostock University library.

[108] Gatschet is another transatlantic figure featuring in my monograph, *Embattled Excavations*, after Arthur de Morelet, Peter Wilhelm Lund, and Albert Koch.

[109] Curtin must have been a veritable language genius, said to have had command of seventy languages (Wikipedia). He spent thirteen years in Russia and became the

translator of the historical works of the Polish writer Henryk Sienkiewicz, including his novel *Quo Vadis* (1897). Curtin wrote many other books, including travelogues on Russia as well as editing books on Russian and Irish mythology.

[110] Curtin, *Myths*, ix.

[111] This must be Alma Mary (Cardell) Curtin, his widow, who had already compiled part of his memoirs.

[112] Curtin, *Myths*, viii–ix.

[113] Jeremiah Curtin, *Memoirs of Jeremiah Curtin*, ed. Joseph Schafer (State Historical Society of Wisconsin, 1940), 331.

[114] Joseph Bruchac, "The Lasting Power of Oral Traditions," *The Guardian*, July 29, 2010, https://www.theguardian.com/commentisfree/2010/jul/29/lasting-power-oral-tradition

[115] Fernando Ortiz, *Cuban Counterpoint: Tobacco and Sugar*, introd. Fernando Coronil (1940; Duke University Press, 1995), 102.

[116] M[ary] A[lma] Curtin, preface, in *Memoirs of Jeremiah Curtin*, by Jeremiah Curtin, ed. Joseph Schafer (State Historical Society of Wisconsin, 1940), viii.

[117] M. A. Curtin, preface, vi.

[118] I will use Gatschet's spelling "Skel." The variation used by Curtin is "Tskel."

[119] To facilitate reading, I will use the names Kmu'kamsh/Marten and Weasel.

[120] Gatschet, *Klamath Indians*, Vol 1: lxxxv; and Lévi-Strauss, *The Naked Man*, 31.

[121] Greg Dening, "Deep Times, Deep Spaces: Civilizing the Sea," in *Sea Changes: Historicizing the Ocean*, ed. Bernhard Klein and Gesa Mackenthun (Routledge, 2004), 20.

[122] Lévi-Strauss, *The Naked Man*, 38.

[123] Lévi-Strauss, *The Naked Man*, 38.

[124] Lévi-Strauss, *The Naked Man*, 44.

[125] The statement indicates the intellectual competition between various scientific discourses at the time; Gatschet's antagonist can be seen in the ethnologist Leslie Spier who uses Gatschet's text but, as most other recipients, not the stories themselves. Ignoring the wealth of the imaginative world of the Klamath, he can then state that they had no religion to speak of (100). Approaching the native tribe with the scientific ethnographic grid of kinship structures and economic customs, Spier seems not to have had access to their mythical world—either because he

didn't expect one and thus didn't ask or because the Klamath didn't want to share their knowledge with him.

[126] Gatschet, *Klamath Indians*, Vol 1: 111–114, emphases added.

[127] In his dictionary part (volume 2), Gatschet mentions under the keyword "lémé-ish" that the "large earth-lodge in which the five lived is represented as a black, dusky cave" (Gatschet, *Klamath Indians*, Vol 2: 187).

[128] Gatschet, *Klamath Indians*, Vol 1:: xci.

[129] Curtin, "Wind and Thunder," *Myths*, 76–80.

[130] Curtin, *Myths*, 78.

[131] Colvig (1921 MS): "Then commenced a conflict between these gods in which all the gods of earth and sky took part. The mountains crumbled beneath the tread of the giants who from their summits hurled the Curse of Fire over all the land. Fire spewed from the mouth of Kequila Tyee, and like an ocean of flame devoured the forests and swept on till it reached the homes of the people. Red hot rocks, as large as the hills, went hurling athwart the midnight skies. Burning ashes fell like rain. The people rushed into the waters of the lake in order to escape the fiery curse." Cf. Clark: "From their mountaintops the two chiefs began a furious battle [… ]."

[132] We are beginning to understand that the Colvig text, though clearly influenced by European knowledge (heaven and hell; geological knowledge), is by far not irrelevant or "false." It is simply a product of transculturation. The two versions, no direct copies of each other, agree in important points. Colvig's account of how he obtained the story (filling Lalek's pipe to make him talk, etc.) also rings authentic.

