



Indigenous Cosmology: Māori of Aotearoa



The numerous objects and events that make up the cosmos were well known to the Māori and comprehensively understood well before the arrival of Pākehā (non- Māori).

The movements of constellations, the heliacal rising of stars, the arrival of comets, the phases of the Moon and many other astronomical phenomena were noted and examined. This detailed astronomical knowledge resulted in the Māori having a precise understanding of the seasons and helped the ancestors of the Māori to navigate across the vast expanse of the Pacific Ocean. Māori astronomical knowledge is known as

tātai arorangi.



But once Europeans started to set foot in these communities, alternative histories were easily propagated and subsequently became a naturalized part of the culture. By the twentieth century, for example, the Kwara'ae people of Malaita in the Solomon Islands had an origin myth that traced their ancestors back to the wandering tribes of Israelites, a Marquesan chant made reference to Queen Victoria being a descendent of the cultural figure Piko, a Hawaiian legend had incorporated the Noah and the Great Flood into its narrative, while in the 1920s, Henry Stowell (who sometimes wrote under the name Hare Hongi) made the observation... the Māori legend of Tawhaki (known elsewhere in Polynesia as Tafaki, Tafa'i, or Kaha'i) contained thirty parallels with aspects of Christ's life.

- Moon, P, 2017: 17

Māori Celestial Names - Key

Māori Name	Western Name
<i>Autahi, Atutahi, Aotahi</i>	Canopus
<i>Puanga, Puangarua, Puaka</i>	Rigel
<i>Matariki, Tātai o Matariki, Huihui o Matariki</i>	Pleiades
<i>Waiti</i>	A star in Matariki
<i>Waitā</i>	A star in Matariki
<i>Tupu-a-nuku</i>	A star in Matariki
<i>Tupu-a-rangi</i>	A star in Matariki
<i>Waipuna-ā-rangi</i>	A star in Matariki
<i>Ururangi</i>	A star in Matariki
<i>Tautoru, Te Kakau</i>	Orions Belt
<i>Mahutonga, Te Taki o Autahi, Te Punga</i>	Southern Cross
<i>Taumata Kuku</i>	Aldebaran
<i>Ngā Whetu Matarau</i>	The Pointers
<i>Te Waka a Tamarereti,</i>	Tail of Scorpio
<i>Whānui</i>	Vega
<i>Poutūterangi</i>	Altair
<i>Putara</i>	Betelgeuse
<i>Rehua</i>	Antares
<i>Whakaahu</i>	Castor, Pollux
<i>Takurua</i>	Sirius
<i>Te Mangaroa, Mangoroa, Te Ika a Maui, Te Ika nui, Te Ika roa</i>	Milky Way
<i>Tamanuitera, Ra, Komaru, Mamaru</i>	Sun
<i>Marama, Mahina, Hina</i>	Moon
<i>Whiro</i>	Mercury
<i>Meremere-tū-ahiahi, Kōpū, Tawera</i>	Venus
<i>Papatuanuku</i>	Earth
<i>Rangawhenua</i>	Mars
<i>Pareārau, Hine i Tiweka, Kopu nui, Wahine Tiweka, Wahine Karihika</i>	Jupiter
<i>Rongo</i>	Saturn

