

**TONGAN HOA: INSEPARABLE YET INDISPENSABLE PAIRS/  
BINARIES**

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We dissect hoatism as a fundamental in Tongan philosophical thinking and feeling that is based in the concept and practice of hoa as inseparable yet indispensable pairs/binaries, with examples taken from across nature, mind, and society. From a tāväist philosophical perspective, everywhere in reality, as in nature, mind, and society, is intersection, and there is nothing above and beyond connection and separation. This is derived from the general tāväist fact that all things in reality stand in eternal relations of exchange, giving rise to order and conflict, both having the same logical status, when equal and opposite identities, entities, or

tendencies meet at a common point, defined by a state of noa 0 or zero-point. The same applies to the mata-ava eye-hole, as a hoa pair/binary, where both are everywhere in reality and there is nothing over and above mata eye, and ava hole.

### **Tukupā Dedication**

To the memories of Epeli Hau'ofa—whose ever-lasting laumālie soul, is now in the already-taken-place kuohili/kuongamu'a past before us, lingering on to the yet-to-take-place kaha'u/kuongamui future, behind us—both currently taking place in the lotolotonga/kuongaloto present. By creatively yet critically dealing with hoa pairs/binaries in *Kisses in the Nederends*, *Tales of the Tikongs*, and *Our Sea of Islands*, Hau'ofa carried on his shoulders the legacies of our forebears, who had set them in motion in tā-vā time-space and fuo-uho form-content, both ontologically-epistemologically and historically-metaphorically.

Like fuo-uho form-content, on the concrete level, tā-vā time-space, on the abstract level is an inseparable yet indispensable hoa pair/binary, in reality, as in nature, mind-heart, and society. The severance of tā time, from vā space, like fuo form, from uho content, renders reality both “tā-less” “timeless” and “fuo-less” “formless,” just as the severance of vā space from tā time, and uho content, from fuo form, renders reality both “vā-less” “spaceless” and “uho-less” “contentless.” By virtue of both their inseparability and indispensability, reality (i.e., temporality-spatiality, formality-substantiality [and functionality and practicality]) is therefore four-dimensional rather than three-dimensional, both ontologically-epistemologically and historically-metaphorically.

—Tā-Vā Time-Space Philosophy of Reality

### **Talakamata Introduction**

THE TONGAN CONCEPT AND PRACTICE OF HOA, inseparable but indispensable pairs of tatau equal and kehekehe opposite binaries, is deeply embedded in Tongan philosophical fakakaukau thinking and ongo feeling, across the gamut of 'iai reality—as in natula nature, 'ilo knowing and ongo emotion/feeling, and society (see Māhina 2002a: 303–8). Hoa Pair/Binary, as a concept and a practice, is also deeply anchored in Moanan Oceanian cultures, evident in the 49

cognates of *hoa/soa* pair/binary in Moanan Oceanian languages (Greenhill and Clark 2011). Thus, *hoa* pair/binary is a central and fundamental concept and practice in Moanan Oceania generally and in Tonga specifically and is critiqued in the general context of the Indigenous Tongan *Tā-Vā* Time-Space Philosophy of Reality (see Ka‘ili, Māhina, and Addo 2017: 1–17).

In this joint *fo‘ou* “original” essay, we set out to critically *faka‘eke/fekumi/fakatotolo* investigate the ‘ilo knowledge (and *poto* skills) on the one hand, and *ongo* feeling (and *loto* desire) on the other, dialectically constituted or composed in *fonua/kalatua* culture and historically transmitted or communicated in *tala/lea* language, both as social *vaka* mediums/vessels or *hala* vehicles. Such ‘ilo knowledge and *poto* skill, as well as *ongo* feeling and *loto* desire, is acquired in the process of *ako* education, where ‘ilo knowledge is “applied” through *poto* skill on the one hand, and *ongo* feeling is demanded in terms of *loto* desire, on the other. As a philosophy, Tongan *ako* education can be generally defined as a *tā-vā* temporal-spatial, *fuo-uho* formal-substantial, and ‘aonga-ngāue functional-practical transformation of the ‘atamai mind and *ongo* feeling from *vale* ignorance, to ‘ilo knowledge and *ongo* feeling on the one side, and to *poto* skill and *loto* desire on the other side, where the former precedes the latter in that logical order of precedence (see Māhina 2008b: 67–96).<sup>1</sup> From a *tāvāist* philosophical perspective, however, ‘ilo knowing/knowledge and *ongo* emotion/feeling are considered to be ‘ilo knowledge and *ongo* feeling of *tā* time and *vā* space on the abstract level, and *fuo* form and *uho* content on the concrete level.

Both Tongan concept and practice on the one hand, and ‘ilo knowing and *loto* desiring on the other are themselves classified into *hoa* pairs/binaries. Both types of *hoa*, namely, *hoatatau* equal/same/similar and *hoakehekehe* opposite/different/dissimilar,<sup>2</sup> are inseparable albeit indispensable in reality, as in nature, mind-feeling, and society (see Ka‘ili 2017a; Lear 2018). Both *hoatatau* and *hoakehekehe* as pairs of *tatau* equals and *kehekehe* opposites, variously exist as *hoamālie* and *hoatamaki*, which in turn coexist as *hōhoatatau* and *hōhoakehekehe* and *hōhoamālie* and *hōhoatamaki*,<sup>3</sup> respectively. The Tongan words *tatau* and *kehekehe* also mean “same” and “difference,” respectively, as in the Tongan terms *mālie* and *melie*<sup>4</sup> referring to “sweet” and *tāmaki*,<sup>5</sup> *mahi*, and *kona* to “sour”—all as inseparable but indispensable *hoatatau* equal/same/similar and *hoakehekehe* opposite/different/dissimilar pairs/binaries. The word *mālie* is a variation of the term *melie*, meaning “sweet,” where the former also means “beauty,” which is a function of both *tatau* symmetry and *potupotutatau* harmony as a *hoatatau* equal pair/binary. Similarly, both *mālie* and *faka‘ofo‘ofa* mean “beauty,” forming another *hoatatau* equal/same/similar pair/binary. By way of demonstration and further reflection, some selected examples will be drawn from across reality, including, *inter alia* natural-physical, psychological-emotional, and social-cultural objects, occurrences, and states of affairs.

The ‘ilo knowing and ongo feeling of hoa pairs/binaries are made up of a plurality and complexity of physical-material, psychological-emotional, and social-cultural entities. In both affect and effect, hoa pairs/binaries are, as both process and outcome, a derivative of the fakafelavai intersecting or fakahoko connecting and fakamāvae separating, ‘atamai mind, and fakakaukau thinking identities in the ‘uto brain on the one hand, and ongo feeling and loto desire tendencies in the fatu/mafu heart on the other. These identities and tendencies are, by nature, tā-vā temporal-spatial, fuo-uho formal-substantial, and ‘aonga-ngāue functional-practical, all taking place in tā time and vā space. Specifically, this is most evident in hoatatau/hōhoatatau or hoamālie/hōhoamālie equal/same/similar pairs/binaries and hoakehekehe/hōhoakehekehe or hoatamaki/hōhoatamaki opposite pairs/binaries. For example, tu‘otu‘atau equal competencies and tu‘otu‘akehekehe unequal competencies<sup>6</sup> and ‘alomālie/alomelie good weather and ‘alotāmaki bad weather.<sup>7</sup> In both cases, there involves a fakatau/fakatatau mediation of the fakafelavai intersecting or fakahoko connecting and fakamāvae separating tendencies within and across the sino body, ‘ilo knowing, and fonua/nofo-‘a-kāinga/sōsaieti society, transforming them from a situation of felekeu/fepaki chaos to a state of maau/fenāpasi order through sustained tatau symmetry, potupotutatau harmony, and mālie/faka‘ofo‘ofa beauty.

#### *Tā-Vā Time-Space Philosophy of Reality*

The Indigenous Tongan Tā-Vā Time-Space Philosophy of Reality is a philosophy of existence<sup>8</sup> that advances a view that tā and vā time and space on the abstract level, like fuo and uho form and content on the concrete level are the common vaka mediums/vessels or hala vehicles in which all things independently exist in a single level of reality (see Anderson 2007; Māhina 2011a: 140–66). As ontological entities, tā time and vā space, like fuo form and uho content, are epistemologically arranged in different ways across cultures (and languages). In Tonga (and Moana Oceania), tā time and vā space, like fuo form and uho content, are organized in plural, temporal-spatial, collectivistic, holistic, and circular ways (in stark contrast to their organization in singular, techno-teleological, individualistic, atomistic, and linear ways in the West) (see Māhina 2010: 168–202, 2017a: 105–32). Herein, tā time and fuo form are definers of vā space and uho content, which are, in turn, composers of tā time and uho form, with the former as verbs and the latter as nouns (Ka‘ili 2017a; Potauaine and Māhina 2011: 16). From a tāvāist philosophical perspective, tā time and vā space, like fuo form and uho content, are inseparable yet indispensable as hoa pairs/binaries in reality, as in nature, mind, and society (see Ka‘ili 2017a, 2017b), and, by extension, four-dimensional rather than three-dimensional. Moreover, tā time and vā space, like fuo form and uho content, are considered as me‘a matter, which is, in turn, taken as ivi energy classified into me‘akula

red matter and me'a'uli black matter, and, by extension, ivikula red energy and ivi'uli black energy (Potauaine and Māhina 2011: 194–216).

Furthermore, from a tāvāist philosophical view, all things in 'iai reality, tā-vā temporality-spatiality (and fuo-uho formality-substantiality); or four-sided-dimensionality stand in eternal relations of exchange, giving rise to maau/fenāpasi order and felekeu/fepaki chaos, which are of the same logical status in that maau/fepaki order, is itself a form of felekeu/fepaki chaos, especially when equal/same/similar and opposite/different/dissimilar forces, energies, or tendencies meet at a common point (see Māhina 2003, 2008a: 31–54). As corollaries, these eternal relations of exchange take, by way of indivisible but indispensable hoa pairs/binaries, the form of fakahoko connection and fakamāvae separation or fakafelavai intersection, where they are fakatatau mediated across all contexts and on all levels, in the productive process (see Māhina 2002b: 5–9, 29–30; Māhina-Tuai 2017: 245–66; Potauaine 2017: 154–79). These points of fakafelavai intersection and fakatatau mediation, are manifested in terms of mata eye/point and/or ava hole/point, that is, mata-ava eye-hole/point (see Potauaine 2010; Potauaine and Māhina 2011: 194–216), which are, in turn, expressed as hoa equal/same/similar and opposite/different/dissimilar pairs/binaries on both abstract and concrete levels (see Ka'ili 2017a, 2017b). From a tāvāist philosophical point of view, then, it means that everywhere in reality, as in nature, mind, and society, is fakafelavai intersection and by implication mata-ava eye-hole/point, and that there is nothing over and above fakahoko connection and fakamāvae separation, and by implication, mata eye/point and ava hole/point (see Anderson 2007; Potauaine and Māhina 2011:194–216). By the same token, everywhere in 'iai reality, tā-vā temporality-spatiality (and fuo-uho formality-substantiality), as in nature, mind, and society, is hoa pairs/binaries, and there is nothing over and above pairs of equal/same/similar and opposite/different/dissimilar binaries.

It is worth noting here that it requires two or more entities to create a fakafelavai intersection. For instance, it takes two intersecting lines (a hoa pair/binary of lines) to form a mata eye/point, or its inverse, ava hole/point.