[133] Curtin, *Myths*, 80.

[134] This reading was suggested to me by Rick Budhwa who did a close concordance between the oral accounts and the geological reconstruction.

[135] "The record of eruptions over the last 10,000 years suggests that, on average, at least one eruption occurs every 800 to 600 years at Mt Shasta." The last eruption is calculated to have taken place "200 to 300 years ago" (US Geological Survey, "Mount Shasta").

[136] Gatschet, *Klamath Indians*, Vol 1: xcviii-xcix. The story "Wind and Thunder" also includes a small scene with Old Leméish's daughter who is even "meaner than her brothers," wearing a "belt around her waist [… ] made of men's bones" (Curtin, *Myths*, 78).

[137] Another part of this short version here refers to the story of Skel who has his head chopped off by Llao, followed by the gruesome ball-game with his head, and it being

pieced back together with the help of various animals, Skel taking his revenge on Llao by feeding him to his own children in the lake.

[138] Gatschet, *Klamath Indians*, Vol 1: xviii.

[139] Gatschet, *Klamath Indians*, Vol 2: 189.

[140] Curtin, *Myths* 293–294.

[141] Curtin, "Frost and Thunder," in *Myths,* 145–147.

[142] Gatschet also identifies Yayayá-ash as one of the Thunders (Gatschet, *Klamath Indians*, Vol 1: xc).

[143] Alatorre, "How Crater Lake Came To Be".

[144] S. J. Harris, *Fire Mountains of the West*, 107. Mount Scott "had become extinct long before Mazama's climactic eruptions" (S.J. Harris, *Fire Mountains of the West*, 106).

[145] The former information is confirmed by the very elaborate Wikipedia entry for "Mount Mazama"—which also gives the Klamath name "Giiwas" for the whole area. For the eruption history of the past 7,700 years, see also US Geological Survey, "Post-Caldera Volcanism and Crater Lake." The part topped by Wizard Island remained active, but all of this activity "occurred within 750 years after the cataclysmic eruption. . . . The last known eruption at Crater Lake occurred when a small lava dome erupted underwater on the east flank of the base of Wizard Island about 4,800 years ago. Since that time, the volcano has remained quiet" ("Post-Caldera Volcanism").

[146] The present-day Klamath dictionary also distinguishes between the two terms, having "giiwas" for Crater Lake and "gi?was" for the pine squirrel. http://klamathtribes.org/language/vocabulary/

[147] https://en.wikipedia.org/wiki/Pine_squirrel; https://en.wikipedia.org/wiki/Douglas_squirrel

[148] See Chapter 9 of John Muir, *The Mountains of California* (New York: The Century Co., 1894).

[149] Gatschet, too, compares Aishish to Quetzalcoatl (Gatschet, *Klamath Indians*, Vol 1: lxxxvii)

[150] Gatschet, *Klamath Indians*, Vol 1: xx.

[151] Gatschet, *Klamath Indians*, Vol 1: 99–101.

[152] Mohammed Barker, quoted after Lévi-Strauss, *The Naked Man* 52; emphasis added.

[153] See Alatorre, "How Crater Lake Came To Be".

[154] Curtin, *Myths* 1–2.

[155] These places are still visited by Klamath people seeking wisdom and spiritual guidance. The story names many of them; here I will concentrate on the one of particular interest to this context.

[156] The mountain and the lake share the same name because the lake is part of the mountain area to which Mount Scott also belongs.

[157] Lévi-Strauss, *The Naked Man*, 73.

[158] Lévi-Strauss, *The Naked Man*, 75.

[159] See Oakley, "The Center of the World" for examples of "migrating" landmark myths (Christopher Arris Oakley, "The Center of the World: The Principle People and the Great Smoky Mountains," in *Landscapes of Origin in the Americas*, ed. Jessica Joyce Christie [University of Alabama Press, 2009]). Another example is the mythical geography of the Modoc story "The Star Brothers" where the original setting is Klamath Lake but the heart of one of the Thunders, knocked out by the vindictive sister, though flying north, nevertheless becomes Mount Shasta (Curtin, *Myths*, 98). Mount Shasta is located south of both Klamath lakes; the most conspicuous mountain range north of the lakes is Gi'was.