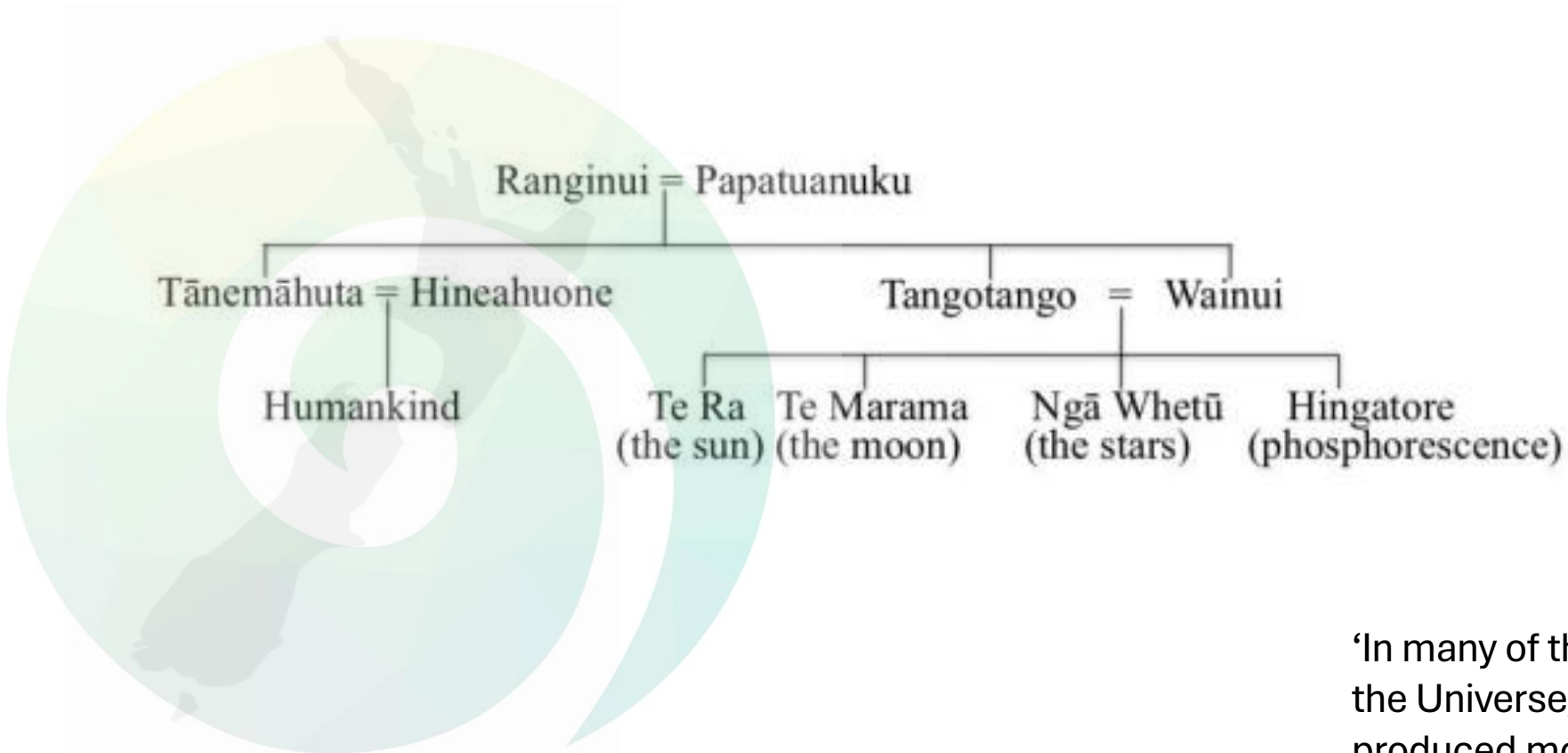
‘Māori astronomy impacted on many aspects of Māori culture, traditions and belief, from the origins of the Universe, to traditional calendrical systems, to the use of astronomy in language, architecture, agriculture and oceanic navigation’.

Harris & Matamua, 2013:328

‘Due to the oral nature of traditional Māori society, astronomical knowledge was often contained in mythology, rituals, incantations, songs and the arts of carving and weaving. Therefore, a unique genre of language pertaining to Māori astronomy developed, and examples of this language can be found within Māori idioms, proverbs, chants, songs, incantations and laments. This language uses naturally-occurring astronomical events to describe and discuss people or groups, their characteristics, behaviour and interactions’.