The tenets of tāvāism include numerous hoa pairs/binaries. Here are some of the tenets:

- that tā and vā, time and space, as ontological entities are the common vaka mediums/vessels, or hala vehicles,<sup>9</sup> in which all things exist, in reality, as in nature, mind, and society (see Potauaine 2010);
- that tā and vā, time and space, as epistemological entities are socially organized in different ways within and across cultures and languages;
- that tā and vā, time and space, are the abstract dimensions of fuo and uho, form and content, which are, in turn, the concrete manifestations of tā and vā, time and space;

- that, as a corollary, *tā* and *vā*, time and space, like *fuo* and *uho*, form and content, are organized in plural, temporal-spatial, collectivistic, holistic, and circular ways;<sup>10</sup>
- that *tā* and *vā*, time and space, like *fuo* and *uho*, form and content, are inseparable yet indispensable as both ontological and epistemological identities in one level of reality as in nature, mind, and society;
- that *tā* and *vā*, time and space, like *fuo* and *uho*, form and content, that is, reality, on both the abstract and concrete levels, are four-dimensional rather than three-dimensional;
- that ‘*iai* reality, or *tā-vā* temporality-spatiality (and *fuo-uho* formality-substantiality), is *tapafā/fa’ahifā* four-dimensional, rather than *tapatolu/fa’ahitolu* three-dimensional, made up of *tā* time, as *tapataha/fa’ahitaha* one dimension, and *vā* space as *tapatolu/fa’ahitolu*, three dimensions;
- that *tā* and *vā*, time and space, like *fuo* and *uho*, form and content, are considered as *me’a* matter and *me’a* matter, is in turn, *ivi* energy, organized into *me’akula* red matter and *me’auli* black matter, and/or, by extension, *ivikula* red energy and *ivi’uli* black energy (Potauaine and Māhina 2011: 194–216); see also Māhina, Ka’ili, Potauaine, Moa, and Māhina-Tuai 2012: 37–55);
- that *tā* time is definer of *vā* space, and *vā* space, is, in turn, composer of *tā* time, on the abstract level, and *fuo* form is definer of *uho* content, and *uho* content, is, in turn, composer of *fuo* form on the concrete level (see Anderson 1961, 2007; Māhina 2017b: 133–53; Potauaine and Māhina 2011);
- that, as a corollary, *tā* time, is a verb, or action led, and *vā* space is a noun, or object based, on the abstract level and *fuo* form, is a verb, and *uho* content, is a noun on the concrete level (see Ka’ili 2017a: 62–71);
- that ‘*ilo* knowing and ongo feeling are ‘*ilo* knowing and ongo feeling of *tā* time and *vā* space on the abstract level and *fuo* form and *uho* content on the concrete level;
- that ‘*ilo* knowing and ongo feeling as ‘*ilo* knowing and ongo feeling of *tā* time and *vā* space and of *fuo* form and *uho* content are dialectically composed in *fonua/kalatua* culture and communicated in *tala/lea* language, both as a social *vaka/hala* mediums/vessels/vehicles in both *tā* time and *vā* space (see Māhina 2008b: 67–96);
- that the *fehālaaki* errors in *fakakaukau* thinking and *loto* desire are commonly a problem of ‘*atamai* mind and ongo feeling, but not of reality, where the ‘*atamai* mind and *fatu/mafu* heart are separated from reality/temporality-spatiality;
- that all things in reality, as in nature, mind, and society, stand in eternal relations of exchange, giving rise to *maau/fenāpasi* order and/or *felekeu/fepaki* chaos;

- that, as a corollary, all things in reality, as in nature, mind, and society, exist in pairs/binaries of equal/same/similar and opposite/different/dissimilar forces, energies, or tendencies, as in *tā* time and *vā* space, *fuo* form and *uho* content, *'ilo* knowing and *ongo* feeling, *tu'a* outside/external and *loto* inside/internal, and *maau/fenāpasi* order and *felekeu/fepaki* chaos;
- that, as a corollary, both *maau/fenāpasi* order and *felekeu/fepaki* chaos are of the same logical status in that *maau/fenāpasi* order is a form of *felekeu/fepaki* chaos;
- that, as a corollary, *maau/fenāpasi* order, is when two or more equal/same/similar and opposite/different/dissimilar forces, energies, or tendencies meet, that is, *fakafelavai* intersect, *fakahoko* connect, and *fakamāvae* separate at a common point, that is, *mata* eye and/or *ava* hole (Māhina 2017b: 133–53);
- that, as corollary, a *mata* eye/point and/or *ava* hole/point, is defined by equal/same/similar and opposite/different/dissimilar *fakafelavai* intersecting, or *fakahoko* connecting, and *fakamāvae* separating, forces, energies, or tendencies, respectively, in the form of *mata* eye/point and/or *ava* hole/point (see Potauaine and Māhina 2011);
- that, as a corollary, a *mata* eye/point and/or *ava* hole/point, is defined by the *fakafelavai* intersection, that is, *fakahoko* connection and *fakamāvae* separation, of two or more *kohi* lines (a *kohi* line is a collection of *mata* eyes/points and/or *ava* holes/points, and *vā* space, is a summation of *kohi* lines) (Māhina 2017b: 133–53);
- that, as a corollary, everywhere in reality, as in nature, mind, and society, is *fakafelavai* intersection, that is, *mata-ava* eye-hole, and there is nothing over and above *fakahoko* connection, that is, *mata* eyes/points and *fakamāvae* separation, that is, holes/points (Potauaine 2010; see also Potauaine and Māhina 2011; Māhina 2017b: 133–53); and
- that, as a corollary, the *mata* eye/point and/or *ava* hole/point, defined by *fakafelavai* intersection, that is, *fakahoko* connection and *fakamāvae* separation, is where *ivi* energy, is most dense and intense.

Tāvāism propagates a view that *fehālaaki* errors, in *fakakaukau* thinking, and *loto* desiring, are a problem of *'atamai* mind and *ongo* feeling, and not of *'iai* reality (*tā-vā* temporality-spatiality and *fuo-uho* formality-substantiality or *tapafā/fa'ahifā* four-sided-dimensionality) (see Māhina 2008b: 67–96; see also Anderson 2007). Basically, the most common *fehālaaki* errors in *fakakaukau* thinking and *loto* desiring are involved in their *fakamāvae* separation from (and not *fakahoko* connection to) *'iai* reality. Normally, this is most conspicuous in the *fakamāvae* separation of *tā* time and *vā* space, as well as *fuo* form

and uho content on both abstract and concrete levels, as in the classic case of the severance of tā time and fuo form from vā space and uho content, in both their inseparability and their indispensability, which results in the treatment of things as tapatolu/fa'ahitolu three-dimensional, rather than tapafā/fa'ahifā four-dimensional (see Anderson 2007; Māhina 2017b: 133–53; Harvey 1980: 418–34). The same equally applies to the elevation of fakahoko connection, over and above fakamāvae separation, which are both fakatatau mediated at the point of fakafelavai intersection, as well as the fakamāvae separation of hoa as equal/same/similar and opposite/different/dissimilar pairs/binaries, which are indivisible yet indispensable in reality, as in nature, mind, and society (see Ka'ili 2017a; Lear 2018; Potauaine 2010).

*Hoa Pairs/Binaries of Equals and Opposites: Selection of Hoa Pairs/Binaries*

By way of further demonstration and reflection, we now canvass selected examples of hoa pairs/binaries from across Tongan fonua/kalatua culture and tala/lea language, where, as vaka mediums/vessels, or hala vehicles, 'ilo knowledge (and poto skill), and ongo feeling (and loto desire) (Māhina 2008b:67–86), relating to hoa pairs/binaries of equals and opposites (Ka'ili 2017a, 2017b), are dialectically constituted or composed and historically transmitted or communicated in both tā time and vā space. Herein, both 'ilo knowledge and poto skill in the 'uto brain on the one hand, and ongo feeling and poto desire in the fatu/mafu heart on the other are fakatatau mediated as psychological, emotional, and physical hoa pairs/binaries (Māhina 2008b: 67–96).<sup>11</sup> The concept and practice of hoa pairs/binaries of equals and opposites is imbued with fakafelavai intersecting, or fakahoko connecting and fakamāvae separating physical-material, psychological-emotional, and social-cultural entities, with tā-vā temporal-spatial, fuo-uho formal-substantial, and ngāue-'aonga functional-practical significance. The examples of hoa pairs/binaries are canvassed within and across: 'aati art and litesā literature, faiva faifolau voyaging/navigation and faiva fakatupu creation, faiva lea heliaki proverbial sayings and faiva ta'anga poetry, and faiva hiva music and faiva haka dance. Hoa Pairs/Binaries are found in kupesi where two-lines intersect to create geometrical designs or motifs, hahake-hihifo east-west and tokelau-tonga north-south, 'iai ontology and vakai epistemology, and tā-vā time-space and fuo-uho form-content. Hoa Pairs/Binaries can also be found within and across tufunga materials art: tufunga faito'o healing, tufunga vaka boat-building, tufunga kava kava making, and tufunga fale house building. Furthermore, we have hoa pairs/binaries within and across fonua "person" and "place", fonua/kalatua culture, tauhivā "relationality" and faifatongia "functionality,"<sup>12</sup> and nga'ahoa the Tongan binary counting system.



### 1. *Hoa Pairs/Binaries: 'Aati Art and Litlesā Literature*

By 'aati art and litlesā literature, we collectively refer to the three divisions of Tongan 'aati arts, namely, faiva performance, tufunga material, and nimamea'a fine arts (see Helu 1999a; Māhina 2007; Māhina, Ka'ili, and Ka'ili 2006), both the organization and the execution of which are done by way of hoa pairs of equal/same/similar and opposite/different/dissimilar binaries (Ka'ili 2017a, 2017b; Lear 2018) (see also items 4 and 5). Whereas faiva performance arts are tefito-'i-loto-he-sino body-centered, both tufunga material and nimamea'a fine arts, are tefito-'i-tu'a-he-sino non-body-centered. Further, both faiva performance arts and tufunga material arts are led mainly by tangata men, and nimamea'a fine arts by fefine women (see Māhina 2011a: 140–66). In all three genres, tatau symmetry and potupotutatau harmony, produce mālie/faka'ofō'ofa beauty, as the internal or intrinsic qualities of 'aati art on the one hand, and māfana warmth and vela fieriness create tauēlangi climatic elation, as the external or extrinsic qualities of 'aati art on the other (see Ka'ili 2017c; Māhina 2005b: 168–83; Lear 2018). The latter, as outcomes dependent on the former as processes, have the affect and effect of some therapeutic, hypnotic, or psychoanalytic importance. That is, mālie/faka'ofō'ofa beauty is fakatatau mediated within and across the hoa pair/binary of tatau symmetry, and potupotutatau harmony and tauēlangi climatic elation is fakatatau mediated, within and across the hoa of māfana warmth and vela fieriness.

### 2. *Hoa Pairs/Binaries: Faiva Faifolau Voyaging / Faiva Toutaivaka Navigation*

The performance art of faiva faifolau voyaging (or toutaivaka navigation), abounds in equal/same/similar and opposite/different/dissimilar hoa pairs/binaries, which are constantly fakatatau mediated, within and across the whole creative process by way of fakafelavai intersection, or fakahoko connection and fakamāvae separation (see items 7 and 11). Among these hoa pairs/binaries are the peau/ngalu waves and matangi/havili winds,<sup>13</sup> where the seascape movements of the vaka boat are fakatatau mediated at their fakafelavai intersection, or fakahoko connection and fakamāvae separation, as hydrodynamic and aerodynamic tendencies through sustained tatau symmetry, potupotutatau harmony, and mālie/faka'ofō'ofa beauty. Such a seascape movement of the vaka boat, between two ports, that is, point of taulanga-folau-mei-ai origination/departure, and point of taulanga-folau-ki-ai destination, can result in either taumu'atonu and taumulitonu<sup>14</sup> or taumu'avale and taumulivale,<sup>15</sup> with the former as tonu/mo'oni on-course, and the latter as vale/hala/loi off-course. When it is tonu/mo'oni on-course, it simply means that both the points of taulanga-folau-mei-ai origination/departure and taulanga-folau-ki-ai destination are 'iloa known, as opposed to being vale/hala/loi off-course,

where both points are ta'e'iloa unknown. While the former leads to a condition of vakama'u/vakahao/vakamo'ui safe voyage, the latter amounts to a situation of vakahē/vakamole/vakamate lost voyage.

### 3. *Hoa Pairs/Binaries: Fakatupu Creation*

This section deals with tufunga fakatupu creation as a material art, which is concerned with the kamata'anga beginning of kakai people and their 'ātakai environment, with a critical focus on two fakatupu creation talanoa stories, respectively, featuring the fakatupu creation of Tonga (see Māhina 1992), and the Judeo-Christian God's creation of Earth (Genesis 1: 1–31). As equal/same/similar and opposite/different/dissimilar hoa pairs/binaries, both kamata'anga beginning and ngata'anga ending are mata eye and ava hole, where one is the tatau mirror image of the other and inseparable yet indispensable and plural yet circular, in reality, as in nature, mind, and society (see Potauaine 2010). The fakatupu creation of Tonga began with Touia-'O-Futuna, the Great Maka, at the fakahoko connection and fakamāvae separation, that is, fakafelavai intersection of Vahanoa, the Vast, Static-yet-Hectic, Expanse of Moana Ocean, and Pulotu, the Ancestral Homeland and Afterworld, all as hoa pairs of equal/same/similar and opposite/different/dissimilar binaries. In other words, Vahanoa and Pulotu are the ancestral temporal-spatial hoa pair/binary. The static and hectic hoa pairs/binaries of Vahanoa and Pulotu gave rise to other fonua-tahi land-sea hoa pairings/binaries, which, in turn, gave way to 'Otua-tangata God-man hoa pairings/binaries. These 'Otua Gods took up their respective divine domains, namely, the Pulotu Afterworld, Maama Earth, and Langi Sky—thereby exerting control over both the human and material resources of society (see Māhina 1993: 109–21). This continued in force through the creative activities of immense social, political, and economic significance by Lo'au, the famous tufunga fonua social architect/engineer, which, inter alia, included the creation of a land tenure system and kava institution (see item 10 below) involving the establishment of both the Tu'i Ha'atakalaua and the Tu'i Kanokupolu dynasties (Māhina 1992). Other primordial hoa pairs/binaries in Tongan cosmogony (creation stories) include Limu and Kele, Piki and Kele, 'Atungaki and Māimoa'alongona, Fonu'uta and Fonuatai, Hēimoana and Lupe, Maui and Hina, Sinilau and Hina, and Tangaloa Eitumātupu'a and 'Ilaheva/Va'epopua (see Fig. 1). Thus, from the beginning, Tonga was deeply grounded in the concept and practice of hoa pairs/binaries.