[160] Gatschet, who summarizes the story under discussion here, reads him as a lunar figure (Gatschet, *Klamath Indians*, Vol 1: lxxxvii). Lévi-Strauss generally criticizes Gatschet's and other mythologists' reductions of these stories to cosmological, especially astronomical, meanings but still shares the notion that Aishish was on the lunar side (71, passim). His treatment of this mythology is a mind-boggling exercise in structuralist scholarship and a fascinating example of his skill, but it also at times suffers from a tendency to construct binary oppositions and the general gesture of reading the different versions as part of one supermyth—not as historically contingent variations. What is so admirable in Lévi-Strauss, from a literary point of view, is how meticulously he is able to *read* the texts, thus showing the complexity and beauty of this story corpus.

[161] Both Léwa's/Llao's daughters living in Gi'was lake and the mentioned daughter of the Lemeísh brothers can be seen as manifestations of this unsympathetic personality.

[162] Curtin, "The Star Brothers," in *Myths*, 95–117.

[163] Lévi-Strauss, *The Naked Man*, 49–50.

[164] Lévi-Strauss, *The Naked Man*, 86.

[165] Also see Gatschet, *Klamath Indians*, Vol 1: 100.

[166] In Freudian dream analysis, the names of these processes are: condensation (e.g. in fusing characteristics of different persons in one dream figure), displacement, and visual representation (applied to myth this means that a deity can take different animal shapes).

[167] Édouard Glissant, *Poétique de la Relation* (Gallimard, 1990; *Poetics of Relation*, trans. Betsy Wing [University of Michigan Press, 2010]). At the same time, it is important to concede that Lévi-Strauss, as the master of structuralist anthropology, did indeed identify the hidden boy/bird-nester motif as a mythical deep element. As so often, the founder of a theoretical school by far supersedes the declared principles of that school in his own analytical practice. Lévi-Strauss pulls together all the registers of historical analysis—linguistics, history, geography—which makes his reading so fascinating. The structures he construes—concessions to the dominance of the mathematical sciences in academia—recede behind the sheer intelligence and scope of his investigation.

[168] See Mackenthun, *Embattled Excavations*, chapter 1.

[169] There is growing archaeological evidence of plant cultivation techniques and soil management used in the Pacific Northwest. See Deur/Turner, *Keeping It Living.*

[170] S.J. Harris, *Fires in the Mountain*, 119.

[171] Stephen F. Bedwell, *Fort Rock Basin. Prehistory and Environment* (U of Oregon P, 1973), 61-62

[172] "[T]he thick shower of volcanic cinders from Mount Mazama appears to have significantly reduced biodiversity across a large area between Crater Lake, the Fort Rock Basin, and the area south of Bend [… ]. This loss of some important upland resources may have resulted in population reductions. When biotic diversity is reduced in an area there are more frequent periods when no food is available" (Jenkins, "Introduction" xx).

[173] Bedwell, *Fort Rock Basin,* 63.

[174] Bedwell, *Fort Rock Basin*, 67.

[175] Bedwell, *Fort Rock Basin*, 68.

[176] Bedwell, *Fort Rock Basin*, 68.

[177] Muir, *The Mountains of California*, chapter 9; emphasis added.

[178] For "root paradigm" see Victor Turner, *Dramas, Fields, and Metaphors. Symbolic Action in Human Society*. (Cornell University Press, 1974), 67-68.

[179] Curtin, *Myths*, 214–218.

[180] Curtin, *Myths*, 216.

[181] See Northrop Frye, *Anatomy of Criticism* (Princeton University Press, 1957). Wus could also be regarded as a trickster according to the popular contemporary figure in Native American literature. Especially his horniness would support such a reading.

[182] David Lewis. "Klamath Termination: Water, Timber, and Sovereign Rights." *Ethnohistory Research*. 17 July, 2015. https://ndnhistoryresearch.com/2015/07/17/klamath-termination/; Tsing 197–199.

[183] Deloria, *Red Earth*, 167.

[184] See Wood, *Tambora*. The cause of the climate catastrophe was unknown at the time. Amazingly, Lord Byron's poem "Darkness," in which he describes the human suffering caused by the "year without a summer," includes an imagined volcanic eruption. Byron evokes the volcano as a source of light, warmth, and "fearful hope."