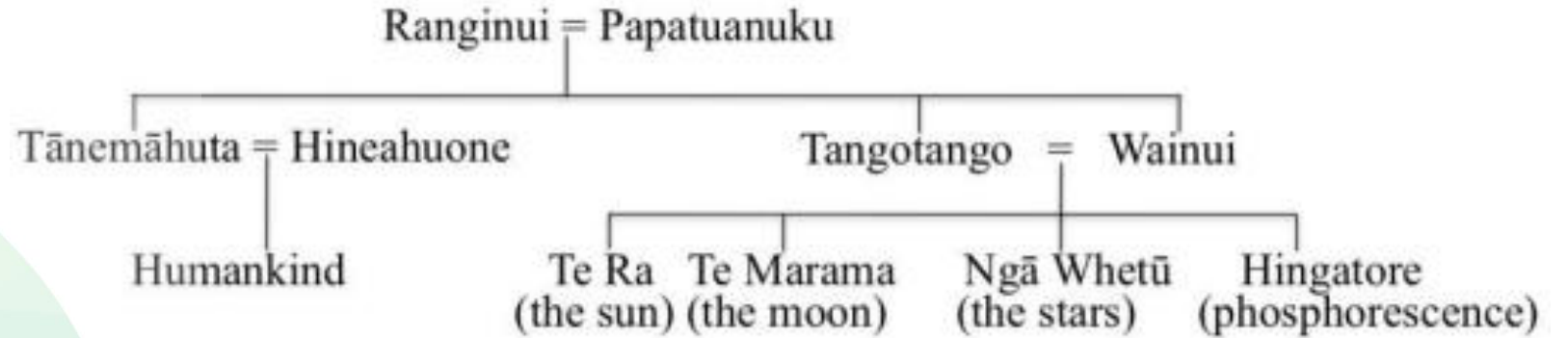
Harris & Matamua, 2013:330

In the beginning...



‘In many of the recollections of the creation of the Universe, it is said that Rangi and Papa produced more than seventy children’.

In the beginning...

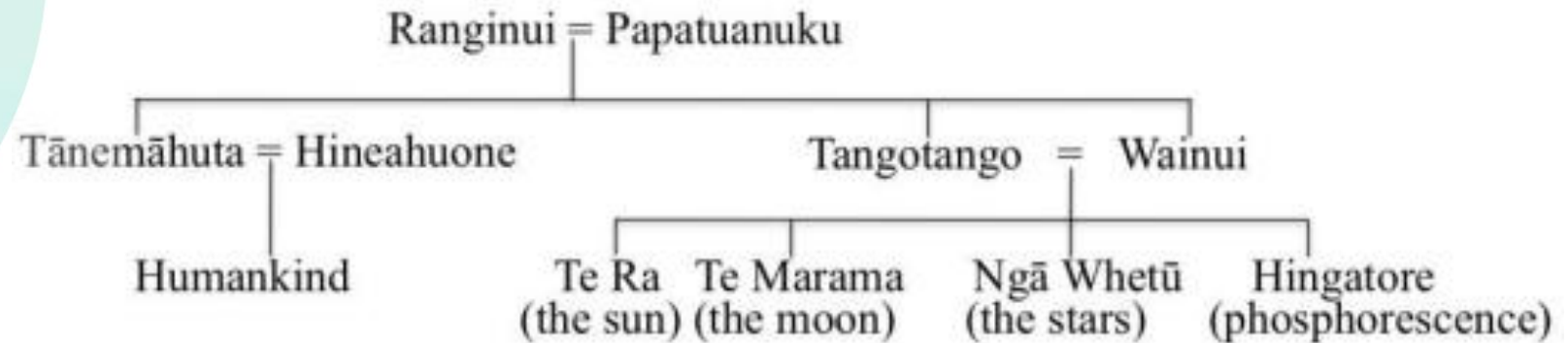


Tāne, imbued with te ira atua (the godly aspect), also obtained te ira tangata (the human aspect) from the heavens before creating and implanting both aspects within Hineahuone, the first woman. She in turn gave birth to humankind, which accounts for the belief that people possess both a human and spiritual nature.

Teara.govt.nz (NZ Dictionary)

In the beginning...

