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Kettunen, Harri

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De rerum natura: On the Nature of Existence and the Existence of Nature in the mundo maya and Beyond

Harri Kettunen

Abstract:

In Mayan languages, as in many other Indigenous languages around the world, there is no traditional word for 'nature.' The lack of such terminology stems from the fact that the division between the human realm and the environment we live in has not been (historically or culturally) as separated as it is in the modern world. However, while there are no traditional words for 'nature' in Mayan languages, some of the languages use descriptive terms or neologisms that are often translated as 'nature' in dictionaries and other linguistic sources. The focus of this article is to understand the concept of nature in the Maya worldview based primarily on linguistic sources.

Keywords: *Maya, concept of 'nature' in Indigenous languages, ontology of nature*

Resumen:

DE RERUM NATURA: SOBRE LA NATURALEZA DE LA EXISTENCIA Y LA EXISTENCIA DE LA NATURALEZA EN EL MUNDO MAYA Y MÁS ALLÁ

En los idiomas mayas, al igual que en muchas otras lenguas indígenas de todo el mundo, no existe una palabra tradicional para la "naturaleza". La falta de este término se debe al hecho de que en los tiempos antiguos no se observaba histórica o culturalmente una división tan visible entre el ámbito humano y el medio ambiente como en la actualidad. Sin embargo, aunque en los idiomas mayas no existen palabras que definan exactamente la "naturaleza", algunos de los idiomas utilizan términos descriptivos o neologismos que en los diccionarios y otras fuentes lingüísticas a menudo se traducen como la "naturaleza". El enfoque de este artículo es comprender el concepto de la naturaleza en la cosmovisión maya principalmente en base a las fuentes lingüísticas.

Palabras clave: *maya, concepto de 'naturaleza' en lenguas indígenas, ontología de la naturaleza*

Introduction

In Mayan languages, as in many other Indigenous languages around the world, there is no traditional word for ‘nature.’ The lack of such terminology stems from the fact that the division between human beings and the environment we live in – and the division between populated and unpopulated areas – has not been (historically or culturally) as separated as it is in the modern world¹. However, while there are no traditional words for ‘nature’ in Mayan languages, some of the languages use descriptive terms or neologisms that are often translated as ‘nature’ (or related terms) in dictionaries and other linguistic sources. These include K’iche’ *uwach ul-eew* (“face of the earth”) for ‘nature’ and Jakalteek *stxòtx’alq’inal* for ‘biotope’ (from *stxòtx’al*, ‘earth of’ and *q’inal*, ‘life’). The main focus of this article is to understand the concept of *nature* in the Maya worldview based primarily on linguistic sources. Besides the Maya area, the article explores the concept of *nature* – and its personified and gender-specific manifestations – in other cultures and languages around the world for comparative purposes. The title of the article invokes Lucretius’s didactic poem *De rerum natura* as well as McTaggart’s *The Nature of Existence* and seeks to see whether Western concepts can be used to describe non-Western ideas, concepts, and beliefs.

The linguistics of nature in the Maya area

While a few Mayan languages have constructed terms (mostly neologisms; see below) that are translated as ‘nature’ (*naturaleza* in Spanish) in dictionaries, most Mayan languages operate with descriptive terms, such as “face of the earth,” or use the dichotomy *town* vs. *forest* (see below). In Mayan languages there are a number of terms for ‘earth’ that are used when forming the concept “face of the earth.” One of them, *kab*, can be reconstructed all the way back to Proto-Mayan (Kaufman 2003:414, 2017:95), although the term is restricted to Yucatekan languages today as a reference to ‘earth’ (Yukatek *kàab* ‘land, world’ [Bricker et al. 1998:118], Itza’ *kab* ‘world’ [only in derived words, compounds, or fixed phrases] [Hofling and Tesucún 1997:332], and Mopan *kab* ‘world’ [Hofling 2011:227]), while in other languages it has either gone through a semantic shift – or it only appears in restricted compounds – as in Tzotzil *chob* ‘milpa’ (Delgaty 1964:14), and various terms for ‘earthquake,’ including Tzeltal *liki chab* (Kaufman 2003:414), K’iche’ *kabraq’an* (ALMG 2004a:63), and the reconstructed Greater Q’anjobalan **kix kab* (Kaufman 2003:414) and Greater Mamean **kab(-la) junab* (Kaufman 2003:414).

Another term for ‘earth, land,’ common in Lowland Mayan languages (Yucatekan and Greater Tzeltalan), along with Chuj and Tojolabal, is Greater Lowland **luʔm* (Kaufman 2003:384) and its descendant forms: Yukatek *luʔum* (Bricker et al. 1998:175), Itza’ and Mopan *luʔum* (Hofling and Tesucún 1997:426; Hofling

2011:295), Lacandon *ruʔm* (Hofling 2014), Ch'orti' *rum* (Hull 2016:351), Ch'ol, Tzeltal, and Tzotzil *lum* (Aulie and Aulie 1978:75; Slocum 1953:37; Hurley and Ruíz 1986:79), as well as Chuj and Tojolabal *luʔum* (ALMG 2003e:60; Jackson and Supple 1952:40). Furthermore, K'iche'an languages have a term for 'earth, land,' deriving from Greater K'iche'an *uleew (Kaufman 2003:416), with descendant terms, such as Uspantek *uleew* (Vicente Méndez 2007:283), K'iche' *ulew* ~ *uleew* (ALMG 2004a:130), Tzutujil and Sakapultek *uleew* (Cruz Ajcá et al. 2014; ALMG 2001c:98), and Kaqchikel and Sipakapa *ulew* (Ruyán Canú et al. 1991:228; ALMG 2001d:98).