[185] The anthropocentrism of Anthropocene discourse consists in its obliviousness to historical asymmetries in identifying the causes of contemporary ecocide and climate change, and in its frequent concentration on the activities of humans, ignoring the agency of nonhuman life. Indigenous mythologies can teach us humility toward the planet's nonhuman inhabitants. In them, we are all "people."

[186] Qtd. in Robert K. Sutton, "Captain Jack and His People: The Modocs Before Banishment," in *Northwestern Tribes in Exile: Modoc, Nez Perce, and Palouse Removal to the Indian Territory*, ed. Clifford Trafzer (Sierra Oaks, 1987), 9.

[187] For a detailed account of the significance of the Lava Beds in Modoc culture and the Modoc War, including much oral history, see Deur, *Footprints*, 157–214.

[188] Donald Fixico, *The Invasion of Indian Country in the Twentieth Century. American Capitalism and Tribal Natural Resources*. 2nd ed. (Colorado University Press, 2012).

[189] David Lewis, "Klamath Termination"; Fixico, *Invasion*, chapter 4.

[190] Thus, for example, George Nanamkin of the Moses Band of Columbia River Indians, who requested she record and publish the story about the Warm Wind Brothers' fight against the Cold Wind Brothers. The story bears quite a few similarities with the Klamath and Modoc stories about Kmu'kamsh's defeat of the North Wind and his killing of the five evil brothers. Both stories may be read as narrativizations of the gradual warming of the climate that took place after the end of the Last Glacial Maximum 10,000 years ago. "In his letter asking me for an interview, he wrote that the story he wanted recorded had been told by his people for many, many years. 'It shows that we had in Ice Age'" (Clark/Edmonds, *Voices* 26). The narrator of the

Modoc story "Wind and Thunder" also draws a link between the killing of the North Wind and the warming of the climate (Curtin, *Myths*, 77).

[191] Kmu'kamsh, of course, is a trickster-transformer but lacks the funny elements of today's literary trickster figures; these are instead represented by his smart and cocky little brother, Weasel. For a critique of reductive readings of trickster figures (beginning with the English word itself), see Nimachia Howe.

[192] Gatschet, *Klamath Indians*, Vol 1: vii.

[193] His phrase "long before the historical period" betrays his indebtedness to a Hegelian sense of historicality which has since been seriously questioned. See, for example, Smail, Hunt, Mackenthun/Mucher.

[194] *The Morning Oregonian*, 25 May 1914. "Skookum" is Chinook for "very big."

[195] Colvig, "Klamath Indian Legend of Crater Lake."

[196] Colvig's ideological position within the colonial contact zone was consistent. In the 1870s, just a few years after his friendly chats with the Klamath chief Lalek, he had been a volunteer in the Modoc War. Much later, in a speech in support of William McKingley's presidential campaign in 1900, Colvig rejected the Democratic candidate William Jennings Bryan's critique of the expansionist policy of the time with a full-fledged rendering of social Darwinist doctrine. "Every great nation," Colvig declared to the campaign crowd at the Medford opera house, "as had its growth through conquest and battlefields. National and racial expansion are based upon and grow out of natural laws which cannot be stayed or controlled by legislation. Intelligence is power and power will rule, and no consideration of moral, local or international law can prevent it. Men are free and equal only in theory; in fact, they are largely the creatures of heredity and environment. Hedge it about and handicap it as you will, Caucasian blood will rule. ("Medford's Big Demonstration"). ("Hotel Lobbies Furnish Tales").

[197] Donna Haraway, *Staying with the Trouble: Making Kin in the Cthulucene* (Duke University Press, 2016).

[198] Arturo Escobar, "Afterword," in *Globalization and the Decolonial Option*, ed. Walter D. Mignolo and Arturo Escobar (Routledge, 2010), 397. I would like to thank Liz deLoughrey for strengthening my half-baked sense that the Klamath-Modoc corpus resonates with an ecopoetic energy that makes it signify in the present historical moment. It contains ancient knowledge with great potential for future world-building.

[199] Stoler, *Imperial Debris*, 11.