‘The stars were perceived as beings, who were bound together as a family through a hierarchical structure. The lineage of the stars begins with Rangi and Papa and the union of their children Tangotango and Wainui. After the separation of Rangi and Papa narratives from Mataatua state that Tāne Mahuta asked his siblings Tangotango and Wainui to give the children to him so that he could adorn their father, Ranginui. The children he wanted were Tamanuiterā (the Sun), Mārama (the Moon) and whetū (the stars), and once he received them, he sought the help of his relative, Tamarereti, who was the owner of a canoe called Puna Ariki. Three baskets were placed in the canoe. The first two baskets contained the Sun and Moon, while the third basket contained the stars in the Milky Way (Te Mangaroa). Being the eldest of all the stars, Atutahi (Canopus) was suspended from the outside of the basket, and he remains the brightest star in the sky outside of the Milky Way’.



Te Rā – born of Rangi & Papa

The Sun - Te Rā

- During winter he was known as Te Rā-tūoi (the lean sun)
- During summer Te Rā-kura (the red sun)
- Midday was Te Pouputanga-o-te-rā (the post of the sun) or Te Pou-tū-a-tamanui-te-rā (the standing post of the sun).
- Dawn and sunset were called Te Tamanui-te-rā-kā (the burning sun).
- The flight of the sun across the sky was described as Te Manu-i-te-rā (the bird of the sun).

Māori mythology says that after the world's creation the sun moved across the sky so rapidly that night and day were very short; there was not enough time for people to perform daily tasks or get sufficient sleep. The demigod Māui devised a plan to slow the sun. He and his brothers made several strong ropes and journeyed to where the sun rises from the underworld. They built a low wall to hide behind and laid out their ropes as nooses. When the sun appeared, the brothers leapt out from their hiding place, threw the ropes over the sun, and ensnared it. Their quarry securely held, Māui leapt up and beat the sun until it cried for mercy. Today Māori see the rays of the sun being the remnants of the ropes used to slow its path



Marama – born of Rangi & Papa



‘The monthly calendar (maramataka) was based on the phases of the Moon. The beginning of the month was signified by the phase immediately following New Moon, as this was the time when the Moon was said to have died and gone to bathe in Tāne te Waiora, the life-giving waters of Tāne. The maramataka was instrumental in determining when to plant and harvest crops, as well as the appropriate times to hunt and fish for specific animals. It helped the Māori monitor seasonal changes, weather, migratory patterns of birds and fish, as well as enabling the accurate tracking of rituals and other important matters. There were many maramataka, as they varied from tribe to tribe’.



Example:

Tamatea is the Māori name for the lunar phase "first quarter".

- Corresponds to the the 21st to 24th nights after the full Moon
- These nights are variations of each of these Tamatea
 - Tamatea-āio
 - Tamatea-angana
 - Tamatea-kai-ariki
 - Tamatea Tuhāhā or Tamatea Whakapau

Over the years Tamatea has become translation of 'strength, brave, clean, explorer' and has become a popular name for both places and people



Longest place name in the world

‘Taumata whakatangi
hangakoauau o
tamatea turi
pukakapiki maunga
horo nuku pokai
whenua kitanatahu",

(which translates to "the place where Tamatea, the man with the big knees, who slid, climbed and swallowed mountains, known as 'land eater', played his flute to his loved ones').



Moana (Sea) – born of Rangi & Papa

The ocean was considered by Māori to be a god, with Ranginui, the deity representing the sky, having at one stage eloped with both Papatuanuku, the ‘Earth Mother’, and then Wainuiatea, the ‘Great Open Space of Waters’. The offspring of this latter union was a series of divinities, which included Moana-nui (the great ocean), Moana-roa (the extensive ocean), Moana-potango (the gloomy ocean). The understanding of the ocean had developed from being just a large body of water to a powerful supernatural being, or indeed, several deities... It was no wonder the ocean continued to be popularly regarded as a deity – it was the fulfilment of all the imaginative musings about eternity. The sea had no frontiers, was an inexhaustible source of food and the origin of the weather and barring the rare occurrence of a volcanic eruption or an earthquake, was the most powerful and terrible force people encountered.



[Māori mythology] ‘were not punctuation points in a linear history, but were part of a cyclical view of the world, in which the themes and ideas in the creation and discovery narratives had current applications. Taken one stage further, the ancestors’ appeared in the living as history emerged and was actualised’. The past and the present were thus compressed into a single concept’.