Besides the aforementioned terms, Eastern Mayan languages – along with the languages in the Huehuetenango diffusion zone belonging to the Q'anjobalan branch – have terms for 'earth' that derive from Eastern Mayan *ch'och' (Kaufman 2003:414). These include *tx'otx'* in Mam (ALMG 2003a:146, 2010:515), Tektitek (ALMG 2003d:75), and Awakatek (ALMG 2001a:88), *ch'och'* in Q'eqchi' (ALMG 2004b:75), and (in the Q'anjobalan branch) *tx'otx'* in Q'anjobal (ALMG 2003b:143) and Jakalteq (Ramírez Pérez 1996:281), and *tx'ootx'* in Akatek (Andrés et al. 1996:187). Lastly, Poqomam (ALMG 2003c:14; McArthur and McArthur 1995:1) and Poqomchi' (Dobbels 2003:30) have *ak'al* for 'earth.'

In Central Mayan languages, there is a shared concept of "face of the earth" that can be translated as 'soil,' 'earth,' or 'world' (and 'nature' as we will see later) depending on the language and context. These include Ch'ol *panumil* (Becerra 1937:25) or *pañimil* (Aulie and Aulie 1978:91-92), from *pan-lum-il*, "above / on.top. of / front / surface / forehead-earth" (Hopkins et al. 2011:173-174), Tzotzil *balumil*, as well as *banamil*, *banomil*, and *banumil*, depending on the dialect (Hurley and Ruíz 1986:18), from *ba-lum-il*, "above/on.top.of-earth," Tzeltal *balumilal* ~ *bahlumilal* (Slocum 1953:6; Kaufman 2003:417), Mopan *yok'ol-kab* (Ulrich & Ulrich 1976:253; Hofling 2011:479) and Yucatec *'ok'ol kaab* (Bricker et al. 1998:16), Ixil *vatz tx'ava?* (Kaufman 2003:417), K'iche' (ALMG 2004a:135), Sakapultek² (Vásquez Aceituno 2007:434), and Uspantek (Vicente Méndez 2007:289) *wach uleew*, Tzutujil *rwach?uleep* ~ *ruwach?uleew* (Pérez Mendoza and Hernández Mendoza 1996:372; Kaufman 2003:418), Kaqchikel *ruwach?ulew* (Ruyán Canú et al. 1991:207), Poqomam *naah ak'al* and *wach ak'al* (ALMG 2003c:108), Q'anjobal *sat tx'otx'* (ALMG 2003b:125), and Mam *twitz tx'otx'* (Kaufman 2003:418). Mam (ALMG 2003a:137) has also *twitz q'ijlal* for 'world, life, nature.'

In addition, besides being translated as 'world,' the K'iche' term *uwach uleew* is translated as 'nature' (Sp. *naturaleza*) in the K'iche' dictionary with neologisms (ALMG 2003f:52). Similarly, Sipakapa (ALMG 2001d:79) has *rwoch uleew* for 'ecosystem, nature' (as in *Ri qchak are' ri xtqchjaj ri rwoch uleew* or "Our task is to care for the ecosystem"). The aforementioned K'iche' dictionary (ALMG 2003f:40-41) has also terms for 'flora' (*urexal uwachulew* [3SE-green-ABSTR-3SE-face-earth] or "the green of the face of the earth") and 'fauna' (*rawajil uwachulew* or "the animals of the face of the earth"). Likewise, Jakalteq (ALMG 2001f) has neologisms

related to the concept of ‘nature.’ These include *stx’òtx’alq’inal* for ‘biotope’ (from *stx’òtx’al*, ‘earth of’ and *q’inal*, ‘life’), as well as *ehobal tx’òtx’* for ‘biosphere’ (from *ehoj* [root of the verb ‘to be’], *-bal* [locative suffix], and *tx’òtx’*, ‘earth’). Terms for larger concepts include Achi term *kajuleew* for universe (ALMG 2001g:136), from *kaaj* ‘sky’ and *uleew* ‘earth,’ as well as Poqomchi’ *taxaaj ak’al* for ‘world, universe, sky, and earth’ (Dobbels 2003:654), i.e., literally “sky-earth,” reminiscent of Finnish *maailma* (‘world, earth, universe’), literally “earth-air.”