[200] Michelle Cliff, *No Telephone to Heaven* (Vintage, 1987), 1.

[201] Lapham, *Enchanted Lake*, 136.

[202] Donna Haraway, *Staying with the Trouble: Making Kin in the Cthulucene* (Duke University Press, 2016).

**Selected Bibliography**

Alatorre, Barbara. "How Crater Lake Came To Be: A Klamath Indian Legend Special for the Herald and News." Crater Lake Institute. *Herald and News*. February 24, 2002. http://www.craterlakeinstitute.com/crater-lake-new-archives/2002-2/2002-02-6/?hilite=%27Alatorre%27.

Alexander, Hartley Burr. *Native American Mythology*. 1916. Reprint: Mineola, Dover, 2005.

Basso, Keith. *Wisdom Sits in Places: Landscape and Language Among the Western Apache*. University of New Mexico Press, 1996.

Bedwell, Stephen F. *Fort Rock Basin. Prehistory and Environment*. U of Oregon P, 1973.

Beer, Gillian. *Darwin's Plots. Evolutionary Narrative in Darwin, George Eliot and Nineteenth-Century Fiction*. Routledge, 1983.

Bruchac, Joseph. "The Lasting Power of Oral Traditions." *The Guardian*. July 29, 2010. https://www.theguardian.com/commentisfree/2010/jul/29/lasting-power-oral-tradition

Budhwa, Rick. "Correlations Between Catastrophic Paleoenvironmental Events and Native Oral Traditions of the Pacific Northwest." MA Thesis, Simon Fraser University, 2002.

Byron, George Gordon Lord. "Darkness" [1816]. *Selected Poems*, Penguin, 2006. 412-15.

Chamberlin, Edward. *If This Is Your Land, Where Are Your Stories? Finding Common Ground.* Vintage, 2004.

Christie, Jessica Joyce, ed. *Landscapes of Origin in the Americas*. University of Alabama Press, 2009.

Clark, Ella Elizabeth. *Indian Legends of the Pacific Northwest*. University of California Press, 1953.

Clark, Ella E. "According to Tribal Legends, Coyote, Great Indian Spirit, Piled Up Rockies and by this Deed Carved Regions Rivers." *The Spokesman Review*, January 4, 1954, 10–11.

Clark, Ella E. "Colorful Indian Legends are More Than Mere Fancy." *The Spokesman Review*, December 27, 1953, 9.

Clark, Ella E., and Margot Edmonds, eds. *Voices of the Winds*. Facts on File, 1989.

Clark, Ella E. Letter to Director of the Library University of Oregon, 21 January, 1951. MS. Ella E. Clark Papers. Washington State University at Pullman.

Cliff, Michelle. *No Telephone to Heaven*. Vintage, 1987.

Colvig, William. "Klamath Indian Legend of Crater Lake." 1912. Manuscript. Private archive Tim Colvig.

Colvig, William. "The Legend of Crater Lake." 1921. Manuscript. Private archive Tim Colvig.

"Crater Lake." *Chicago Tribune*, August 3, 1873, 5. Adopted from *New York Times* of July 27, 1873.

"Crater Lake's Many Marvels." *The Tennesseean*. Nashville, February 12, 1900. Identical with *Wichita Daily Eagle*, February 18, 1900.

Cressman, Luther S. *The Sandal and the Cave*. 1962. Oregon State University Press, 2005.

Cruikshank, Julie. *Do Glaciers Listen? Local Knowledge, Colonial Encounters, and Social Imagination.* University of British Columbia Press, 2005.

Curtin, Jeremiah. *Myths of the Modocs*. Little, Brown, and Company, 1912.

Curtin, Jeremiah. *Memoirs of Jeremiah Curtin*. Edited by Joseph Schafer. State Historical Society of Wisconsin, 1940.

Darwin, Charles. *The Descent of Man*. 1871. Penguin, 2004.

Deloria, Jr., Vine. *Red Earth, White Lies: Native Americans and the Myth of Scientific Fact.* Fulcrum, 1997.

Deloria, Vine, Jr. *God is Red: A Native View of Religion*. 1973. Fulcrum, 1992.

Deloria, Philip J. *Indians in Unexpected Places*. University of Kansas Press, 2004.