Moon, P, 2017: 26 cited in Glacken C.J. 1968:29

“Ka tō he rā, ka whiti he rā” literally means: “The Sun will set and the Sun will rise again.” Phases like this are used in everyday language. More widely, it also describes the never-ending progression of time and also a reminder that no matter how challenging life can be, time will not cease.

Pauline Harris & Rangi Matamua, et al, 2013: 330

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Polynesian myths

Samoa and Tonga

The Samoan equivalent of Ranginui, the sky father, and Papatūānuku, the earth mother, begins with Tagaloa-lagi (Tangaroa-rangi to Māori), who created the islands of Samoa by throwing down rocks from the heavens. One of these rocks, Papatu (standing rock), married Papa'ele (low-lying rock). Papatu represented the father mountain, and Papa'ele the earth mother. From this union came the gods. The gods married, and from them came human life. In the Tongan version of this account, Papalimu married Papakele.

Tahiti

In Tahitian mythology Ātea, the sky father, married Papatu'oi, the earth mother. Their child was Tumunui, the great foundation, who married Paparahaha, the life-giving earth. Their child in turn was Te Fatu, the lord of the heavens and ancestor of all life.

Hawaii

The Nanaulu genealogies of Hawaii are very similar to the traditions of Tahiti. During creation Wakea, the sky father, married Papa, who is described as a gourd. Wakea moulded the gourd to create the universe. First, he fashioned Papa into a drinking vessel – this became Papahanaumoku, the earth mother. The lid of the gourd formed the heavens, and its juices became the rain and clouds. The seeds of the gourd were implanted into the heavens as the sun, moon and stars. Wakea and Papa then created the island of Kahiki, the ancestral homeland of the Hawaiians. The descendants of Wakea became the high chiefs of each of the Hawaiian islands.

Rarotonga

Rarotonga has a particularly beautiful tradition of the sky and earth. Creation began when the goddess Varima-te-takere plucked Ātea, the sky father, from her side. Atea moved about, changing shape and increasing in size to form the heavens. He then married Paparoa-i-te-itinga, the earth mother stretching into the sunrise. Paparoa-i-te-itinga gave birth to five sons, the gods Tangaroa, Rongo, Tāne, Tongaiti and Tangi'ia, and to Te Tumu, the foundation stone. Te Tumu then married Paparoa-i-te-opunga, and from this union came human life.



“In his monumental work on historical geography, *Traces on the Rhodian Shore*, Clarence Glacken argued that it would be difficult to exaggerate the importance of astrology in the history of human thought, but that it would be equally hard to appreciate its full significance. The stars certainly illuminated Polynesian mythology, but also served a deeper purpose as one of the fundamental ‘scientific’ principles of natural law in the pre-Newtonian world:

‘The stars were not themselves affected by their movement and light, since they were eternal and incorruptible. But their motion and rays had to have some effect, and an outlet for this vast store of energy was found in our elemental world, whose changes and fluctuations and variations paralleled the shifting patterns of the eternal heavens and the varying projections of the rays of light....the earth was thought of as the center and bottom of the universe, and it was fitting that inferiors should be ruled and governed by superiors – the heavenly bodies. Theology, astronomy, astrology, meteorology, and geography overlapped in such cultures to the point where there were merely branches of the same generic discipline. For Polynesians, there was a harmony in the natural world they experienced that was lost on most later Western onlookers”.



‘However, getting to the historical essence of these myths and legends is not as simple as just peeling off the metaphors and holding up whatever remains for examination...

The spiritual realm from which these accounts and their characters were believed to have originated was understood by Māori to be beyond the ability of humans to comprehend fully. Consequently, the Māori accounts of the formation and discovery of New Zealand –while containing both figurative and literal elements –can be perceived as adaptations of supernatural knowledge made to fit the limitations of human understanding, perhaps just as much as merely metaphor-laden explanations of creation. In addition, many of the gods in Māori mythology tended to be projections of the temporal aspects of the society that they presided over, doing the things humans do (cultivating kumara, going fishing, felling trees), all of which tied in with the agricultural basis of Māori communities’.



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