Like the fakatupu creation of Tonga, the Judeo-Christian God's creation of Earth was performed at the fakahoko connection and fakamāvae separation, that is, fakafelavai intersection, of hoa pairs/binaries (Senesi, Genesis 1: 1–31). It is said that prior to the six days of creation (with the seventh as a day of rest), the Maama Earth was in a state of both fuofuonoa “formless” (i.e., 'tā “timeless”),

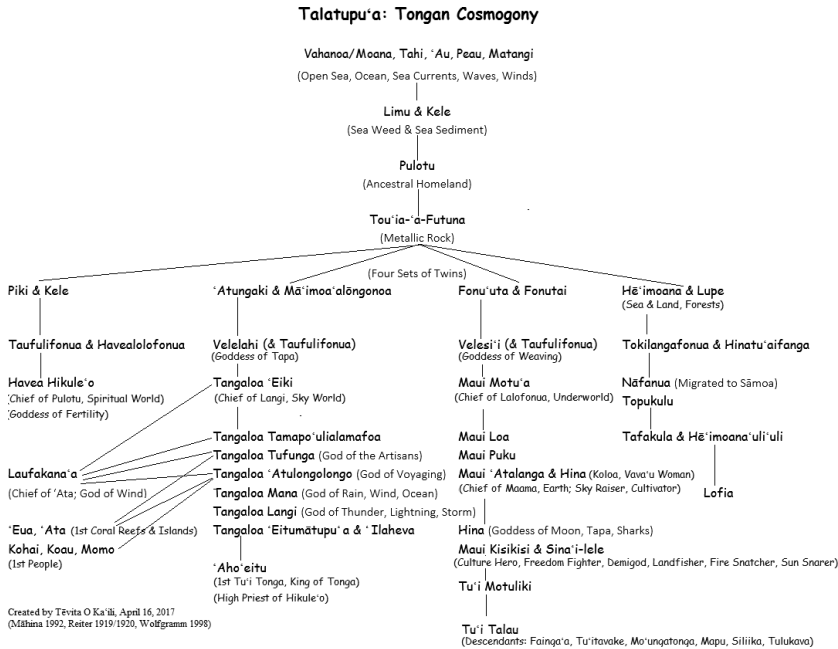


FIGURE 1. **Talatupu'a: Tongan Cosmogony.** Image Sourced from Ka'ili (2017b).

and uhouhonoa “contentless” (or, ‘va “spaceless”), that is, lala “nothingness.” The Judeo-Christian God began with the primordial temporal-spatial hoa pair/binary of langi sky and Maama Earth, in the midst of total fakapo’uli darkness. In doing so, he brought forth maama light alongside fakapo’uli darkness, thereby creating both ‘aho day and pō night, in correspondence to the la’ā sun and māhina moon. He then created the ‘atā vast expanse of open vā space with the langi sky above and fonua land below, interspersed with vai streams and tahi seas, filled with both flora and fauna and both manupuna birds and ika fish. In the final and ‘aho ono sixth day, it is said that he created humans, namely, tangata men and fefine women. The naunau ‘a Hono nima handiwork continued to form in hoa pairs/binaries, such as fā’ele birth and mate death, lavea wounding and faito’o healing, langa building and holo dismantling, tangi weeping and kata laughing, hae tearing and monomono mending, ‘ofa love and fehi’a hate, and tau war and melino peace (Tangata Malanga/Koheleti, Ecclesiastes 3: 1–8).

Of interest to our inquiry is the aesthetic and pragmatic concept and practice of lelei good (i.e., mālie/faka’ofo’ofa beauty), which was part and parcel of the Judeo-Christian God’s creation, as in the completion of phases, marked by pon-gipongi morning and efiāfi evening. Similarly, as part of the Tongan taumafakava

royal kava ceremony (see Fifita 2016; Māhina 2011b, 2013), the conduct of the entire proceedings is governed by the phrase 'lelei' good, such as in the presentation of both ngāue (e.g., kava and puaka pigs) and koloa (e.g., fala mats and ngatu bark-cloths), and the milolua/vilolua kava making, occurs by way of things, objects, and processes in indivisible yet indispensable *hoa* pairs/binaries. This is most evident in *angi* commands between the *matāpule* chiefly orators and *kau ngāue* attendants, namely, *koe ngāue ke fakalelei* the work be made good, and *koe ngāue ke veuveuaki, veteveteki ke lelei* the work be taken apart and made good. Once they are made *lelei* good, the *angi* command is accordingly uttered, namely, *kuo lelei, 'u'ufi e ngāue* it has been good, cover the work, followed by *fakafeta'i e ngāue* thank you for the work. In both cases, *lelei* good (i.e., *tatau* symmetry, *potupotutatau* harmony, and *malie/faka'ofo'ofa* beauty) is *hoa* or paired with its opposite, namely, *kovi bad* (i.e., *kehekehe/ta'etatau* asymmetry, *potupotukehekehe/ta'epotupotutatau* disharmony, and *palakū ugly*). The former is both a godly or heavenly and a kingly or chiefly attribute.

Like the pan-Moanan Oceanian theory and practice of *fonua* person and place, the conception and action of *fakatupu* creation can be deployed as both an affective and an effective critique of the current environmental crisis, notably, *feliuliuaiki e langi/ea* climate change (see Māhina 1992).

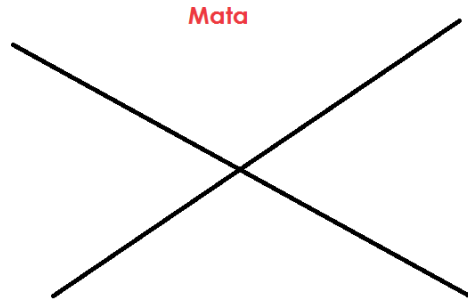
#### 4. *Lea Heliaki Proverbial Sayings*

The Tongan *faiva lea heliaki* performance art of proverbial sayings are deeply entrenched in *hoa* pairs of equal/same/similar and opposite/different/dissimilar binaries, which are concerned mainly with the *fakatatau* mediation of *heliaki* metaphors, through the act of metaphorically saying one thing but really meaning another (see Māhina 2004b; Māhina and Māhina-Tuai 2007; Taumoepeau 2011: 132–39) (see items 1 and 5). *Heliaki* metaphor is the intersection of two elements within a *hoa* pair/binary. The main categories of *heliaki* metaphors are epiphoric, metaphoric, and metonymic (or *synecdochic*). Epiphoric *heliaki* expresses the exchange of qualities between two related entities (e.g., *paramount and sun*). Metaphoric *heliaki* on the other hand, articulates the intertwining of two associated cultural and historical events (e.g., *ancestral site and people*). Finally, metonymic (*synecdochic*) *heliaki* illustrates the oneness of two or more elements (e.g., *land and people*). The following three *faiva lea heliaki* proverbial sayings are characterized by things, objects, or persons with equally compatible physique, substance, or quality. These are *faifekau taau moe fekau* the messenger that befits the message or, conversely, *fekau taau moe faifekau* the message that befits the messenger<sup>16</sup>; *taau e lei moe tofua'a* the lei tooth befits the whale, or, equally, *taau e tofua'a moe lei* the whale befits the lei tooth; and *tatau e tua moe palai* the tua yam is equal to the palai yam or, alternatively, *tatau e palai moe tua*

the palai yam is equal to the tua yam. As further examples, ma‘u ‘ae mā he kakava bread is gotten from sweat or, conversely, ma‘u ‘ae kakava he mā sweat is gotten from bread, points to the interdependence between things, objects, or persons for collective benefits, and ‘oua ‘e lau kafo kae lau lava do not mind injury but rather mind duty, engages two opposite/different/dissimilar hoa pairs/binaries whereby one is privileged over the other, as in lava over kafo duty over injury. Like faiva lea heliaki proverbial sayings, the performance art of faiva hiva kakala love songs, is also steeped in hoa pairs/binaries, such as in the tatau symmetry of real ‘ofa love and metaphoric mate death.<sup>17</sup> Faiva ta‘anga poetry, is characterized by hoa pairs/binaries, such as in the equation of ‘ofa love to mate death as well as mohe sleep to mate death, and misi dream in mohe sleep to ‘ofa love in ‘āā waking, which are all fakatatau mediated in the creative process (Māhina 2005b, 2008a, 2011a).

##### *5. Hoa Pairs/Binaries: Ta‘anga Poetry; Hiva Music and Haka Dance*

Faiva performance arts of: faiva ta‘anga poetry, faiva hiva music, and faiva haka dance, lie in close proximity to one another when poetry is composed and then put to both music and dance (see items 1 and 4). Faiva ta‘anga poetry, faiva hiva music, and faiva haka dance, are concerned mainly with lea language/words, ongo sounds, and haka motions, and, by extension, ‘uhinga meanings, hiva/fasi/nota tones/notes, and haka movements (see Potauaine and Māhina 2011; Māhina 2011a: 140–88, 2017b: 133–53; Lear 2018). All three are driven by the intrinsic qualities of art, namely, tatau symmetry and potupotutatau harmony, in the production of mālie/faka‘ofa‘ofa beauty,<sup>18</sup> as well as the extrinsic qualities of māfana warmth and vela fieriness, in the creation of tauēlangi climatic elation. Among other hoa pairs/binaries, faiva haka dance is largely constituent of haka fakatangata male and and haka fakafefine female dance movements or motifs. Similarly, among other hoa pairs/binaries, faiva hiva music is largely constituent of ongo, afo, or fasi fakafa‘ahitatau, sound, tone, or tune of the same side, order, or being, i.e., sound of mo‘ui life and of the kau mo‘ui living and ongo, afo, or fasi fakafa‘ahikehe, literally sound, tone, or tune of a different side, order, or being, that is, sound of mate death, and of the kau mate dead. As approximate translations, ongo, afo or fasi fakafa‘ahikehe, and ongo, afo or fasi fakafa‘ahitatau have been commonly associated with minor sound, tone or tune and major sound, tone or tune, respectively. In ancient Tonga, ongo, afo, or fasi fakafa‘ahikehe, or ongo, afo, or fasi faka-Pulotu, was a vaka medium/vessel or hala vehicle, by which the living accessed and paid tribute to the fangakui ancestors,<sup>19</sup> and their refined ‘ilo knowledge (and potu skills) (see Māhina 1984: 33–36).<sup>20</sup> Modern Tongan hiva music is heavily influenced by the European “major” and “minor” music systems, which are translated into Tongan as maisoa or mīsoa and maina or mīnoa, respectively.

FIGURE 2. **Mata, Two Intersecting Kohi, Lines.**FIGURE 3. **Tā or Kohi, Lines: Collection of Two or More Mata, Points.**

**Vā - Collection of Kohi (Lines)**

FIGURE 4. **Vā: Collection of Kohi, Lines.**

#### 6. *Kupesi Two Lines Intersecting to Create Geometrical Designs or Motifs*

Fundamentally, all kupesi intricate-elaborate geometric designs or motifs, are created from *hoa* pairings/binaries of *kohi* lines and *mata* eyes/points (or *ava* holes/points). *Mata/ava* eye/hole are created from two (or more) intersecting lines, and a line is formed from a serial collection of two (or more) *mata* points (see Figs. 2 and 3). Again, these *kohi* lines and *mata* points, are all created from *hoa* pairs/binaries. In *tāvāism*, *kohi* line is a representation of *tā* time, and *vā* space is a parallel collection of two (or more) *kohi* lines (see Figs. 3 and 4).

All kupesi intricate-elaborate geometric designs or motifs are based on *hoa* pairing of *kohi* lines and *mata* points. For example, the kupesi known as *Manulau Two-birds* is created from intersecting lines and space. Like the *hoa* pair/binary of lines and points, the two abstract birds also form a *hoa* pair/binary (see Fig. 5).

All kupesi intricate-elaborate geometric designs or motifs are based on *tatau* symmetries, and all symmetries are formed from *hoa* pairs/binaries of similarities. Generally, Tongan kupesi intricate-elaborate geometric designs or motifs are shaped as spherical symmetry, radial symmetry, bilateral symmetry, biradial symmetry, and fractal symmetry. Spherical symmetry is created from a *hoa* pair/binary of two identical halves through any cut in the center (see Fig. 6). Radial

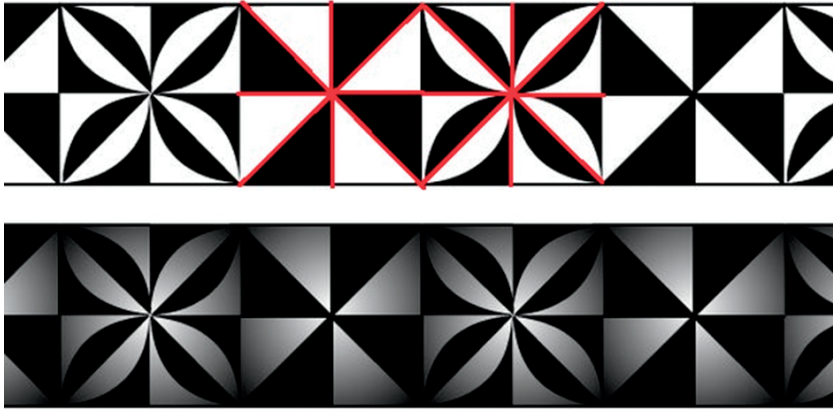


FIGURE 5. Manulua, Two-Birds.



