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Not My Fault: The Cascadia story chapter 4 – Eyewitness accounts

Lori Dengler/For the Times-Standard
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There have been many memories of survivors over the past week as news media marks six years from the Japan earthquake and tsunami. Many people experienced the Great Cascadia earthquake and tsunami of 1700 too. Tens of thousands of Native Americans lived in the area we now call Northern California, Oregon, Washington and British Columbia. And just like the people in the Tohoku region of Japan, Cascadia earthquake survivors told of their stories to one another.

The 2011 Japanese stories are shared on cell phones and social media. The people in the Cascadia region 317 years ago remembered their earthquake in an extensive oral tradition. There were no written languages among these peoples but that in no way diminished either their experiences or the richness of their accounts.

I first learned about oral history as a freshman at Berkeley in the 1960s when my roommate took the very popular introductory Anthropology course. I liked to leaf through her required reading. One of the books was "Yurok Myths" by Alfred Kroeber. Kroeber built his reputation studying California native peoples. He owned land in Orick and spent much time in Humboldt County transcribing the accounts Yurok elders told to him and his colleagues. At the time, Kroeber probably thought the accounts mythic and of cultural relevance, but not descriptions of actual events.

My friend Deborah Carver came across Kroeber's book in the late 1970s while working as an interpreter at Redwood National Park. Her initial impression of the stories involving the characters Earthquake and Thunder was "pretty wild." But some years later, as geologic evidence was mounting for great earthquakes, she took a more detailed look and found that many of the descriptions strikingly real.

Several stories piqued her interest. "How Prairie Became Ocean," tells of Earthquake and Thunder sinking the land so that lagoons would form. Visit the Agate Beach overlook at Patrick's Point sometime and the story makes sense. The sandy surface layers (marine terraces) gently dip down the north until they dive beneath Big Lagoon in the far distance. These terraces were horizontal less than 200,000 years ago. Repeated Cascadia earthquakes have warped the land surface into a giant downward fold or syncline. A similar origin explains Humboldt Bay.

Deborah was hooked. For the next decade she explored the depths HSU library's Humboldt Room. She spoke with elders in the Yurok community. She accessed UC Berkeley's Bancroft Library where she found unpublished transcripts of other anthropologist's work. She traveled up the coast visiting libraries and historical societies. In Crescent City she found a Tolowa story told to linguist Pliny Goddard that could pass as an article in a modern newspaper, "…The earth did truly shake from the west and everything on the earth fell down… (A brother and sister) ran up on the hill and the water nearly overtook them… When they neared the top, they saw the water covering the whole world…" Loren Bommelyn of the Tolowa Dee-ni' Nation and fluent in Tolowa, continues to recount this story today.

Unfortunately, much of the Indian oral history of the Cascadia region was lost as tribal groups were hit by disease, territorial conflict, and pressure to assimilate. But surviving accounts make it clear their experiences were similar to what happened in Japan only six years ago. The strong ground shaking went on for a long time. It was accompanied by loud rumbling sounds that resembled thunder. Coastal peoples saw areas drop suddenly and fill with water and tsunami surges arrived shortly afterward. The tsunami had a deadly effect, wiping out villages and causing many casualties.

Deborah found a common thread in many of the accounts – indicators of time of day and season, such as sleeping in a sweat lodge (night) or eating acorn soup (winter). None of the stories suggested summer or midday. In 1996, she and her husband, geologist Gary Carver, presented a meeting poster summarizing her research. It opened with a provocative statement – the last Cascadia earthquake occurred at night in the winter. Several years later, the orphan tsunami research from Japan confirmed their results (Not My Fault 3/2) – the last great Cascadia quake occurred on January 26th, 1700 at night.

Geologic evidence suggests a similar-sized quake had occurred about 800 years earlier, another 200 years before that, another gap of 200 years, then a gap of 800 or so etc. etc. The Japanese written history doesn't help with the earlier quakes and the uncertainties in dating become larger. But it's clear they don't recur like clockwork and some are bigger than others. 1700 was

not the first Cascadia quake the native peoples had experienced.

The first time someone showed me the original village site of Orekw, about 60 feet above the beach and the mouth of Redwood Creek, I thought what an odd place to choose. The river provided the main sustenance and it seemed like a steep trek up the hill. Deborah uncovered three accounts of past tsunamis in the area – and estimated a likely height of just less than 60 feet. The Yurok had learned from their past experiences and knew what they were doing in choosing this place.

Deborah Carver's research is archived at Redwood National Park
https://irma.nps.gov/DataStore/Reference/Profile/599488. Her work is included with other Pacific Northwest oral accounts at
http://srl.geoscienceworld.org/content/76/2/140

Next chapter – an earthquake close to home brings Cascadia out of the closet

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http://www.times-standard.com/opinion/20170315/the-cascadia-story-chapter-4-eyewitness-accounts