Besides these, Popol Vuh (Christenson 2003:48) uses merismus where two terms or concepts form a new concept. These include “sky-[and]-earth” as “creation as a whole,” “mountain-[and]-valley” as “the face of the earth as a whole” and “deer-[and]-birds” as “all wild animals” versus “dogs-[and]-turkeys” as “all domesticated animals.” The last two pairs seem to reflect the opposition of wilderness and human habitation. Furthermore, the *juyub’ taq’aj*, or “mountains+valleys” parallels Chuj *witz’ ak’lik*, or literally “mountain+plains/valleys,” referring to the earth in general and glossed as “The Earth Lord, the spirit of the mountain” by Hopkins (2012:6, 383). The lines in Popol Vuh (Christenson 2004:15) are as follows:

<i>Ronojel kaj,</i>	All sky,	(lines 64-65)
<i>Ulew.</i>	Earth.	
	“sky-earth” = “creation as a whole”	
<i>Juyub’</i>	Mountains,	(lines 240-241)
<i>Taq’aj.</i>	Valleys.	
	“mountain-valley” = “the face of the earth as a whole”	
<i>Ri kiej,</i>	The deer,	(lines 338-390)
<i>Tz’ikin.</i>	Birds.	
	“deer-birds” = “all wild animals”	
<i>Ix chi k’ut,</i>	You now therefore,	(lines 746-749)
<i>Xkixqati’ chik,”</i>	We will eat you now,	
<i>Xcha’ ri ki tz’i’,</i>	Said the their dogs,	
<i>Kak’ chikech.</i>	Their turkeys to them.	
	“dogs-turkeys” = “all domesticated animals”	

All in all, Mayan languages either lack a specific term for ‘nature’ or it is constructed by using semantically related terms. A dictionary search of 29 Mayan languages produced only a few direct translations of Spanish ‘naturaleza’ (‘nature’). These include, besides the neologisms mentioned above, only one direct translation (gloss) of ‘nature’: Awakatek *wisqil* (ALMG 2001a:101). Besides the terms mentioned above, Mayan languages make the difference between inhabited areas

(such as a village) and the wilderness (usually a forest or ‘*montaña/monte*’, i.e., literally ‘mountain, hill’ but more commonly ‘bush, wilderness’). These include Yukatek *k’áax* ‘forest’ vs. *kàah* ‘town’ (Bricker et al. 1998:120, 148), Lacandon *k’áax* ‘forest’ vs. *kajar* ‘town’ (Hofling 2014:205), Itza’ *k’aax* ‘forest’ vs. *kaj* ‘town’ (ALMG 2001b:37, 42; Hofling and Tesucún 1997:333, 387), and Mopan *ché’il* ‘wild, uncivilized’ vs. *kaj* ‘town’ (Hofling 2011:151) in the Yukatekan branch; Ch’ol *te?el* ‘forest, jungle’ (Hopkins et al. 2011:218), Chontal *te?e?* ‘forest, jungle’ (Keller and Luciano 1997:235), Ch’orti’ *ajk’opot’* ‘wild, of the forest’ and *nuk-te?* (“large-tree”) ‘hills, forest in the mountains’ (Hull 2016:35, 307), Tzeltal *te?eltik* ‘forest’ (Slocum 1953:75), and Tzotzil *jabnaltik* and *mol te?tik* ‘forest, mountains,’ literally “old forest” (Hurley and Ruíz 1986:57, 84)⁴ in the Greater Tzeltalan languages; Chuj *yax lu?um* ‘virgin forest, rain forest’ (Hopkins 2012:408), literally “green-earth,” and Akatek *xol(aj) te?(laj)* “in the forest” (Andrés et al. 1996:221) in the Greater Q’anjobalan languages; Mam and Tektitek *tze?* (ALMG 2003a, 2003d) and Awakatek *tx’ok’been* (ALMG 2001a:88) ‘forest’ in the Greater Mamean languages; K’iche’ *k’iche?laj* (ALMG 2004a:63), Achi *k’ache?laaj* (ALMG 2001e:55), Kaqchikel *k’ichelaj* (ALMG 2011:53), Poqomam *k’ichee?* (ALMG 2003c:97), Poqomchi’ *ch’ahn* (Dobbels 2003:123), and Q’eqchi’ *k’iche’* (Stoll 1896, Part 2; ALMG 2004b:113) ‘forest, *montaña*’ in the Greater K’iche’an languages, along with Wastek *te?lom* ‘forest’ (Larsen 1955:88).

The Mayan terms also reflect a more general Mesoamerican idea of uninhabited areas as ‘forest,’ ‘wilderness,’ or *monte* (i.e., ‘wilderness, uncultivated land’) as in Nahuatl *cuauhtlah* (*k’awtlah*) and *cuauhyoh* (*k’awyo*) (Karttunen 1983:64), Amuzgo *jndëë* (Stewart and Stewart 2000:72), Mixe (of San Juan Colorado) <cuhu> (*kù?ù*) (Stark et al. 1986:11), Otomi (of San Andrés Cuexcontitlán) *xanthi* (*/ʃãnthi/*) (Lastra de Suárez 1989:143), and Xinka *kraw’a* ~ *graw’a* (Rogers 2010:369, n.d.a:4, n.d.b.:17), to name a few. The semantics of nature-related terminology can also be geographically motivated. While the aforementioned terms refer either to the wilderness in general – or foresty areas in particular – terms in other languages reflect the surrounding environment in a different manner: e.g., in Seri (Komkaak), a language isolate in Sonora, Mexico (outside Mesoamerica proper), wilderness is associated with a desert, as in <heecot> (*/ʔæ:kot/*), which is glossed as “monte, vegetación [desert area]” in Moser and Marlett (1998:17)⁵.