FIGURE 6. Spherical Symmetry: Fo'i Hea Design.



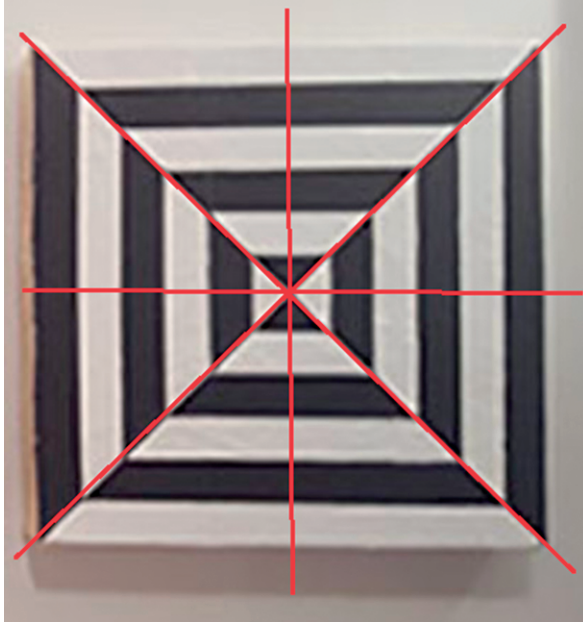


FIGURE 7. Radial Symmetry: Fata-‘a-Tu‘i Tonga Design.

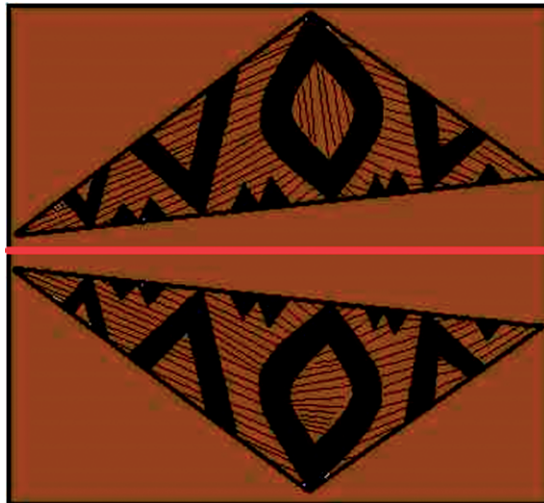


FIGURE 8. Bilateral Symmetry: Matahihifi Design.



symmetry is formed from a hoa pair/binary of two identical halves through vertical/horizontal/diagonal cuts in the center (see Fig. 7). Bilateral symmetry is shaped from a hoa pair/binary of two identical halves through a single cut in the center (see Fig. 8). Biradial symmetry is a fusion of bilateral and radial symmetries (see Fig. 9). Finally, a fractal symmetry is configured from a hoa pair/binary of two (or more) identical patterns at all scales (see Fig. 10).

*7. Hoa Pairs/Binaries: Hahake-Hihifo East West and Tokelau-Tonga North-South*

In Tongan philosophical 'ilo knowing and ongo feeling, the la'ā sun, māhina moon, and ngaahi fetu'u stars (see Velt 1990, 2011), are, in astronomical ways, said to vilo turn and takai twist around the Maama Earth. The Maama Earth is divided into four main locations and directions, hoa or paired into hahake-hihifo east-west and tokelau-tonga north-south (see items 2 and 11).



FIGURE 9. **Biradial Symmetry: Manuēsina by Tavakefaiana Sēmisi Potauaine.**



**FIGURE 10. Fractal Symmetry: Kauikalilo Design by Soplemalama Filipe Tohi.**

The revolution of the la'ā sun around the Maama Earth, begins in the hahake east, by way of both hopo rising and hake ascending to the tokelau north, 'olunga up-above, and, similarly, changes both location and direction by means of both tō falling/setting, and hifo descending to the hihifo/lulunga west. By changing both location and direction, the la'a sun travels to the tonga south, placed lalo down-below/down-under. So, quite apart from both hopo rising and hake ascending, defining both hahake east and hihifo west, both tokelau north and tonga south, are, respectively, associated with 'olunga up-above and lalo down-below/down-under, where the former is 'aho day, and the latter pō night, that is, 'aho-pō day-night. On the other hand, the māhina moon revolves around the Maama Earth thirteen times, defining the Tongan 13-month calendar, and the la'ā sun commonly revolves on a 'aho-pō day-night basis. Both the moon and the month are called māhina, signifying their closer relationships as hoa pairs/binaries in the material art of tufunga fa'a cultivation, and the performance arts of faiva toutaiika fishing, faiva faifolau voyaging, and faiva toutai-vaka navigation, amidst others.

Of enormous interest are in-depth aspects of the tala/lea language of both faiva faifolau voyaging and toutaiivaka navigation. We refer here to such expressions as 'oku tō-hahake 'etau folau our voyage falls more to the east, 'oku tō-hihifo 'etau folau our voyage falls more to the west, 'oku tō-'olunga 'etau folau our voyage falls more to up-above/high-above, and 'oku tō-lalo 'etau folau our voyage falls more to down-below/down-under. By 'olunga up-above/high-above and lalo down-below/down-under, reference is made to both tokelau north and

tonga south, respectively. Another interesting matter relates to the hahake-hihifo east-west, tokelau-tonga north-south, tā-vā temporal-formal, fuo-uhō formal-substantial, and ngāue-ʻaonga functional-practical orientation of the whole of Tonga, which tends more toward tokelau-tonga north-south, than hahake-hihifo east-west. Generally, we begin with the islands of Tongaʻeiki, Tongatapu or Tongalahi, and ʻEua in the tonga south, through the islands of Haʻapai in the loto center/middle, and to the islands of Vavaʻu in the tokelau-ofi immediate north, and the islands of Niuatoputapu and Niuafōʻou in the tokelau-mamaʻō remote north. On the other hand, the local hahake-hihifo east-west/tokelau-tonga, north-south tā-vā temporal-spatial, fuo-uhō formal-substantial, and ngāue-ʻaonga functional-practical orientation tends more toward the former than the latter, as in hahake-hihifo in Tongaʻeiki, Tongatapu or Tongalahi, Haʻapai (where lulunga is uniquely used in place of hihifo both meaning west), and Vavaʻu. So, in both popular usage and especially faiva taʻanga poetry and tufunga lea/faiva lea speech-designing/speech-giving/oratory (see Helu 1999a; Māhina 2017b; Māhina, Kaʻili, and Kaʻili 2006), the tokelau-tonga north-south hoa pair/binary is intra-islands, that is, across islands, while the hahake-hihifo east-west hoa pair/binary, is inter-islands, that is, within islands.

More exciting further still is the additional use, especially in both popular usage and poetry and oratory, of hahake east, hihifo west, tokelau north, and tonga south, as in the matangi fakahahake easterly winds for maau/fenāpasi order, as opposed to matangi fakahihifo westerly winds for felekeu/fepaki chaos. Similarly, the same applies to matangi tokelau north winds, and matangi tonga south winds, where the former is māfana warm, and the latter is momoko/mokomoko cold. These states of affairs are deeply linked on both the ontological (or historical) and epistemological (or metaphorical) levels, thereby pointing to their being universally fakahoko connected and fakamāvae separated, that is, fakafelavai intersected in reality, as in nature, mind-heart, and society. The group of islands in the remote hihifo/lulunga west, in the Haʻapai islands, notably, Nomuka, is collectively called ʻOtu Muʻomuʻa, which means in the muʻa front, next to the islands of Tongaʻeiki and Tongatapu or Tongalahi. Moreover, the term lulunga west is derived from the movement of the laʻā sun around the Maama Earth, especially the expression tō-fakalulunga, which refers to the setting of the laʻā sun, in the hihifo west. The special case of Vavaʻu requires attention, where the islands to the hahake east and tonga south, are collectively called ʻotumotu hahake eastern islands, and ʻotumotu lalo, that is, ʻotumotu tonga, both meaning southern islands. There are no motu islands to the tokelau south, which is situated to the liku windward side, or to the hihifo west, of both ʻuta mainland Vavaʻu. The hiva viki praise song, “Tongo Fionoʻa”<sup>21</sup> makes use of ʻotumotu tonga (i.e., ʻotumotu lalo) southern islands, as in the kōhi lines, “Pā ʻae peau ʻihe tuʻa Koloa, Pea ongo ʻi Vavaʻu moe

‘otumotu tonga,” “Waves breaking at the liku of Koloa, Sounding in Vava‘u and southern islands.”

More interesting still is the use of the hahake-hihifo east-west/tokelau-tonga north-south *tā-vā* temporal-spatial, *fuo-uho* formal-substantial, and *ngāue-‘aonga* functional-practical orientation, especially in *me‘afaka‘eiki* funerals, which tends more toward the use of the former. The end of the *tanu* burial ritual is commonly marked by a *fakamālō* thank-you *lea* speech, usually by the *hou‘eiki* chief, or his *matāpule* chiefly orator, which includes the utterances “*Kātaki ‘a Hahake ‘o me‘a atu ki hahake, mo Hihifo ki hihifo*,” “Please the Easterners do disperse to the east, and the Westerners to the west.” In the diaspora, the *‘ulumotu‘a*, the most senior patriarch of the *kāinga* extended family, usually carries out the *lea* speech, in addition to his role in the organization of *ngāue* men’s wealth, in relation to his opposite *hoa* pair/binary, who is the most senior matriarch, known as the *fahu*, who is responsible for the organization of the *koloa* women’s wealth. By virtue of transportation as *vaka* mediums/vessels or *hala* vehicles of human movement, the ritual (and ceremony) of *putu* funeral and *mate* death, was locally confined to “intra within” the islands, and as far as the technological improvement goes, it would not be surprising for both the *tokelau* north and *tonga* south to be soon made part of the equation by way of “inter across” the islands. By combining all, the *hahake* east, *hihifo* west, *tokelau* north, and *tonga* south, it becomes, “*Katiki ‘a Hahake ‘o me‘a atu ki hahake, Hihifo ki hihifo, Tokelau ki tokelau, mo Tonga ki tonga*,” “Please the Easterners do disperse to the east, Westerners to the west, Northerners to the north, and Southerners to the south.”

The use of *hahake* east and *hihifo* west, in relation to *mata‘u* right and *hema* left, are apparent in two *kohi* lines of a *hiva kakala* love song, titled “*Ngalu Fānifo*,” “Surfing Waves” (see Velt 2000, 2011), namely, “*Hema e matangi fakahihifo*,” “One *ue‘ia* e *ngalu fānifo*,” “The left, westerly blowing winds, Breaking the waves for surfing,” and two *kohi* lines of a *hiva viki* praise song, titled “*Hiva Afa ‘o Vaea*,” “Hurricane Song of Noble *Vaea*” (see Wood-Ellem 2004; also see Velt 2000), namely, “*Ne sikahe ma fakahihifo, Louloua‘a matangi to*,” “The left, westerly blowing winds, Fall they do aggressively.” *Hahake* east and *hihifo* west, like *mata‘u* right and *hema* left, are linked to *tā* time and *vā* space, like *fuo* form and *uho* content, on the ontological (or historical) level and to *mo‘ui* life and *mate* death, like *tangata* men and *fefine* women, on the epistemological (or metaphorical) level (Potauaine and Māhina 2011: 1994–16). In the Tongan *taumafakava* royal *kava* ceremony, for example, *mata‘u* right is associated with *mo‘ui* life and *hema* left with *mate* death, as in the two *matāpule* chiefly orators, flanking the *tu‘i* monarch, and officiating both protocol and etiquette on the *mata‘u* right and *hema* left sides, respectively. Similarly, in Tongan thinking-feeling and practice, the *mata‘u* right and *hema* left are related to *poto*

skillful and vale unskillful, as in the mata‘u right-handed and hema left-handed as mata‘u lakupoto skillful right-hand and hema lakuvale unskillful left-hand. The words of wisdom given by Jesus to his kau ako disciples, who when toutai fishing at the Tahī Kaleli Sea of Galilee, did not catch any ‘ika fish, was based on the mata‘u-hema right-left principle. He advised them to move into the loloto deep, and put out their kupenga fishnet, fakamata‘u right-handedly on the mata‘u ‘oe vaka right side (as opposed to the hema ‘oe vaka left side), of the vaka boat, where they hauled up their kupenga fishnet, overflowed with good fish (Sione John 21:1–12).