Deloria, Philip J. "*Red Earth, White Lies*, *Sapiens* and the Deep Politics of Knowledge." In *Decolonizing "Prehistory": Deep Time and Indigenous Knowledges in North America*. Edited by Gesa Mackenthun and Christen Mucher. University of Arizona Press, 2021. 231–248.

DeLoughrey, Elizabeth. *Allegories of the Anthropocene*. Duke University Press, 2019.

Dening, Greg. "Deep Times, Deep Spaces: Civilizing the Sea." In *Sea Changes: Historicizing the Ocean*. Edited by Bernhard Klein and Gesa Mackenthun. Routledge, 2004, 13–35.

Deur, Douglas. *In the Footprints of Gmukamps*. National Park Service, 2008.

Deur, Douglas E., and Nancy J. Turner, eds. *Keeping It Living: Traditions of Plant Use and Cultivation on the Northwest Coast of North America*. University of Washington Press, 2005.

Diller, Joseph Silas. *Crater Lake, Oregon*. Excerpted from the Smithsonian Report for 1897. Government Printing Office, 1898.

"Douglas fir." University of California Forest Research and Outreach. https://ucanr.edu/sites/forestry/California_forests/http___ucanrorg_sites_forestry_California_forests_Tree_Identification_/Douglas-fir/

Echo-Hawk, Roger C. "Ancient History in the New World: Integrating Oral Traditions and the Archaeological Record." *American Antiquity* 65, no. 2 (2000): 267–290.

Escobar, Arturo. "Afterword." In *Globalization and the Decolonial Option*. Edited by Walter D. Mignolo and Arturo Escobar. Routledge, 2010.

Fabian, Johannes. *Time and the Other. How Anthropology Makes Its Object*. 1983. Columbia University Press, 2002.

Finnegan, Ruth. *Oral Tradition and the Verbal Arts.* Routledge, 1991.

Fixico, Donald L. *The Invasion of Indian Country in the Twentieth Century. American Capitalism and Tribal Natural Resources*. 2nd ed. Colorado University Press, 2012.

Freud, Sigmund. *Der Witz und seine Beziehung zum Unbewußten*. 1905. Frankfurt/M.: Fischer, 1986.

Freud, Sigmund. *Vorlesungen zur Einführung in die Psychoanalyse. Teil II: Der Traum*. 1916. *Sigmund Freud Studienausgabe*, vol. 1. Fischer, 2000, pp. 41-241.

Frye, Northrop. *Anatomy of Criticism*. 1957. Reprint. Princeton University Press, 2020.

Gatschet, Albert S. *The Klamath Indians of Southwestern Oregon*. 2 vols. US Department of the Interior/US Geographical and Geological Survey of the Rocky Mountain Region. Washington, DC: government Printing Office, 1890. Vol. 1. https://babel.hathitrust.org/cgi/pt?id=chi.35750446&view=1up&seq=197&size=125. Last accessed 16 September 2019.

Glissant, Edouard: *Poetics of Relation*. University of Michigan Press, 2010.

Hamacher, Duane W., and John Goldsmith. "Aboriginal Oral Traditions of Australian Impact Craters." *Journal of Astronomical History and Heritage* 16, no. 3 (2013): 295–

311. http://www.aboriginalastronomy.com.au/wp-content/uploads/2020/02/Hamacher-2013-Aboriginal-Oral-Impact-Craters.pdf

Haraway, Donna. *Staying with the Trouble: Making Kin in the Cthulucene*. Duke University Press, 2016.

Harding, Sandra. 2008. *Sciences From Below. Feminisms, Postcolonialities, and Modernities*. Duke University Press.

Harris, Stephen J. *Fire Mountains of the West: The Cascade and Momo Lake Volcanoes.* Mountain Press Publishing Company, 1988.

"Hotel Lobbies Furnish Tales of Varied Tenor." *The Oregonian,* Portland, January 5, 1914: 5.

Howe, Nimachia. *Retelling Trickster in Naapi's Language*. University Press of Colorado, 2019.

Humboldt, Alexander von. *Ansichten der Kordilleren und Monumente der eingeborenen Völker Amerikas*. Orig. Paris, 1810-13, first German edition, trans. Claudia Kalscheuer, ed. Oliver Lubrich and Ottmar Ette, Eichborn, 2004.