The concept of ‘nature’ in the European linguistic landscape

As regards the terms for ‘nature’ in other languages around the world, the concepts and their etymologies are as varied as the languages. However, some interesting patterns that can be observed. Some are due to lexical borrowings, some attributable to linguistic areas (sprachbunds, diffusion areas), and some to common human concepts of the surrounding environment. Moreover, it is difficult to assess how culture affects people’s ideas of nature – and how the terminology (or the lack

of it) related to nature affects how the speakers of a given language perceive the natural environment around them. Evidently, each individual has a different relationship with nature⁶, but culture and society also affect it, and the terminology related to nature shapes how people perceive it and talk about it. The semantic field of the English word ‘nature’ includes terms such as *natural*, *innate*, *raw*, *uncontrolled*, *wild*, *primitive*, *free*, *untouched*, and *uncultivated*. However, when we look at the etymology of the word, a somewhat different semantic scope arises. The Latin term *nātūra*, from which the English term ‘nature’ derives from (along with more than half of the terms for ‘nature’ in all European languages), translates as *birth*, *character*, *quality*, *essence*, *substance*, *element*, *disposition*, *inclination*, *temperament*, *the natural world*, *the universe*, and *male organ*, all deriving from *nātūrus*, future active participle of *nāscor* ~ *gnāscor* (“to be born”), and ultimately from Proto-Indo-European **ǵenh₁*- “beget a child, to give birth, be born” (Lewis and Short 1879:1189-1190; Mallory and Adams 2009:474; Streng 1933:481-482).

While the Germanic and Romance languages (along with Albanian, Irish, Scots Gaelic, Welsh, and Polish, as well as the non-Indo-European Basque and Maltese) have a Latin-based term for ‘nature,’ most Slavic languages derive their term from Proto-Slavic **roditi*. Interestingly, however, the term is synonymous, or near-synonymous to the etymology of the term ‘nature,’ with the meaning “to give birth, bear (fruit)” – itself from Proto-Balto-Slavic **radei-* or **radi-*, a cognate with Latvian *radīt*, “to give birth to, to create” (Derksen 2008:437, 2015:177). Similarly, Lithuanian *gamtà*, ‘nature,’ derives from Proto-Baltic **gim̃-*, itself from Proto-Indo-European **g^wem-*, with the meaning “to come,” and also “to come out into the world,” i.e., “to be born,” and etymologically the same as the English verb ‘to come,’ and, e.g., Spanish *venir* (Mallory and Adams 2009:394-396). Semantically associated, although with a distinct etymology, is the Greek term for ‘nature,’ φύσις (*fýsi*), derived from Ancient Greek φύσις (*phýsis*, /p^hýsis/), itself from φῦω (*phýō*, /p^hýo:/), “to grow,” and ultimately from Proto-Indo-European **b^huH-*, “to appear, become, rise up,” which also gave, e.g., the English word ‘to be’ and Spanish *fui* (and *fue*, *fui-*, *fuer-*, *fues-*).

Furthermore, in the Uralic languages, terms for ‘nature’ are semantically associated with the neighboring Indo-European languages. Hungarian has *természet* for ‘nature,’ from *terem*, ‘to produce’ +^rnominalizing suffix *-észet* (Zaicz 2006:739-740) while Finnish *luonto* (‘nature, outside world, natural order, quality, property’) derives from the verb *luoda*, ‘to create, bring about’ and ‘shovel (snow)’ (SSA3 1995:105, 108). Closely related languages have similar terms, such as Northern Sami *luondu*⁷ (Álgu database 2021) and Estonian *loodus* (EKI ühendõnastik 2020), derived (along with Finnish *luonto*) from Proto-Finnic **loodak* (“to throw, to cast, to push away” and “create, make”), itself from Proto-Finno-Volgaic **loŋe-* (“to throw, push away”) (Álgu database 2021; SSA2:105). Another related term is the Finnish *ympäristö*, or ‘environment,’ from *ympäri* (‘around’), a borrowing from Proto-

Germanic *umbi ('around'), itself from Proto-Indo-European *h₂entb^{hi} ('around, on both sides'), and ultimately from *h₂ent-, or 'face' (SSA3 2000:491; Mallory and Adams 2009:289, 291). This is also the origin of Latin *ambi-* ('around, about, on each side of') and its derivatives, including English 'ambient.' Consequently, Finnish *ympäristö* and English 'ambient' come from the same source. Interestingly, these are also semantically related to English 'environment,' from French *en* ('in') + *viron* ('a turn').