#### *8. Hoa Pairs/Binaries: ‘iai Ontology and Vakai Epistemology*

The classical, philosophical dispute between ‘iai ontology (or ways of being), and vakai epistemology (or ways of knowing), is about “reality as it is” and “reality as we know it”; the dispute is therefore not “how we know what we know,” “when we know what we know,” “where we know what we know,” or “why we know what we know” but rather “what we really know” (see Anderson 2007; Anderson, Cullum, and Lycos 1982; Ka‘ili, Māhina, and Addo 2017a: 1–17) (see item 9). From a tāvāist philosophical perspective, then, the epistemological questions are considered secondary to the ontological questions<sup>22</sup> in that the ‘ilo knowledge, has to be discovered first before it can be used for the wants of people and the needs of society. Besides, ‘ilo knowledge and ongo feeling, are in and of themselves the epistemological ‘ilo knowledge and ongo feeling of tā time and vā space and fuo form and uho content, the ontological. As ontological hoa pairs of equal/same/similar and opposite/different/dissimilar binaries, tā time and vā space on the abstract level, and fuo form and uho content on the concrete level are, in both their indivisibility and indispensability, transcended as epistemological hoa pairs/binaries to, inter alia, tangata-fefine men-women, kula-‘uli red-black, la‘ā-māhina sun-moon, ‘aho-pō day-night, mo‘ui-mate life-death, mata‘u-hema right-left, and hahake-hihifo east-west (see Māhina, Ka‘ili, Potauaine, Moa, and Māhina-Tuai 2012: 37–55; Potauaine 2011: 194–16). As actual but metaphorical tā-vā temporal-spatial and fuo-uho formal-substantial (as well as ngāue-‘aonga functional-practical) entities, the latter are both tā-fuo temporally-formally defined and vā-uho spatially-substantially composed, in the productive process.

#### *9. Hoa Pairs/Binaries: Tā-Vā Time-Space and Fuo-Uho Form-Content*

Like fuo and uho form and content on the concrete level, tā and vā time and space on the abstract level are indivisible yet indispensable in reality, as in nature, mind-heart, and society (see item 8). As such, tā time is verb and definer of vā

space, as *vā* space is noun and composer of *tā* time, and, by implication, *fuo* form is verb and definer of *uho* content, and *uho* content is noun and composer of *fuo* form (Ka‘ili 2017a, 2017b; Potauaine 2010; Potauaine and Māhina 2011). From a *tāvāist* philosophical view, both *tā* time and *vā* space and *fuo* form and *uho* content on the abstract and concrete levels are regarded as the common *vaka* mediums/vessels or *hala* vehicles for the independent existence of all things in reality, as in nature, mind-heart, and society. On both the abstract and concrete levels, *tā* time and *fuo* form have *tapataha/fa‘ahitaha* one dimension, and *vā* space and *uho* content have *tapatolu/fa‘ahitolu* three dimensions, that is, *ma‘olunga/loloto* height/depth, *loloa* length, and *maokupu/fālahi* breadth/width. In all, both *tā* time and *vā* space on the abstract level and *fuo* form and *uho* content on the concrete level have *tapafā/fa‘ahifā* four dimensions. It follows that all things in reality, as in nature, mind-heart, and society, are *tapafā/fa‘ahifā* four-dimensional, rather than *tapatolu/fa‘ahitolu* three-dimensional. To simply treat reality, as in nature, mind-heart, and society, to be only *tapatolu/fa‘ahitolu* three-dimensional, is to make it essentially “*fuo-less*” “*formless*” and “*tā-less*” “*timeless*” (see Ka‘ili 2017a: 62–71; Māhina 2017: 133–53).

#### *10. Hoa Pairs/Binaries: Faito‘o Healing*

The Tongan *tufunga faito‘o* material art of *faito‘o* healing, involves *tofoto‘o* opening through *faito‘o* healing, to *tukuto‘o* ending/closing, thereby marking the *kamata* beginning through the *faito‘o* healing, to the *ngata* ending of the healing process (Māhina 2002a: 303–8). The *tukuto‘o* ending/closing of *faito‘o* healing is marked by *kaukautuku* final bath using *hoa* pairs/binaries of medicinal herbal leaves; the *vai* and *tulu‘i* potions made from herbal leaves, fruits, and barks are arranged as *hoa* pairs/binaries. The word *tafato‘o* evokes a befitting imagery of “operating upon” and “opening up” the *sino* body or *‘atamai* mind, and taking out the disease, sickness, or illness through the process of *faito‘o* healing, when it is closed again once complete. As a *hoa* pair/binary, both *tafato‘o* opening and *tukuto‘o* ending/closing mark the *kamata* beginning and *ngata* ending of the process of *faito‘o* healing, where they are *fakatatau* mediated, transforming them from a condition of *felekeu/fepaki* chaos, to a state of *maau/fenāpasi*, order through sustained *tatau* symmetry, *potupotutatau* harmony, and *mālie/faka‘ofo‘ofa* beauty. The concepts and practices of *tafato‘o* and *tukuto‘o* are also identified as *me‘a‘ofa* gifts of *kava* roots, which act as tokens of *fakamālō* thank you for the services provided. The terms *tofoto‘o* and *tefeto‘o* are variations of *tafato‘o* opening, where *tofo*, *tefe*, and *tafa* commonly but neutrally mean operating, cutting, or opening. The word *tefe* is largely reserved for circumcision, which is also known as *kamu* and *kaukau*, with the Tongan translation and abbreviation *kamu* taken from the biblically led English word “circumcise.”

Also, the term *kaukau* means “bathe,” derived from the *kaukau* dip in the sea by the patient of circumcision for healing purposes. Even the word *vale* for the mentally ill is now replaced by the phrase *puke mahaki’ia faka’atamai*, which is fused and confused with the expression *puke mahaki’ia fakamāhina* monthly menstrual periods of women.

These changes are ill informed, problematically informed by some unexamined, unwarranted, subjective moralistic considerations. The words “disease,” “sickness,” and “illness” are known in Tonga as *mahaki* and *puke*, referring to being “empty” of *sai*, wellness, and “possessed” of *mahaki*, disease/sickness/illness (see Helu 1999b: 37–46, 1999c: 68–83; Māhina 2002a: 303–8). The chief purposes of *faito’o* healing are therefore to “fill up” the state of “emptiness” with *sai* wellness, and “dispossess” the “possessed” of *mahaki*, disease and *puke* sickness/illness, as a condition of *kehekehe/potupotukehekehe/ta’etau* imbalance. Apart from the terms *kamu* circumcision and *kaukau* bathe, the word *vale*, as in *valea* and *valenga* as a state of mind and heart, simply means that the *’atamai* mind and *ongo* feeling are “losing the grip on” or “losing touch with” reality. By virtue of *faito’o* healing, it strictly means actively engaging in the restoring of one’s “grip on” or “touch with” reality (see Māhina 1999, 2002a: 303–8). This is the case with the ancient Tongan philosophy of *ako* education, which critically involves a *tā-vā* temporal-spatial and *fuo-uho* formal-substantial (as well as *ngāue-’aonga* functional-practical) transformation of *’atamai* mind and *ongo* feeling from *vale* ignorance, to *’ilo* knowledge and *loto* desire, to *poto* skills (see Māhina 2008b: 67–96). Similarly, the words *hoholokovi/hoholotamaki* for aging badly has displaced the terms *’atamai-ngalongalo* and *loto-ngalongalo* forgetful mind and forgetful heart,<sup>23</sup> normally used for Alzheimer’s disease and dementia as mental conditions. The terms *hoholokovi/hoholotamaki* aging badly are instead used for people who do not act their age, as in older, married men who court a female *tou’a* kava server in *faikava* kava drinking. Ironically, these labels are, while problematic, Western in essence, fashionably dressed up anew (see Poltorak 2004, 2011: 217–34) in place of their Tongan equivalents, which hold both their depth and their breadth (see Vaka 2014).

### *11. Hoa Pairs/Binaries: Vaka Boat, Kava and Fale House*

According to oral history, the first waves of people who sailed all the way from the northwest moana ocean in their long-distant seaworthy *vaka* boats to Tonga from their ancestral homeland *Pulotu* initially took shelter in caves and tree trunks (see Māhina 1992, 1993: 109–21). Not long after safe arrival, it dawned on them to have their *vaka* boats turned upside down as temporary shelters. Their *vaka* boats, now became their *fale* houses. A kava beverage was prepared for drinking as part of their religious rites and ceremonies inside one of the



fale houses where they sang and danced their thanksgiving prayers to the 'Otua Gods of the sea and wind, Lulu and Lātū, for their divine protection. The kava was thus created at the fakafelavai intersection, that is, fakahoko connection and fakamāvae separation of the vaka boat and the fale house (see items 2 and 7). So it follows that, the fale house, is a vaka fakafo'ohifo upside-down boat, and the vaka boat is a fale fakafo'ohake downside up house, with the kava placed in-between (see Fifita 2016; Potauaine 2010; Māhina 2011b, 2013). The key positions in the kava fuolōloa oval<sup>24</sup> were named after the vaka boat, which was now a fale house. Among these were the top of the fuolōloa oval as the seat of the high 'eiki chief, called the olovaha after the taumu'a bow, with both sides, telekanga port and kaokao starboard, for the other high-ranking 'eiki chiefs, named 'alofi after the rowers and the kava makers seated at the taumuli stern, opposite the olovaha called tou'a after the taula anchor.

The fale house, may be considered in relation to the fefine woman, derived from kelekele/fākele earth/soil, fā'ele birth, and fā'e mother (see Potauaine 2010). By implication, the vaka boat, fale house, and kava, which are derivatives of one another, may also be considered in relation to the fefine woman. All three, namely, the vaka boat, fale house, and kava, are themselves mediums/vessels/vehicles. The vaka boat, protects the navigators, voyagers, and travelers from both the ngalu/peau waves and matangi/havili winds,<sup>25</sup> and the fale house protects the dwellers and inhabitants from the elements, notably, the la'ā sun, 'uha, rain, and matangi/havili winds. Similarly, kava, which protects people and their environment from hectic states of social organization, is fakatatau mediated at the fakahoko connection and fakamāvae separation, that is, fakafelavai intersection of the vaka boat and fale house. This is most evident in a specific technique of royal kava making called the milolua/vilolua double-twists-and-turns, where all the activities are in equal/same/similar and opposite/different/dissimilar hoa pairs/binaries from the presenting and dividing, through the bounding and preparing, to the mixing and serving. Overall, on the general level, more of these hoa pairs/binaries are seen in the wider hydrodynamic, aerodynamic, and socioecodynamic relationships (see Māhina 2011b, 2013) between the vaka boat, fale house, and kava as fakahoko connecting and fakamāvae separating entities.

Apart from his many other great achievements, Lo'au, in both his capacity and capability of a renowned tufunga fonua social architect/engineer, is known as the author of both the tala 'oe tupu'anga 'oe kava moe tō, origin myth of kava and sugarcane plants, as well as the tala 'oe ouau 'oe kava moe tō, protocol of kava and sugarcane plants (see Māhina 1992, 1993: 109–21). The tala 'oe tupu'anga 'oe kava moe tō, origin myth of kava and sugarcane plants, is a mixture of both faiva fakaoli comedy and faiva fakamamahi tragedy. Faiva fakaoli comedy deals with the fakahoko connection and fakamāvae separation, that is, fakafelavai intersection of ngalipoto normality and ngalivale absurdity,



resulting in kata laughter. Faiva fakamamahi tragedy deals with anga'itangata sociality and anga'imanu animality, with the outcome of fakamā shame (see Māhina 2008a: 31–54, 2011a: 140–66). The origin story revolves around kava and tō, kava and sugarcane plants, which are fakahoko connected and fakamā-vae separated or fakafelavai intersected, by way of their kona bitter and melie sweet qualities, respectively. The tala 'oe ouau 'oe kava moe tō protocol of kava and sugarcane plants, incorporates both plants and their respective qualities. Both plants are prepared, where the kava is drunk as a narcotic beverage, then eaten with the tō sugarcane. That is, one inu drinks the kona bitterness first before one kai eats the melie sweetness. The moral of both the story and the protocol are such that, as for all lasting best and permanent human endeavors, one begins with kona bitterness, and ends with melie sweetness, in that logical order of precedence (see Fifita 2016; Māhina 2011b, 2013).<sup>26</sup>

### *12. Hoa Pairs/Binaries: Fonua Person and Place*

As a pan-Moanan Oceanian ecology-centered human concept and practice, the Tongan word fonua variously exists as hanua, honua, vanua, fanua, fenua, enua, and whenua (see Māhina 1992, 1993: 109–21) (see items 13 and 14). The ecology-centric human conception and action of fonua embraces both ecology and society as indivisible but indispensable hoa pairs of equal/same/similar and opposite/different/dissimilar binaries. In the case of Tonga, fonua as a thinking, feeling, and practice is constitutive of both “person” and “place” (i.e., tā time and vā space) as inseparable but indispensable hoa pairs/binaries, where the former is a tā temporal marker of the latter, which is, in turn, a vā spatial composer of the former (see Māhina 1992, 1999, 2010: 168–202). From a tāvāist philosophical view, fonua person and place, can be generally defined as a tā-vā temporal-spatial, fuo-uho formal-substantial, and ngāue-'aonga functional-practical yet cyclical and plural movement from fā'ele birth, as the first fonua, through mo'ui life as the second fonua, to mate death as the third fonua, respectively, characterized by the valevale/tama fetus and taungafanau mother's placenta and manava womb, kakai people and 'ātakai/kelekele environment/land, and the mate dead and fonualoto burial places. Such a movement of plurality and complexity of things, events, and states of affairs are fakatatau mediated, transforming them from a condition of felekeu/fepaki chaos, to a state of maau/fenāpasi order, through sustained tatau symmetry, potupotutatau harmony, and mālie/faka'ofó'ofa beauty. The concept and practice of fonua person and place can be both affectively and effectively used as a critique of the highly problematic idealist-rationalist, separatist-dualist, anthropocentric Western-led, UN-driven, “modern” doctrine of sustainable development,<sup>27</sup> which severs people from the environment, thereby privileging society above and beyond ecology.