Humboldt, Alexander von. *Views of the Cordilleras and Monuments of the Indigenous Peoples of the Americas*, ed. Vera Kutzinski and Ottmar Ette, University Press Chicago, 2013.

Hunt, Lynn. *Measuring Time, Making History*. Central European University Press, 2008.

Jefferson, Thomas. *Notes on the State of Virginia*. 1785. Ed. William Peden. University of North Carolina Press, 1982.

Jenkins, Dennis L. "Introduction to the 2005 Edition." Luther S. Cressman, *The Sandal and the Cave*. Oregon State University Press, 2005. vi-xxvi.

Kolodny. Annette. *The Lay of the Land. Metaphor as Experience and History in American Life and Letters*. University of North Carolina Press, 1975.

Kolodny, Annette. *In Search of First Contact. The Vikings of Vinland, the Peoples of the Dawnland, and the Anglo-American Anxiety of Discovery*. Duke University Press, 2012.

Krause, Stefan. "Tanmahawis. The Bridge of the Gods." *American Antiquities.* https://www.iaa.uni-rostock.de/forschung/laufende-forschungsprojekte/american-antiquities-prof-mackenthun/landmark-stories/bridge-of-the-gods. Last accessed September 16, 2019.

Lapham, Stanton C. *The Enchanted Lake. Mount Mazama and Crater Lake in Story, History and Legend*. J. K. Gill, 1931.

Lévi-Strauss, Claude. *The Naked Man*. Vol. 4 of *Introduction to a Science of Mythology*. 1971. English translated by John and Doreen Weightman. Harper and Row, 1981.

Lewis, David G. "Klamath Termination: Water, Timber, and Sovereign Rights." *Ethnohistory Research*. 17 July, 2015. https://ndnhistoryresearch.com/2015/07/17/klamath-termination/

Ludwin, Ruth S., and Coll Thrush. "Finding Fault. Indigenous Seismology, Colonial Science, and the Rediscovery of Earthquakes and Tsunamis in Cascadia." *American Indian Culture and Research Journal* 31, no. 4 (2007): 1–24.

Mackenthun, Gesa. *Embattled Excavations: Colonial and Transcultural Constructions of the American Deep Past*. Waxmann, 2021.

Mackenthun, Gesa, and Christen Mucher, eds. *Decolonizing "Prehistory": Deep Time and Indigenous Knowledges in North America*. University of Arizona Press, 2021.

May, Robert E. *Manifest Destiny's Underworld. Filibustering in Antebellum America*. University of North Carolina Press, 2002.

Mayor, Adrienne. *Fossil Legends of the First Americans*. Princeton University Press, 2005.

"Medford's Big Demonstration." *Medford Mail,* October 26, 1900: 2.

"A Mighty Wound in the Brow of the Cascades." *Oregon Daily Statesman.* 29 August 1896.

Miller, Bruce Granville. *Oral History on Trial: Recognizing Aboriginal Narratives in the Courts*. University of British Columbia Press, 2011.

Muir, John. *The Mountains of California.* 1894. http://www.yosemite.ca.us/john_muir_writings/the_mountains_of_california/chapter_9.html. Last accessed 17 September 2019.

National Park Service (NPS). *Crater Lake Historic Resource Study*. https://www.nps.gov/parkhistory/online_books/crla/hrs/hrs1.htm

NoahsArkSearch. http://www.noahsarksearch.com/ararat.htm

Oakley, Christopher Arris. "The Center of the World: The Principle People and the Great Smoky Mountains." *Landscapes of Origin in the Americas*. Edited by Jessica Joyce Christie. University of Alabama Press, 2009. 3–14.

Ortiz, Fernando. *Cuban Counterpoint: Tobacco and Sugar*. 1940. Introduction Fernando Coronil. Duke University Press, 1995.

Poe, Edgar Allan. "The Purloined Letter." *Poetry and Tales*. Ed. Patrick F. Quinn. The Library of America, 1984. 680-698.

"The Sad Fate of the Beautiful Unknown." *Oregon Journal*. Portland. 27 March, 1904.