On the personification and gender of nature

Nature is also personified in many cultures around the world. "Mother Earth" and "Mother Nature" are widespread concepts with a myriad of artistic, linguistic, and mythological representations around the world and throughout human history. However, as artistic representations of "Mother Earth" predate written records and attested linguistic terms, it is not always easy to connect later cultural phenomena to earlier manifestations in material culture. In spite of this, archaic cultures have produced symbolic imagery with affinities to the later manifestations of the concept of "Mother Earth," as demonstrated by Marija Gimbutas (1991) and Nikos Chausidis (2012). According to Gimbutas (1991:228), "[f]rom the Upper Paleolithic, symbols appear representing the Goddess's fertility. She is portrayed as a naturalistic nude with hands placed on her enlarged belly, her pregnant form apparently likened to the fecundity of the seeded earth and all its creatures." Furthermore, Gimbutas (1991:230) adds that "[t]here is no doubt that the prehistoric veneration of Mother Earth survived intact up to the time of the worship of Demeter and Persephone in Greece, Ops Consivia in Rome, Nerthus in Germanic lands, Zemyna or Zemes Mate in the Baltic area, Mother Moist Earth in Slavic lands, and elsewhere. Her power was too ancient and deep to be altogether destroyed by succeeding patriarchal religions, including Christianity." Although neither Gimbutas nor Chausidis discuss Indigenous ideas of "Mother Nature" or "Mother Earth," the concept appears to be near-universal.

While there are male "earth gods" and female "sky gods," the idea of the nature being feminine is quite widespread. One of the well-known Indigenous American manifestations of "Mother Earth" is the Quechua *Pachamama*, from *pacha* ('earth, land, time, universe') and *mama* ('mother')⁸ (DQEQ 2005:294, 373, 375). Others include widespread Native North American concepts of "Mother Earth." According to the interviews carried out by Jostad et al. (1996:572) with members of nine Native North American groups (Blackfoot, Coeur d'Alene, Colville, Kalispel, Menominee, Nez Perce, Salish, Spokane, and Warm Springs), "[i]n the traditional context, the language used by those interviewed was completely gender-specific; Mother Earth is "she," the rivers are her blood, and we come from her womb of creation." However, although the fundamental concept surely exists, it is worth not-

ing that *none* of the Indigenous languages of the peoples interviewed in Jostad et al. (1996) have gendered pronouns. While some, such as Okanagan (Colville-Okanagan), has gender suffixes and some, such as Blackfoot, has grammatical gender (although animate-inanimate, not sex-specific⁹), none of the languages mark pronouns with gender. Consequently, the interviews were probably carried out in English. However, this does not mean that the underlying concept of “Mother Nature” would not be present in the language, culture, and worldview of the said groups.

Furthermore, it is worth noting that the gender of the various terms for ‘nature’ in Indo-European languages is feminine: Sanskrit प्रकृति (prakṛti), Latin *nātūra* (along with descendant terms in, e.g., French, Italian, and Spanish), Slavic природа (*priroda*), Lithuanian *gamta*, as well as Greek φύσις (*fýsi*). However, one ought to be careful when interpreting gender categories based solely on grammatical gender without understanding the underlying semantics of these terms.

Besides the examples provided by Gimbutas (1991:230) above (Demeter, Persephone, Ops, Nerthus, Žemyna¹⁰, Zemes Mate, and “Mother Moist Earth”), many other female deities in European mythology can be associated with the concept “Mother Earth.” These include Jord ~ Jörd ~ Jörð, from Old Norse *jǫrð*, ‘earth’ (Icelandic *jörð* and Danish, Norwegian, and Swedish *jord*, cognates of English *earth* and Gothic 𐌺𐌹𐌸𐌰 [airþa], from Proto-Germanic *erþō and, ultimately, from Proto-Indo-European *h₁er-, ‘earth’), Fjorgyn, Frigg, and Freya, as well as Gaia (Gaia), Γῆ (Gê), Tellus, Terra, and Venus¹¹ in the Greco-Roman tradition (Daly 2009:23, 33, 58; Lindow 2001:205-206; Orchard 1997: 44, 98), along with numerous other personifications of nature and earth in different cultures around the world.

“Mother Earth” and the mother of the earth in the Andes

After the Spanish conquest in the Andes, the image of the Virgin Mary was associated with Pachamama (Yetter 2017:2). Although there is some controversy as to the forms and extent of this syncretism (see below), the connection can be observed on many levels, including language, art, religion, and worldviews. The linguistic connection is manifested in the terms *wirjunn* (or *wirjen*) *Pachamama* (Harris 2000), a clear connection to the Virgin Mary. Artistic representations are epitomized in the anonymous Andean painting from 1720 titled “Virgen del Cerro” (“Virgin of the Hill,” “Virgin of the Mountain,” or “Virgin of the Mountain of Potosí” in English translations)¹² which portrays the Virgin Mary within a mountain. The mountain itself represents Cerro Rico, the main source of silver of the Spanish Empire and the largest single source of silver in the history of mankind. Known also as the “mountain that eats men,” due to the harsh conditions and treatment of the Indigenous miners (Ferry 1999; Izagirre 2019; Lane 2019), the Indigenous attitude towards Cerro Rico is rather mixed. The aforementioned painting shows the Virgin Mary merged with the mountain, exhibiting adits (entrances to the mines), trees,

llamas, and Indigenous people, and surrounded by dignitaries and religious icons, and flanked by the Sun and the Moon. While the connection to the Indigenous past of the area is clear, the symbolism is almost entirely imported. Furthermore, although the connection between mountains and Virgins existed already in Spain (e.g., the Virgin of Montserrat), and this connection might have had an influence on the Andean tradition (Damian 1995; Duncan 1986), the fusion of the mountain and the Virgin Mary appears to be motivated by local ideology. For example, as far as I know, none of the images of the Virgin of Montserrat portray the Virgin merged with the mountain. Instead, the figure is always shown in front of it. Consequently, although the connection between the Virgin of Montserrat and the Virgin of the Mountain of Potosí seems obvious, there is no reason to suggest that these two are related (see also Nair 2007:211-212).