### *13. Hoa Pairs/Binaries: Fonua/Kalatua Culture*

The thinking-feeling and praxis of hoa pairs of equal/same/similar and opposite/different/dissimilar binaries, is deeply albeit broadly entrenched within and across the whole spectrum of Tongan culture (and language),<sup>28</sup> as in all types of disciplinary practices and forms of social activities (see items 12 and 14). In mathematical, numerical ways, Tongans commonly organize things into tauhoa, such as 2, 4, 6, and so on, and ta'etauhoa for example, 1, 3, 5, and so on, as in the making of medicinal potions from herbal leaves, seeds and barks, the positioning of dancers in dance performances, and the presenting of ngāue and koloa as forms of men's and women's work in such rites and ceremonies as the taumafakava royal kava ceremony. On the other hand, these real numbers are, by inverting them, made into poetical equations, as in the treatment of two married people, two kingly lines, and two kava clubs, each tatau equalling one (i.e., one plus one equals one). These instances actively though critically engage in the fakatatau, mediation, of the fakahoko connection and fakamāvae separation, that is, fakafelavai intersection, of the lahi diversity in unity, and, by the same measure, unity in diversity. In such, lahi many and taha one, are transformed from a situation of felekeu/fepaki chaos to a condition of maau/fenāpasi order through sustained tatau symmetry, potupotutatau harmony, and, more so, mālie/faka'ofa'ofa beauty.

In Tonga, ako education and 'aati art, are closely aligned to one another, where both are made synonymous in the production of 'ilo knowledge (and pota skills), and mālie/faka'ofa'ofa beauty. By extension, ako education is organized along the three main divisions of 'aati arts, namely, faiva performance arts, tufunga material arts, and nimamea'a fine arts (see Māhina 2008b: 67–96). Herein, all types of disciplinary practices and forms of social activities are arranged by ways of hoa pairs of equal/same/similar and opposite/different/dissimilar binaries. In the faiva performance arts, they include, inter alia hoafaiva co-performance artists, hoafaiako co-teachers, hoalakalaka co-lakalaka-dancers, hoafānifo co-surfers, hoatau co-warriors, hoatoutaivaka/hoafaifolau, co-navigators/voyagers, hoalafo co-lafo-disc-throwers, hoahiva co-singers, hoafuhu co-boxers, and hoasika co-javelin-throwers. In the tufunga material arts, they include, among others, hoatufunga co-material artists, hoalangafale co-house-builders, hoafa'a co-cultivators, hoafō'uvaka co-boat-builders, hoalalava co-kafa-sennit-intersectors, hoatātatau co-tattooists, hoatātongitongi co-wood-sculptors, hoatongiukamea co-steel-sculptors, hoatāmaka co-stone-cutters, and hoafonolei co-jewelers. In the nimamea'a fine arts, they include, among others, hoakoka'anga co-bark-cloth-makers, hoalālanga co-mat-weavers, hoatuimatala'ī'akau co-embroiderers, hoalangaleisi co-crochet-makers, hoatuikakala co-flower-designers, hoalangata'ovala co-ta'ovala-mat-weavers, hoalangakatamosikaka

co-mosikaka-basket-weavers, hoalangakatoalu co-alu-basket-weavers, and hoatuitangaipilo co-pillow-case-makers.

*14. Hoa Pairs/Binaries: Tauhivā Relationality and Faifatongia Functionality*

The Tongan concepts and practices of tauhivā keeping sociospatial relations and faifatongia performing socioeconomic functions (see Ka‘ili 2005, 2009, 2017),<sup>29</sup> are, in both their inseparability and their indispensability as hoa pairs of equal/same/similar and opposite/different/dissimilar binaries (see Ka‘ili 2017a, 2017b), fundamental to Tongan culture, where the former is regarded as a faiva performance art, and the latter as an artistic (and literary) device (see items 12 and 13). In this general context, the fai performance of fatongia socioeconomic functions, temporally defines the tauhi keeping of the vā sociospatial relations, which, in turn, spatially composes the fatongia socioeconomic obligations. On the other hand, in specific terms, the concept and practice of tauhivā keeping sociospatial relations can be divided into tauhi keeping and vā sociospatial relations, where the former, tauhi keeping, is a verb and definer of the latter, vā sociospatial relations, which is, in turn, a noun and composer of tauhi keeping sociospatial relations. Likewise, the term faifatongia performing socioeconomic functions, can also be divided into fai performing and fatongia socioeconomic obligations, where the former, fai performing, is a verb and definer of the latter, fatongia socioeconomic functions, which is, in turn, a noun and composer of fai, performing socioeconomic obligations. Depending on their fakatatau mediation, within and across both the specific and the general contexts, it can result in either vālelei good relations, fiefia happiness, melino peace, tu‘umālie prosperity, and, more importantly, tau‘atāina freedom, or alternatively, vākovi bad relations, mamahi sadness, vātau instability, tu‘utāmaki poverty, and, above all, pōpula oppression. The same parallel the Samoan soa pair/binary of teulevā decorating sociospatial relations, and tautua enacting socioeconomic services. Like the privileging of vā space, beyond tā time, the severance of tauhivā keeping sociospatial relations, and teulevā decorating sociospatial relations, from faifatongia performing socioeconomic functions, and tautua enacting socioeconomic services, respectively, defies both their indivisibility and their indispensability, in reality, as in nature, mind-heart, and society.

*15. Hoa Pairs/Binaries: Nga‘ahoa, the Tongan Binary Counting System*

Hoa, in terms of nga‘ahoa binary, are central to the Tongan mathematical counting system. All Tongan material goods, such as ‘ufi yams, ika fishes, au thatches, niu coconuts, tutu strips of barkcloth, and pulopula yam seedlings, were counted based on a nga‘ahoa binary. For example, two yams are taha

TABLE 1. **Nga‘ahoa: Tongan Binary Counting System.**

‘Ufi, Yam	Number of Yams
Fo‘i ‘ufi e taha (a single yam)	1
1 Nga‘ahoa (1 binary)	2
2 Nga‘ahoa (2 binaries)	4
2 Nga‘ahoa mo e fo‘i ‘ufi e 1 (two Binaries + a single yam)	5
Kau ‘ufi e 1 (10 binaries $\times$ 1) or (10 binaries = 20)	20
Kau ‘ufi e 2 (10 binaries $\times$ 2)	40
Kau ‘ufi e 10 (10 binaries $\times$ 10)	200
Kau ‘ufi e 20 (10 binaries $\times$ 20)	400
Kau ‘ufi e 100 (10 binaries $\times$ 100)	2,000
Kau ‘ufi e 5,000 (10 binaries $\times$ 5,000)	100,000
Kau ‘ufi e 100,000 (10 binaries $\times$ 100,000)	2,000,000

nga‘ahoa one binary. Four yams are ua nga‘ahoa two binaries, and five yams are ua nga‘ahoa mo e fo‘i ‘ufi e taha two binaries and one yam. When the number of yams reaches twenty, the name of the binary changes from nga‘ahoa to kau a group of twenty yams in two pairs (ten yams in each pair). Twenty yams are kau ‘ufi e taha, and forty yams are kau ‘ufi e ua two kau ‘ufi. Likewise, two hundred yams are kau ‘ufi e hongofulu, ten kau ‘ufi, and two thousand yams are kau ‘ufi e teau, one hundred kau ‘ufi. Note that the counting system is based on nga‘ahoa binary and kau, ten nga‘ahoa binaries. Thus, the Tongan mathematical counting system is fundamentally grounded on hoa pairs/binaries (see Table 1).

### Talangata Conclusion

This critical examination of hoa pairs/binaries raises fundamental questions about the possible connection and separation or intersection of tāvāism’s hoa pairs/binaries to the binary oppositions of structuralism and poststructuralism. Tāvāism’s hoa pairs/binaries is deeply grounded in realism, whereas the binary opposition of structuralism/poststructuralism is based on idealism. Furthermore, tāvāism places equal values on the constituent elements of hoa pairs/binaries (tā time and vā space, fuo form and uho content, fakahoko connection and fakamāvae separation, maau/fenāpasi order and felekeu/fepaki chaos) as a matter of reality, whereas the constituent elements of the

binary oppositions of structuralism are placed in a hierarchy. Poststructuralism departed from structuralism in its critique of the hierarchical nature of the binary opposition promoted by structuralism. This form of critique is known as deconstruction, which was formulated and promoted by the famous French philosopher Jacques Derrida. Poststructuralism criticized structuralism (especially Lévi-Strauss's structuralism) for centering one element of the binary opposition while marginalizing the other. For example, in structuralism's binary opposition of male-female, there is a privileging of male over female. This criticism by poststructuralism of the hierarchical arrangement of the binary in structuralism is in agreement with the *tāvāism*'s critique of the privileging of a certain element of the *hoa* pair/binary in current scholarship. For example, *tāvāism* has criticized the privileging of *vā* space over *tā* time, or *tā* time over *vā* space, in current theories. In addition, *tāvāism* has problematized the centering of connection while marginalizing separation in many scholarly writings. Whereas poststructuralism understands binary oppositions as based on cognitive structure (idealism), *tāvāism* understands *hoa* pairings/binaries across nature, mind and society as grounded on concrete reality (realism). Despite the agreeance between poststructuralism and *tāvāism* in their criticism of the hierarchical nature of the constituent elements of binary oppositions, they fundamentally disagree on the basis of reality.

The Tongan thinking and praxis of *hoa* pairs of equal/same/similar and opposite/different/dissimilar binaries are fundamental to the Indigenous Tongan *Tā-Vā* Time-Space Philosophy of Reality. This Tongan conception and action of *hoa* pairs/binaries is deeply grounded in view of the philosophical fact that all things in reality, as in nature, mind, and society, stand in eternal relations of exchange, giving rise to *maau/fenāpasi* order and *felekeu/fepaki* chaos. By virtue of this *tāvāist* philosophical fact, as a corollary, everywhere in reality, as in nature, mind, and society, is *fakafelavai* intersection, and there is nothing over and above *fakahoko* connection and *fakamavae* separation. By the same token, as a corollary, everywhere in reality, as in nature, mind, and society, is *mata-ava* eye-hole and there is nothing above and beyond *mata* eye and *ava* hole (see Potauaine 2010; Potauaine and Māhina 2011: 194–216). By extension, as another corollary, everywhere in reality, as in nature, mind, and society, is *hoa* pairs/binaries and there is nothing over and beyond *hoatatau* pairs/binaries of equal/similar/same entities/identities/tendencies and *hoakehekehe* pairs/binaries of opposite/different/dissimilar entities/identities/tendencies.

This is most conspicuous in the transcendence of *tā-vā* time-space, *fuo-uhō* form-content, *fakahoko-fakamāvae* connection-separation (i.e., *fakafelavai* intersection), and *mata-ava* eye-hole from the ontological (i.e., historical) level to *fefine-tangata* men-women, *kula-ʻuli* red-black, *laʻā-māhina* sun-moon, *ʻaho-pō* day-night, and *moʻui-mate* life-death (see Potauaine and Māhina 2011:

194–216; Māhina, Ka‘ili, Potauaine, Moa, and Māhina-Tuai 2012: 37–55) on the epistemological (i.e., metaphorical) level. A selection of *hoa* pairs/binaries has been examined from across reality, as in nature, mind, and society, for the purposes of both demonstration and reflection. All these instances actively but critically engage in the transformation of *hoa* pairs/binaries from a condition of *felekeu/fepaki* chaos to a state of *maau/fenāpasi* order, through sustained *tatau* symmetry, *potupotutatau* harmony, and *mālie/faka‘ofo‘ofa* beauty. By way of *kaha‘u* futurism, we strongly think and feel that the Tongan (and Moanan Oceanian) logical-philosophical concept and practice of *hoa* pairs/binaries stands to contribute to the *hoa* pairs/binaries of real intelligence and artificial intelligence.