Schliemann, Heinrich. *Schliemann's First Visit to America, 1850-1851*, ed. Shirley H. Weber, Harvard University Press, 1942.

Shoichet, Catherine E. "Biden Wants to Remove this Controversial Word from US Laws." *CNN*. https://edition.cnn.com/2021/01/21/politics/alien-biden-immigration-law/index.html. Accessed January 22, 2021.

Smail, Daniel Lord. 2008. *On Deep History and the Brain*. University of California Press.

Snead, James. E. *Relic Hunters. Archaeology and the Public in Nineteenth-Century America*. Oxford University Press, 2018.

Spier, Leslie. *Klamath Ethnography*. University of California Press, 1930.

Sprague, Franklin B. "Lake Majesty." *Oregon Sentinel*, September 9, 1869. https://www.nps.gov/parkhistory/online_books/crla/hrs/hrs1.htm

Steel, William Gladstone. *Steel Points* 2 (January 1907). Issue on Crater Lake.

Stephens, John Lloyd. "An Hour with Alexander von Humboldt." *Little's Living Age*, 15 (1847), 151-3.

Stephens, John Lloyd. *Incidents of Travel in Central America, Chiapas and Yucatan.* [ITC]. 1841. 2 vols. Reprint. Dover, 1969.

Stephens, John Lloyd. *Incidents of Travel in Yucatan*. [ITY]. 1843. 2 vols. Reprint. Dover, 1963.

Stoler, Ann Laura. *Imperial Debris. On Ruins and Ruination*. Duke University Press, 2013.

Sutton, Robert K. "Captain Jack and His People: The Modocs Before Banishment." *Northwestern Tribes in Exile: Modoc, Nez Perce, and Palouse Removal to the Indian Territory.* Ed. Trafzer, Clifford. Sierra Oaks, 1987. 1-14.

Tsing, Anna Lowenhaupt. *The Mushroom at the End of the World: On the Possibility of Life in Capitalist Ruins*. Princeton University Press, 2015.

Tuan, Yi-Fu. *Landscapes of Fear*. 1980. University of Minneapolis Press, 2013.

Turkel, William J. *The Archive of Place: Unearthing the Pasts of the Chilcotin Plateau.* University of British Columbia Press, 2007.

Turner, Victor. *Dramas, Fields, and Metaphors. Symbolic Action in Human Society*. Cornell University Press, 1974.

US Geological Survey. "Mount Shasta." https://volcanoes.usgs.gov/volcanoes/mount_shasta/. Last accessed 17 September 2019.

US Geological Survey. "Post-Caldera Volcanism and Crater Lake." https://volcanoes.usgs.gov/volcanoes/crater_lake/crater_lake_geo_hist_136.html. Last accessed 17 September 2019.

Vansina, Jan. *Oral Tradition: A Study in Historical Methodology*. Routledge, 1965.

Vining, Irwing E. "A Mighty Wound in the Brow of the Cascades." *Oregon Daily Statesman,* 29 August 1896 Vitaliano, Dorothy B. 1973. *Legends of the Earth. Their Geologic Origins*. Indiana University Press.

Vitaliano, Dorothy B. *Legends of the Earth. Their Geological Origins*. Indiana University Press, 1973.

Vitaliano, Dorothy B. "Geomythology: Geological Origins of Myths and Legends". *Myth and Geology*. Ed. L. Piccardi and W.B. Masse. Geological Society Special Publications, 2007. 1-7.

White, Richard. "Indian Peoples and the Natural World. Asking the Right Questions." *Rethinking American Indian History*. Ed. Donald L. Fixico. University of New Mexico Press, 1997. 87-100.

Williams, Howel. *Crater Lake: The Story of Its Origin*. University of California Press, 1963.

Williams, Howel. *The Ancient Volcanoes of Oregon.* University of Oregon, 1948.

Winthrop, Robert H. "Crater Lake in Indian Tradition: Sacred Landscapes and Cultural Survival." *Nature Notes From Crater Lake*, vol. 28, 1997, Crater Lake Institute online library. http://www.craterlakeinstitute.com/nature-notes-at-crater-lake/51-volume-28-1997/. Accessed 16 August 2019.

Wood, Gillen D'Arcy. *Tambora: The Eruption that Changed the World.* Princeton University Press, 2014.