However, this does not mean that the Virgin Mary and *Pachamama* were not associated with each other. Derks and Heessels (2011:304-305) point out that right after the introduction of Catholicism in Bolivia, the Indigenous people of the area associated the Virgin Mary with *Pachamama* as protective and fertile mother figures. According to van Kessel (1992:1), both *Pachamama* and the Virgin Mary give and take care of life, watch over the fertility of the cattle, the crops of the farm, and secure the rains and the next agricultural cycle. In return, both ask for “payments” in the form of offerings: flowers, fruits, and seeds¹³.

On the other hand, as Salles-Reese (1997:38) observes, the “association with lust [...] renders impossible the *Pachamama*’s syncretization with the Virgin Mary; unlike the Mother of Christ, the Indian deity is nor virginal, chaste, or pure.” Consequently, according to Tola (2018:28), the assimilation of *Pachamama* into the Christian framework was rather complicated, as for the European missionaries, “*Pachamama* and the Andean women who revered it also evoked lust, lasciviousness and moral chaos.” Furthermore, as Dean (2010:36, 68, 91) points out, while the earth or *Pachamama* is conceptually feminine, many distinct parts of the earth, such as individual stones (especially named ones), outcrops, and mountains, are often masculine while, e.g., caves, as places of origin or birth, are feminine. Moreover, according to Dean (2010:44, 45,68), commonly, the *wank’a* (rocks that were perceived as “petrified owners of places, such as fields, valleys, and villages”) were related to masculine issues associated with male semination, such as flood, drought, and warfare.

The relationship between people and *Pachamama* in the Andes was that of reciprocity. As Tola (2018:28) points out, “[w]hen treated with respect, the earth could respond with abundant harvests. Failure to pay proper attention to *Pachamama*, however, could lead to arid soils, illnesses and even death.” Consequently, “[a]lthough capable of generating life, the pre-Hispanic *Pachamama* could hardly be described as a benevolent, all-giving mother” (Tola 2018:28). The association and partial fusion of *Pachamama* and the Virgin Mary is a prime example of European

and Indigenous surface-level syncretism where the entities are not entirely fused but, instead, co-existing and – to some extent – complementary or even contradictory. Consequently, the nature of the relationship should be labeled as *pericretic* – to coin a term – rather than *syncretic*¹⁴.

To elaborate the relationship and circumstances further, Yetter (2017:3) points out that “[e]ven though these beliefs were syncretized with the model of the Virgin Mary, the Spanish male conquerors were blind to the Andean motives of the preservation of their own cultural ideologies.” Consequently, as Vuola (2019:105) observes, “Pachamama does not merge into Mary. Rather, they co-exist and share common elements, but also have characteristics of their own.” Furthermore, Tola (2018:28-29) notes that in Western modernity, the relationship between nature and society has been based on a rigid opposition in which the earth is a feminized setting for human endeavors, whereas, in the Andean ontology, the relationship is complementary and fluid.

“Mother Earth” in the mundo maya

As regards the concept of “Mother Earth” in the Maya area and Mayan languages, a dictionary search of 30 Mayan languages produced only one direct reference regarding the concept, i.e., Achi (ALMG 2001e:72) *qachuu ulew*, glossed as “madre tierra.” Although references to “Mother Earth” do exist in the modern Mayan languages, the concept itself seems to be a modern development in the Maya area. Based on discussions with speakers¹⁵ of various Mayan languages in 2021, the concept was known but its historical depth contested. Nevertheless, eight out of ten people who took part in a survey¹⁶ carried out among speakers of six Mayan languages in Guatemala answered that they do use the concept of “Mother Earth” in reference to the earth. However, only one provided a term in a Mayan language for the concept. Furthermore, while many people who took part in the survey answered that the earth is feminine, many also replied that earth does not have gender – or it is composed of both genders. One answer was particularly revealing:

“In general, we refer to the earth as our mother, but there are also specific spaces or areas that can be masculine, such is the case of some mountains that are recognized as masculine and bear masculine names, but most of them are feminine. It is also important to mention that there are some places that are not defined by sex – it is only known that they are sacred and have names. [...] In our community, for example, in general it is Qatut Ak'al, but if we refer to the Volcán de Agua, we say the Yuuk' Jun Ajpú or Qatat Yuuk' Jun Ajpú – and Jun Ajpú in our thought and oral tradition is masculine, although it is still part of a whole.”¹⁷

Yet, according to Héctor Aj Xol Ch'ok (personal communication, 2021), the concept was all but unknown a few decades ago but has become more common – especially among the Maya who have worked in NGOs and studied in universi-

ties. He also notes that the new concept ignores the concept of duality in the Maya thought.