### ACKNOWLEDGMENTS

We would like to say Tonga’s *mata‘ikoloa koe fakamālō* precious treasure of mind-enlightened, heartfelt thank-you, to the following organizations, community groups and individuals for generously and warmly but critically lending us a helping mind, heart, and hand in the collective production of this joint original essay:

Lagi-Maama Academy & Consultancy, Auckland, Aotearoa, New Zealand; Vā Moana: Space and relationality in Pacific thought and identity, Marsden Inquiry and Research Cluster, Auckland University of Technology, Auckland, Aotearoa, New Zealand; Kanokupolu Faikava Talanoa Collective–Kanokupolu Village Trust, Auckland, Aotearoa, New Zealand; Vava‘u Academy for Critical Inquiry and Applied Research, Vava‘u, Kingdom of Tonga; Hala Mangaono, Leimatu‘a, Kava Club, Fasi-moe-Afi, Nuku‘alofa, Tonga‘eiki, Tongatapu, Tongalahi, Kingdom of Tonga.

Maui-TāVā-He-Akó, Professor Dr. Tēvita O. Ka‘ili for his groundbreaking contributions to the subject; Matanginifale, Dr. Nuhisifa Seve-Williams; Kula-He-Fonua, Associate Professor Dr. Ping-Ann Addo; Dr. Christopher Fung; Fetongikava, Dr. Viliami Uasike Lātū; Tavakefaifāna, Sēmisi Fetokai Potauaine; Rev. Kiopeti Māhina; Havelulahi, Ma‘asi Taukei‘āho; Toluma‘anave, Barbara Afitu-Makuati; Keneti Tuai; ‘Aisea Nau Matthew Māhina; Manuesina ‘Ofakihautolo Māhina; Hikule‘o Fe‘ao-moe-Ako Melaia Māhina; Meleseini Haitelenisia Fifita ‘O Lakepa Lolohea Fetu‘u Tuai; and Akesiumeimoana Tu‘ulaikemipilisi Tupou Māhina Tuai.

Once again, we say from the height of our minds and depth of our hearts *mālō fau*, many thanks, for all the many actively yet reflectively engaging *tālanoa ‘uhinga* critical-yet-harmonious-talks, in all contexts and on all levels, over the many years.

## NOTES

1. Knowledge application for the wants of people and needs of society.
2. The root word of kehekehe is kehe, both meaning “difference.”
3. The root word of hōhoa is hoa, both meaning “pair” or “binary.”
4. The word mālie is a variation of the term melie, both meaning “sweet,” that is, lovely and beautiful.
5. Both the words tāmaki and mahi mean “sour” (or kona bitter) used as a heliaki metaphor, for sad things; the root word of mamahi is mahi, both meaning “sadness.” The performance art of tragedy is called faiva fakamamahi, which is concerned with “sad things” as opposed to its hoa, faiva fakaoli, the performance art of comedy, the chief concern of which is with “funny things.”
6. Here tu’otu’atau and tu’otu’akehekehe are respective variations relating to ongo, afo, or fasi fa’ahitatau, literally “sound, tone, or tune of the same side, order, or being,” that is, sound of mo’ui life, and of the kau mo’ui living, and ongo afo, or fasi fakafa’ahiheke, literally “sound, tone, or tune of a different side, order, or being,” that is, sound of mate death, and of the kau mate dead.
7. Some other variations include anomelie-anotamaki/anoanomelie-anoanotamaki sweet-sour, faingamālie-faingatāmaki opportunity-difficulty, kaungamālie-kaungatāmaki sufficient-insufficient, manumanumelie-manumanutamaki beauty-ugly, tahimelie-tahitamaki good sea conditions-bad sea conditions, and tu’amelie-tu’atamaki/fakatu’amelie-fakatu’atamaki good hope-bad hope/hopeful-unhopeful.
8. Comparative logic can be defined as the study of the structure of reality and of existence (see Anderson 2007).
9. Or hala, which means path, road, way, or conduit (channel), as in the heliaki proverb, “Tēvolo hala he sikotā,” “The devil manifests itself by the path, road, way, or conduit (channel) of a kingfisher” (The Tongan word for tēvolo devil, is fa’ahiheke, literally meaning “being-of-a-different-side” (or the “other” side), which refers to the side of mate death, and the kau mate dead (as opposed to its opposite hoa, pair fa’ahitatau, which literally means “being-of-the-same-side,” that is, of mo’ui life, and the kau mo’ui, living). Both vaka and hala also mean receptacle, vessel, vehicle, or conduit (channel).
10. As opposed to their singular, techno-teleological, analytical, atomistic, and linear arrangements in the West.
11. See ancient Tongan philosophy of ako education, as a tā-vā temporal-spatial, and fuo-uhō formal-substantial (as well as ngāue-’aonga functional-practical) transformation of the human ’atamai mind and fakakaukau thinking on the one hand, and ongo feeling and loto desire on the other, from vale ignorance to ’ilo knowledge to poto skill, in that logical order of precedence.
12. Or ’aonga utility, ngāue practicality (or tekiniakale technicality) as opposed to quality.

13. The word “havili” is rooted in the term “vili,” a variation of vilo, which is hoa or paired with takai, that is, vilo takai/vilotakai twist-and-turn. A drill, which is, by nature, spiral-type/vortex-like, is named vili, often uttered as mata‘i vili or mata‘ivili eye-of-the-drill and/or ava‘i vili or ava‘ivili eye-of-the-drill.

14. Also taumu‘atonua and taumulitonua, referring to both the taumu‘a bow, and the taumui stern, of the vaka boat, which is tonu/tonua on-course, in relation to both its points of taulanga folau ki ai destination, and its taulanga folau mei ai origination, respectively.

15. Also taumu‘avalea and taumulivalea; a reference to both the taumu‘a bow, and the taumui stern, of the vaka boat, which is vale/valea off-course, in relation to both the respective taulanga-folau-ki-ai destination and taulanga-folau-mei-ai origination.

16. A sermon conducted by president Rev. Kiopeti Māhina at the funeral service of Rev. Dr. Sione ‘Ilomaisini Lea (Leameivaka), former president, Siasi Fakatahataha ‘ae Kakai Tonga ‘i Nu‘usila, United Church of Tonga in New Zealand, Taufā‘ahau Tupou IV Church, Ōtāhuhu-Māngere, Auckland, New Zealand, March, 2020.

17. When a punake poet, wants to mate die, he/she is in deep ‘ofa love, meaning factual ‘ofa love and metaphorical mate death (Kavaliku 1961: 49–67, 1977; Mahina 2005a: 136–47).

18. The word mālie beauty, is used for faiva performance arts, while the term faka‘ofa‘ofa beauty, is used for both tufunga material arts and nimamea‘a fine arts. On the other hand, the words talavou and hoihoifua, largely referring to physical beauty, are used for tangata men and fefine women, respectively.

19. Their laumālie everlasting souls, are thought to be in the kuohili/kuongamu‘a past, yet in the mu‘a front, where they are placed as guidance for people and on which the yet-to-come kaha‘u/kuongamui future, placed in the mui back, is brought to bear, and both are constantly fakatatau mediated, in the ever-changing lotolotonga/kuongaloto present.

20. Name of a special tongo mangrove, tree at Koloa, the island and royal residence of Tu‘i Tonga in Vava‘u.

21. This parallels the tāvāist philosophical treatment of ‘aati art (and litilesā literature), where the primary concerns are with “what art is,” that is, “art work,” followed by the secondary concerns with “what art is for” and “what art is by means of,” that is, “art use” and “art history,” respectively, in that logical order of precedence.

22. The Tongan words for Alzheimer’s disease and dementia as a mental condition are ‘atamai ngalongalo forgetful mind; cf. loto ngalongalo forgetful heart, which are linked to both the ‘atamai mind and fakakaukau thinking, in the ‘uto brain on the one hand, and ongo feeling and loto desire in the fatu/mafu heart, on the other.

23. The fuo formal, shape of the kava is fuolōloa oval/ovular, as are the vaka boat and fale house, after the fale fakaManuka (or fale fakaManu‘a in Samoan) as opposed to the fuo formal, shape of the tano‘a bowl, which is fuopotopoto circle/circular, after the fale ha‘otā (or fale maota in Samoan). Whereas the tano‘a is for kava, the kumete and sene are, respectively, for faito‘o healing and ngaohikai cooking, all as varieties of bowls.



24. Both *peau/ngalu* waves and *matangi/havili* winds, are aerodynamic and hydrodynamic in terms of both quality and functionality, as in the case of the *vaka* boat and *fale* house, which involves the *fakata* mediation, of the elements by way of *fakahoko* connection and *fakamāvae* separation, that is, *fakafelavai* intersection. What goes on within and across the *vaka* boat and *fale* house, as in *kava* between them, is socioecodynamic, defined by *fonua* people and their environment. Both *peau/ngalu* waves and *matangi/havili* winds, are forms of *mata* eye, and/or *ava* hole, that is, *point*, where *ivi* energy is most dense and intense.

25. This was the story of both the *kava* and the *sugarcane* plants, which peaked in the sacrifice of *Kava* through *mate* death, which began with *kona* bitterness, followed by *melie* sweetness, when both became a lasting social institution of both aesthetic and pragmatic, political, and economic significance in *Tonga* (see *Māhina* 1992). This parallels the story of *Jesus* when he was sent to the world to salvage people from *mate* death to *mo'ui* life (*John* 3:16), where he ended up himself giving up his *mo'ui* life and *mate* died, for the so-called sinners, which paved the way for *Christianity* as a lasting social and religious institution. One can say that the *tala 'oe fonua*, telling of the land and its people, is deeply embedded in the *talanoa 'oe kava moe tō*, telling of the *kava* and *sugarcane* plants, while the *tala 'oe lotu Kalisitiane*, telling of *Christianity*, is deeply entrenched in the *tala 'oe kolosi 'akaufakalava* telling of the cross.

26. Sustainable development is a form of economic development, which is a post-World War II, Western-based, UN-led capitalist doctrine, followed by political governance as a post-Cold War, Western-driven, UN-based democratic doctrine, where both capitalism and democracy are now combined as inseparable but indispensable *hoa* pairs of equal/same/similar and opposite/different/disimilar binaries. As a “modern” doctrine, economic is defined as a development that meets the needs of the present generations while compromising the needs of future generations. While the formulation of sustainable development was a global solution to climate change as a global problem, the environment is omitted from the equation.

27. Both *fonua/kalatua* culture and *tala/lea* language, are merely human *vaka* mediums/vessels *hala* vehicles, for the dialectical composition and historical communication of ‘*ilo* knowledge (and *poto* skills), in *tā* time and *vā* space.

28. As indivisible but indispensable *hoa* pairs of equal/same/similar and opposite/different/disimilar binaries, *tauhi*vā keeping sociospatial relations, and *faifatongia* performing socio-economic obligations, is a *Tongan* form of *tau'atāina* “democracy,” as are the Western political and economic systems *democracy* and *capitalism* inseparable yet indispensable *hoa* pairs of equal/same/similar and opposite/different/disimilar binaries, where the former is thought and felt to be mediated in the latter, conducted in the so-called free market, which is believed to have both a mind and a spirit of its own.

29. From a *tāvāist* philosophical perspective, *liliulea* language translation, involves a *tā-vā* time-space, *fuou-uhou* form-content, and *ngāue-'aonga* function-practice, transformation of ‘*ilo* knowledge (and *poto* skills), between two languages (and cultures), where their common points of *fakahoko* connection and *fakamāvae* separation, that is, *fakafelavai* intersection, are transformed from a condition of *felekeu/fepaki* chaos to a state of *maau/fenāpasi* order through sustained *tatau* symmetry, *potupotutatau* harmony, and *mālie/faka'ofofa* beauty (see *Kalavite* 2019: 173–83).

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### KOLOSALIO GLOSSARY

The following Tongan terms, *liliu kihe*, translated into their English *tatau* equals and *kehekehe* opposite<sup>30</sup> are instances of *hoa* pairs/binaries informed by way of *fakafelavai* intersection, that is, *fakahoko* connection and *fakamāvae* separation on the one hand, and *mata-ava* eye-hole, that is, *mata* eye and *ava* hole, on the other. As *hoa* pairs/binaries, they are *fakatatau*, mediated by way of *fakahoko* connection and *fakamāvae* separation, that is, *fakafelavai* intersection, where they are *liliu* transformed from a situation of *felekeu/fepakiki* chaos, to a condition of *maau/fepakiki* order, through sustained *tatau* symmetry and *potupotutatau* harmony and *mālie/faka'ofa'ofa* beauty.

