

Hawaiian Geological Traditions

Cultural definitions of the world around us
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The geological features and processes of our Hawaiian Islands provide awesome inspiration to geologists and geophysicists studying those powerful expressions of a global oceanic plume under a moving tectonic plate in the middle of the world's largest ocean. The fiery explosions and quivering earth was no less inspiring to Hawaiians, who, living on active volcanic islands, incorporated the dynamics of the land into their traditions. The birth of the islands and their early formation was described by Hawaiians in a number of accounts, involving such deities as Pele, the volcano goddess, Maui, the trickster demi-god, and Papa and Wākea, the Earth-mother and Sky-father parents that give birth to not only the islands, but the ancestor of all Hawaiians.

Hawaiians considered their islands to have been born from a mother deity: Papa-hānau-moku "Papa [who] gives birth to islands." Her pairing with Wākea creates a series of islands. And as some births can be, the birth of an island by a goddess can be filled with straining and violent movement, eased by the calming influence of the husband. To Hawaiians, it was not surprising or unexpected that the land should shake, after all, even the calmest of people can become agitated, and need the help of friends and family to settle back into control. One creation account relates this directly:

*Ua hānau ka moku
 a kupu, a lau, a loa, a ao, a mu'o
 Ka moku i luna 'o Hawai'i
 'O Hawai'i nei nō ka moku
 He pūlewa ka 'āina, he naka Hawai'i
 E lewa wale ana nō i ka lani,
 lewa honua
 Mai ākea ua pāhono 'ia
 Mālie i ke a'a o ka moku me ka honua
 Pa'a 'ia i ka lawa ea lani
 i ka lima 'ākau o Wākea
 Pa'a Hawai'i la a la'a
 Hawai'i la 'ikea, he moku...*

The island was born
 sprouted, leafing, long, high, budding
 The island above, is Hawai'i
 This Hawai'i indeed [is] the island
 The land was unstable, Hawai'i shook
 Lifting indeed so to the heavens,
 lifting abruptly
 From [W]ākea it was set right
 Calmed at the root of the island and the world
 Made steadfast by the exalted binding
 by the right hand of Wākea
 Firm is Hawai'i, then, until consecrated
 Hawai'i revealed, an island...

Sometimes Hawaiian traditions can seem contradictory. Pele tradition has the volcano goddess moving from island to island, searching for a home for her eternal fires. One account moves her sequentially from Kaua'i through the island chain to Hawai'i, matching the geologist's account of volcanic activity occurring first on the oldest, northwestern islands, and moving in sequence to its current activity on the Big Island. In contrast, the tradition of the birth of the islands by Papa-hānau-moku goes in the opposite direction: Hawai'i is born first, followed by other islands. One short account tells it:

*'O Wākea noho iā Papa-hānau-moku
Hānau 'o Hawai'i he moku
Hānau o Maui he moku
Ho'i 'o Wākea noho iā Ho'o-hōkū-ka-lani
Hānau 'o Moloka'i he moku
Hānau 'o Lāna'i ka 'ula, he moku
Līlī'ōpū punalua 'o Papa iā Ho'o-hōkū-ka-lani
Ho'i hou 'o Papa, noho iā Wākea
Hānau 'o O'ahu he moku
Hānau 'o Kaua'i he moku
Hānau 'o Ni'ihau he moku
He 'ula 'o Kaho'olawe*

Wākea lives with Papa-hānau-moku
Hawai'i is born, an island
Maui is born, an island
Wākea returns and lives with Ho'o-hōkū-ka-lani
Moloka'i is born, an island
Lāna'i is born, an afterbirth, an island
Papa is jealous of Ho'o-hōkū-ka-lani
Papa returns to live with Wākea
O'ahu is born, an island
Kaua'i is born, an island
Ni'ihau is born, an island
Kaho'olawe is an afterbirth

Of course, the key idea is that Pele is not so much the creator of the islands as the shaper of the land. She is Pele-kālai-honua-mea (Pele-sacred-land-hewer), who keeps the fires burning at her home in Halema'uma'u and sends her flows over the landscape. There are many stories relating to the volcanic formations, attributed to Pele, including people turned to stone by the wrath of the goddess. One of these, the dog demi-god Ka-uhi-ī-maka-o-ka-lani was turned to stone on the windward slopes of O'ahu and was strong enough to attempt to rise from his rock form to a crouching stance, but could go no further than that. Later western visitors gave him his popular current name of Crouching Lion (mindless that there are no lions in Hawai'i).

Major geological forces are also incorporated into the legends about the demi-god Maui. Despite some popular recent retellings, the demi-god Maui did not fish up the islands of Hawai'i from the ocean bottom with his magic hook Manai-a-ka-lani. The islands, after all, had already been created by Papa and Wākea! His attempt was to join the separated islands into a single mass. In the Kumulipo, the lines relating to this are clear, as Maui's mother tells him:

*E ki'i 'oe i kou makukāne
Aia i laila ke aho, ka makau
'O Manai-a-ka-lani 'o ka makau ia
O ka louna o nā moku e hui
i ka moana kahiko*

Get it from [your] father
There is the line, the hook
Manai-a-ka-lani, that is the hook
For snagging the islands to join them together
in the ancient sea...

The Hilo story of the islet of Mokuola, a sacred healing site in Hilo Bay, is a variant of this story. According to it, Maui oversees the pulling together of the islands with Manai-a-ka-lani, collecting a great many chiefs and men to the task, and warning those pulling not to look back. Through their efforts, the island of Maui is pulled within a few feet of the island of Hawai'i when one of the pullers glances back. The line attached to Manai-a-ka-lani instantly snaps, and the great hook is thrown into the heavens (and is called by the Western world Scorpio), and all of the island of Maui slides back to its former location, except for the bit that had been snagged by the hook, the islet of Mokuola, which remained in Hilo Bay.

The idea that Maui could pull an island around at all is related to another interesting concept from ancient Hawai'i: that the islands were not grounded in place as piles of hardened basalt sitting on the sea floor, but floated on the sea like gigantic canoes. There is no coincidence that the word for island, "moku," is the same as that for a boat. Mythological islands upon which the gods lived (such as Kānehunamoku, where the major gods Kāne and his brother Kanaloa lived) were said to float about at no fixed location, and therefore could not be landed upon by mortals, but only gazed upon from afar, visible on the horizon at dawn perhaps, but unapproachable. The islands inhabited by people were more stable in their location, but a supernatural being such as Maui might use his power to draw them closer together.

From grand mythic chants such as the Kumulipo, to shorter chants, dances, and stories that celebrate places and deities such as Maui and Pele, many of the traditional accounts explaining the creation and naming of Hawaiian geological features remain with us today. They provide great insight into the manner in which local geology and geography was regarded in Hawaiian epistemology (world-view, beliefs, and knowledge), how phenomena such as earthquakes were explained in a cultural context, and how different aspects of the world can be defined in completely different terms by different cultures (Scorpio vs Manai-a-ka-lani, Crouching Lion vs Ka-uhi-ī-maka-o-ka-lani).

To explore in more detail Hawaiian cultural views of creation and geology, there are many sources, but these are good starting places:

Beckwith, M.W. 1972. *The Kumulipo: A Hawaiian Creation Chant*.

Emerson, N.B. 1915. *Pele and Hiiaka: A myth from Hawai'i*.

Luomala, K. 1969. *Maui-of-a-thousand-tricks*.

Summers, C. and E. P. Sterling (eds). 1993. *Sites of O'ahu*.