Nonetheless, the concept does exist in the modern Maya parlance – and also in more traditional surroundings. According to Kerry Hull (personal communication, 2021), the Ch'orti' regularly refer to the earth as “Mother” – especially in ritual contexts. Furthermore, as there is no grammatical gender in Mayan languages, the gender shows up in explicit nominal references. Hull (2003: 146) notes that “gender association parallelism results from the common frame of reference of the sun and the earth, or as the Ch'orti' say today, “Padre Jesus” and “Madre Tierra.”” In addition, Hull (2003:174) notes that “[t]he earth, like all other ‘good’ beings in Ch'orti' mythology, have ‘evil’ counterparts. All the principal angels have Underworld counterparts who are responsible for causing illnesses. Even Jesus Christ has his evil equivalent in Ch'orti' thought.” Furthermore, the femininity of the earth is obvious in the Ch'orti' planting rites, with references to Mother Earth and Our Mother [the Earth] (Kerry Hull, personal communication, 2021).

The concept is also used in Yucatan – although it is conspicuously absent in the Yucatec linguistic sources. However, the concept does exist in the ritual language of some elders today, as recorded in 2010 by Harald Thomaß (In Press) who documented the following phrase voiced by Don Antonio:

Tin k'ubik waay lu'um kaabile', para empezar y cerrar: in na' lu'um
 “Lo entrego aquí en la tierra, para empezar y cerrar: mi madre tierra”
 (“I give it here on earth, to start and close: my mother earth”)

How traditional, common, or widespread the concept *na' lu'um* is, requires more research. Interestingly, however, it has found its way into modern phraseology and names of, e.g., organizations, businesses, and merchandise, including *Na'Lu'um Cacao Institute* (Belize), *Koox Na'Lu'um Eco Hotel* (Tecoh, Yucatán), *Na' Lu'um Restaurant* (Mérida, Yucatán), *Instituto Ná Lu' Um*, (El Soberbio, Misiones, Argentina), *Colectivo Na'lu'um* – environmental and social community organization (Yucatán), *Grupo Ecologista Na Lu'um* (Campeche), *Ak na'lu'um* educational website, *Espacio Pachamama U Nai Na Lu'um* cultural center, *In na lu'um* Facebook blog, *Ná Lu'um Art*, *Na Lu'um Cosmética Nativa* (Quintana Roo), *Na'lu'um* health and beauty products (Yucatán), *Na' Lu'um* artisanal soaps (Mexico City and Quintana Roo), *Na Lu'um* ecological products (Quintana Roo), *Na'lu'um* wood products (Yucatán), *Lu'um Na'* apartments and condos (Campeche), *Artesanos Na' Lu'um* (Cancún, Quintana Roo), and *The Swallows of Na' Lu'um* song by Nicholas Gunn. Similarly, we have the “Mother Earth” concept appearing in Guatemala, including *Asociación Tuut Ak'al Chib'aatz'* (*tuut ak'al* for “mother earth” in Poqomchi').

Besides the earth itself, the Maya concepts of earth beings/deities (from the ancient Maya texts¹⁸ and iconography to modern Maya concepts) personify aspects

of the earth – much the same way as in many other cultures around the world. Reflections of these ideas are found in concepts such as *Mam* or “grandfather” – with connections to earth and mountain spirits of great antiquity¹⁹. However, these beings have, more than often, other aspects and attributes – making it problematic to associate them with earth exclusively. For example, God N is associated with the aforementioned *Mam* but it also has other attributes that are not connected with terrestrial phenomena (Taube 1992:92-99). Another example is God D whose celestial association is widespread. However, he is also associated with the earth, especially during the Postclassic and Colonial eras – much the same way as *Tōnacātēcuhtli* in the Aztec worldview. Similarly, the Central Mexican deities with connections to the earth, including the aforementioned *Tōnacātēcuhtli*, as well as *Tlāltēcuhtli*, *Tōnacācihuātl*, *Chicomēcōātl*, and *Cōātlicue*, also possess other aspects beyond the earthly associations (Seler 1887:227, 234; Taube 1992:36-41). The fluidity of these beings makes their classification as mere earth deities problematic.

Concluding remarks

The terminology around the concept of *nature* is in constant motion in the languages and cultures around the world, and the Maya area and Mesoamerica are no exceptions. Although there are no traditional terms for ‘nature’ in many languages, new concepts based on changing perspectives of the world around us emerge in all languages. These include neologisms as well as semantic extensions of existing terms. Furthermore, besides the terminology itself, nature and earth are often personified in Indigenous cultures. However, although the idea of “Mother Earth” has recently gained currency in the Maya area, the concept is not autochthonous. Instead, it appears to be a borrowed concept – albeit falling into a fertile ground. Moreover, rather than being based on rigid oppositions, the Maya idea of the earth and the natural world surrounding us is complementary – rather than markedly either feminine or masculine.