‘āā	awake, waking
‘aati	art
afo	harmony, simultaneous pitch
‘aho	day
ako	educate, education
‘alomālie	good weather conditions
‘alotāmaki	bad weather conditions
anomelie	sweet; see <i>kanomelie</i> sweet
anoanomelie	overly sweet; see <i>kanokanomelie</i> overly sweet
anotāmaki	sour; see <i>kanotāmaki</i>
anoanotāmaki	overly sour; see <i>kanokanotāmaki</i>
‘aonga	use, useful; see <i>utility, functionality</i>
‘ātakai	environment
‘atamai	mind
‘atamai ngalongalo	Alzheimer’s disease, dementia, forgetful mind; see <i>loto ngalongalo</i> forgetful desire
ava	hole; see <i>mata</i> eye
efiafi	evening
‘eiki	chief, chiefly
enua	“person” and “place”; see <i>fonua</i>
fā‘ahi	dimension; see <i>tapa</i> dimension
fā‘ahitatau, fakafa‘ahitatau	side-of-the-same-order, i.e., of life and the living; cf. <i>Maama Earth</i> (symbolic name for Tonga) as the world of mortals

fa'ahikehe, fakafa'ahikehe	side-of-a-different-order, i.e., of death and the dead; see Pulotu (symbolic name for Fiji) as ancestral homeland and afterworld of Moana Hihifo Western Moana; cf. Hawaiki as ancestral homeland and afterworld of Moana Hahake Eastern Moana
fai	do
faifatongia	performing socioeconomic obligations; see tauhivā, keeping sociospatial relations
faingamālie	opportunity
faingatāmaki	difficulty
fakapō'uli	dark, darkness
fakatatau	mediation
fakatupu	creation
fa'ahitaha	one dimension
fa'ahitolu	three dimensions
fa'ahifā	four dimensions
faiva faifolau	performance art of voyaging
faiva fananga	performance art of legends
faiva fakatupu	performance art of creation
faiva haka	performance art of dance
faiva hiva	performance art of music
faiva lea heliaki	performance art of speech giving
faiva ta'anga	performance art of poetry
faiva talanoa	performance art of storytelling
faiva talatupu'a	performance art of myths
faiva toutaiika	performance art of fishing
faiva toutaivaka	performance art of navigation
faito'ó	healing
fakaangaanga	draft
faka'eke	inquiry
fakafelavai	intersection
fakahaka	choreography
fakahoko	connection
fakakaukau	thinking
fakamaka	fossilized
fakatotolo	research
fatu	heart; see mafu heart
fa'ē	mother
fā'ele	birth
faiva	performance art

faikava	kava drinking
fākele	birth; see fā'ele birth
fakamāvae	separation
fanua	“person” and “place”; see fonua
faka'ofa'ofa	beauty; see mālie beauty
fatongia	obligation, function
fa'u	create
faiva fakamamahi	performance art of tragedy
faiva fakaoli	performance art of comedy
faiva talanoa	performance art of storytelling
fakatu'amelie	hopeful
fakatu'atāmaki	unhopeful
fālahi	width; see breadth, maokupu
fasi	tone; tune, air, melody, sequential pitch; leading voice
fefine	woman
fehālaaki	error
fehī'a	hate, hatred
fekumi	research
felekeu	chaos
fenua	“person” and “place”; see fonua
fepaki	conflict
fiefia	happy, happiness
fika matelau	1, one
fika tauhoa	even number
fika ta'etauhoa	odd number
fo'ou	original, new
fonua	“person” and “place”; people and environment
fonualoto	burial place; see fa'itoka and mala'é burial places
fuo	form; see uho content
fuo-uho	form-content; see tā-vā time-space
fuofuonoa	formless
hae	tear, tearing
hahake	east; see hihifo west
hahake-hihifo	east-west; see tokelau-tonga north-south
haka	dance, bodily movement
hake	going-up, ascending; see hahake east
hala	medium, vessel or vehicle; way; see tala tell, telling
hema	left



hanua	“person” and “place”; see fonua
heliaki	artistic (and literary) device
hifo	going-down, descending; see hihifo west
hihifo	west
hoa	pair/binary or pairs/binaries of equal/same/ similar and opposite/different/dissimilar
hoafaiako	co-teachers
hoafaiva	co-performers
hoafānifo	co-surfers
hoafuhu	co-boxers
hoakehekehe	opposite/different/dissimilar entities/identities/ tendencies, pair/binary or pairs/binaries
hoalalava	co-intersectors
hoasika	co-javelin-throwers
hoatātatau	co-tattooists
hoalangakatomosikaka	co-mosikaka-basket-weavers
hoalangakatoalu	co-alu-basket-weavers
hoalangata‘ovala	co-waist-mat-weavers
hoatātongitongi	co-steel-sculptors
hoatuikakala	co-flower-designers
hoatuitangaipilo	co-pillow-case-makers
hoatuimatala‘i‘akau	co-embroiders
hōhoakehekehe	opposite/different/dissimilar entities/identities/ tendencies, pair/binary or pairs/binaries
hoafaifolau	co-voyagers
hoalafo	co-lafo-disc-throwers
hoalakalaka	co-lakalaka-dancers
hoamālie	equal/same/similar entities/identities/tenden- cies, pair/binary or pairs/binaries
hoafaiako	co-teachers
hoatoutaivaka	co-navigators
hōhoamālie	equal/same/similar entities/identities/tenden- cies, pair/binary or pairs/binaries
hoholokovi	aging badly
hoholotāmaki	aging sourly; see hoholokovi aging badly
honua	“person” and “place”; see fonua
hoatatau	equal/same/similar entities/identities/tenden- cies, pair/binary or pairs/binaries
hōhoatatau	equal/same/similar entities/identities/tenden- cies, pair/binary or pairs/binaries
holo	dismantling

‘iai	reality, existence
‘ilo	knowledge
‘lo‘i	known
‘iloa	knower
ivi	energy
ivikula	red energy
ivi‘uli	black energy
kafa	sennit; see cord, rope, maea
kafa kula	red kafa-sennit
kafa ‘uli	black kafa-sennit
kalatua	culture; see fonua, kalatua
kapo	less knowledgeable, skillful; see punake kapo
kaha‘u	future
kamu	circumcise; see tefe, kaukau circumcise
kaukau	circumcise; bathe; see tefe circumcise
kata	laugh, laughter
kanoloto	content; see uho content
kakai	people
kamata‘anga	beginning
kau mate	dead
kau mo‘ui	living
kaungamālie	more, enough
kaungatāmaki	less, not enough
kanotohi	abstract; see kanoloto content
kehe	different
kovi	bad
koloa	material wealth
kuongaloto	present; see lotolotonga future
kuongamu‘a	past; see kuohili past
kuongamui	future; see kaha‘u future
kuohili	past; see kuongamu‘a past
la‘ā	sun
langi	sky, heaven
lea	language; see tala language
lelei	good; see sai wellness, mālie, faka‘ofo‘ofa beauty
loi	lie; see lasu lie
loto	desire, inside or heart
lala	absence, non-presence; sex
langa	build
lau māhina	months
lava	done

lavea	injury, wounding
lelei	good; see mālie, faka'ofa'ofa, hoihoifua, talavou beauty
litilesā	literature
liliu	translation
lōloa	length
loto	desire; see center, inside, internal, midpoint, loto
loto ngalongalo	forgetful desire (feeling heart)
lotolotonga	present; see kuongaloto present
māfana	warmth
mafu	heart; see fatu heart
maama	light; see malama light
maau	order
mahaki	disease; see sickness, illness, puke
māhina	moon, month
maka	rock, stone
makatu'ū	bedrock
mālie	beauty; see lelei, faka'ofa'ofa, hoihoifua, talavou
manava	womb; see taungafanau placenta, umbilical cord, uho
maokupu	breadth; see width, fālahi
ma'olunga	height; cf. loloto, depth
maokupu	width, breadth; cf. falahi width, breadth
maisoa	major
mamahi	sad, sadness
mata'ū	right, as in right-handed
maina	minor; see mīnoa, minor
manupuna	bird
mata	eye; see ava hole, mata-ava eye-hole
mata-ava	eye-hole; see tā-vā time-space, fuo-uho form-content
me'a	matter; see ivi energy
me'akula	red matter; see me'a'uli black matter
me'a'uli	black matter; see me'akula red matter
mīnoa	minor; see maina, minor
mate	death
manumelie	proportional; see mālie, faka'ofa'ofa beautiful
manumanumelie	proportional; see manumelie proportional
manutamaki	less proportional
manumanutamaki	less proportional
me'a'ofa	gift

melino	peace, peaceful
mu'a	front, before
mui	back, after
milolua	kava-making technique; cf. vilolua double movement
misi	dream
mīsoa	major; see maisoa, major
mohe	sleep
monomono	mend, mending
ma'u	discovering
mo'ui	life, living
nimamea'a	fine art
naunau	attribute
nga'ahoa	binary/binaries
ngata'anga	end, ending
ngāue	work
noa	0, zero-point; common meeting point of two or more equal and opposite forces, energies or tendencies
nota	Tonganization of "note" in music
'olunga	up-above; see tokelau north
'ofa	love
ongo	feeling, hearing, and sound
olovaha	presiding tu'i, king; see taumu'a bow, of kalia boat
ongo	feeling, hearing, and sound
poto	skills, (expertise, ingenuity); see knowledge application, utility, functionality
palai	type of yam; see tua as equal type of yam
palakū	ugly, ugliness
pōpula	oppression
pongipongi	morning
potupotukehekehe	disharmony
potupotutatau	harmony
puke	sickness, illness; see mahaki, disease
Pulotu	ancestral homeland and afterworld of Moana hihifo, western Moana Oceania
sai	wellness; see lelei goodness
sikotā	kingfisher bird
sino	body
soa	Samoan hoa

sōsaieti	society
tafato'ō	operation
tofoto'ō	beginning of faito'ō healing; see tafato'ō operation
tukuto'ō	ending of faito'ō healing; see tofoto'ō beginning of faito'ō healing
tulu'i	herbal potion for faito'ō healing
uhouhonoa	contentless
ta'anga	poetry
telekanga	port and starboard
tā	time; see vā space
ta'etau	asymmetry; see kehekehe asymmetry
ta'epotupotutatau	disharmony; see potupotukehekehe disharmony
tahimelie	good sea conditions
tahitamaki	bad sea conditions
taulanga-folau-ki-ai	destination, arrival
taulanga-folau-mei-ai	origination, departure
taumu'a	bow
taumu'atonu	on-course, bow; see destination, arrival
taumu'atonua	on-course, bow; see destination, arrival
taumuli	stern
taumulitonu	on-course, stern; see origination, departure
taumulitonua	on-course, stern; see origination, departure
taumu'avale	off-course, bow; see destination, arrival
taumu'avalea	off-course, bow; see destination, arrival
taumulivale	off-course, stern; see origination, departure
taumulivalea	off-course, stern; see origination, departure
tangata	man
tau	war
tau'atāina	freedom
tauhoa	pairing
ta'é'iloa	unknown
ta'etauhoa	unpair
tāmaki	bad, sour
tangi	cry
tapafā	four dimensions
tapatolu	three dimensions
tapataha	one dimension
tauelangi	climatic elation
taumafakava	royal kava ceremony

tāvāism	Tā-Vā Time-Space Philosophy of Reality
tāvāist	see tāvāism
tā-less	timeless
tatau	symmetry
tautua	Samoan for Tongan faifatongia socioeconomic functions
tauhi	keep, keeping
tala	language; see lea language
talanoa	storytelling, “critical-yet-harmonious-talk”
tama	child; see valevale fetus
taula	anchor; see to’ua, taula anchor
taungafanau	mother’s placenta; see manava womb
tefe	circumcise, circumcision; see tafa, tofo
tekinikale	operating
teulevā	technical
tēvolo	Samoan for Tongan tauhivā, keeping sociospatial relations
tokelau	devil
tonga	north; see ‘olunga up above, tokelau north
tua	south; see lalo down below, tonga south
tu’umelie	type of yam; see palai type of yam
tu’utāmaki	prosperity
tufunga	poverty
tufunga faito’o	material arts, material artist
tufunga fakatupu	material art of healing
‘uhinga	material art of creation
uho	meaning
‘uto	content; see uho mother’s umbilical cord
vā	brain
vai	space
vaka	water; see herbal potion vai
vakai	boat
vakahao	epistemology; ways of knowing
vakahē	safe boat
vakamate	unsafe boat
vakama’u	dead boat
vakamole	safe boat
vakamo’ui	lost boat
vākovi	safe boat
vālelei	bad sociospatial relations
	good sociospatial relations

vale	ignorance, mental illness, sickness
valevale	fetus
vālea	altered space; see vālenga altered space
vālenga	altered space; see vālea altered space
vā-less	spaceless
vātau	socially “noisy,” instability; see vālau, socially “noisy,” instability
vela	fieriness; see māfana warmth, and tauēlangi climatic elation
veteveteki	taking apart; see veuveuaki taking apart
veuveuaki	taking apart; see veteveteki taking apart
vilolua	royal kava-making technique; double-twist; see milolua
whenua	“person” and “place,” see fonua, “person” and “place”