Notes

- 1 The modern world (modern era, modernity) refers here to the socio-cultural values, attitudes, and norms, as well as the world system and historical era from roughly the 16th century onwards, characterized first by European hegemony and later by globalization, and associated with capitalism, technological progress, individualism, and urbanization (see, e.g., Braudel 1979; Goody 2004; and Wallerstein 2004).
- 2 Sakapultek has also *kajulew*, glossed as ‘natureza’ (‘nature’) in ALMG (2001c:38). The term does not, however, appear in Vásquez Aceituno 2007.
- 3 The Ch’orti’ term *kōpot* is interesting, as there’s a chance that this term reflects part of a name on the Terminal Classic Randel Stela of Sak Tz’i, written as **AJ-YAX-K’o?-bo?-ta** (*Aj Yax K’obot?*), or “He of the Green Forest.”
- 4 Note also Tzotzil (Hurley and Ruíz 1986) *chij* as ‘ram, lamb, sheep, deer’ vs. *te’tikal* *chij* ‘deer’ (literally “forest deer”) and *chitom* as ‘pig’ vs. *te’tikal* *chitom* as ‘peccary’ (*jabalí* in Spanish in Hurley and

- Ruíz [1986:41] – a loanword from Arabic *جَبَالِيَّ* *jabaliyy*, “of the mountains”). Similarly, there is a development in K’iche’ where *kej* used to mean only ‘deer’ but refers to a ‘horse’ today, while a Nahuatl loanword *masat* (and, to a lesser extent, *kej*) refers to a ‘deer’. In the same way, *ak’* used to mean ‘turkey’ in K’iche’ and now *ak’* or *tij ak’* is ‘chicken’, while *no’s* and *qu’l* means ‘turkey’. These are typical semantic shifts in other Mayan languages as well – along with many other languages around the world. Of particular interest are the Old Tupi names for ‘jaguar’ and ‘tapir’. According to Lemos Barbosa (1956:83, 385-386), in Old Tupi, the superlative particle, *eté* came to clarify confusion after the contact with European languages. Certain lexical items, especially specific domestic animals that were unknown to the Indigenous people of the area, were named after similar familiar entities, including: wine: *kaûi* (‘cauin’); ox: *tapiira* (‘tapir’); and dog: *iagûara* (‘jaguar’). Subsequently, the native terms were augmented with the *eté* particle to produce *kaûi-eté* for ‘cauin’; *tapiir-eté* for ‘tapir’; and *iagûar-eté* for ‘jaguar’, or “onça legitima, grande.” Still today in modern Guarani, *jagua* means ‘dog’ while *jaguarete* is ‘jaguar’. However, ‘tapir’ is *mborevi* and ‘ox’ is *guêi* (an obvious loanword from Spanish).
- 5 Note also <heecto quiih> (*/ʔæ:ktɔ ki:ʔ/*) as “cazar (estar en el monte) [hunt]” and <heecot coom> (*/ʔæ:kot ko:m/*) “buscar visión [seek vision]” in Seri (Moser and Marlett 1998:17).
 - 6 As demonstrated in the (linguistically ambiguous) movie line “this is not natural” in Irvine Welsh’s *Trainspotting* (Welsh 1993), with a reference to outdoors in the Scottish nature.
 - 7 The term understood as ‘nature’ is a modern concept in Sami languages, influenced by the Finnish term *luonto*. The primary meaning of the term is ‘nature’ or ‘character’ as is “human nature.”
 - 8 Although *Pachamama* is often translated as “Mother Earth,” the concept is far more comprehensive, encompassing time along with space. Furthermore, as Yetter (2017:11) notes, “Pachamama [is] mother earth as well as the mother of earth.”
 - 9 Furthermore, as Kilarski (2007:334) points out, “[...] the principal differences between Algonquian and Indo-European gender, [...] involve the type of assignment criteria: in contrast to Algonquian, semantic criteria in Indo-European are usually weaker, being combined with formal ones (morphological or phonological). Furthermore, sex, rather than animacy, is the primary distinction, similarly to many other language families of the Old World, as well as, e.g., Northern Iroquoian among North American languages.” However, it is also worth noting that the animate–inanimate contrast (rather than pure sex-based distinction) was also present in the Proto-Indo-European pronominal system.
 - 10 Žemyna derives from the reconstructed name of the Proto-Indo-European earth goddess *D^héǵ^hōm, meaning ‘earth’. The term *d^héǵ^hōm (and specifically its derived form *ǵ^hh^mō, “earthling”) is also the source for Proto-Italic *hemō and Latin *homō* (“human being”), and its descendant terms: Italian *uomo*, French *homme*, and Spanish *hombre*, as well as Latin (etc.) *humus* (“earth, soil”), and English *human* (Mallory and Adams 1997:174, 2009:471).
 - 11 As Mother Earth in Lucretius’ *De Rerum Natura* (Fratantuono 2017:15-17).
 - 12 There are two versions of the painting: one at the Casa Nacional de Moneda de Bolivia (The National Mint of Bolivia) in Potosí and the other at Museo Nacional de Arte, La Paz, Bolivia.
 - 13 “[...] ambas – Pachamama y la Virgen – son las que dan y cuidan la vida y la salud de sus hijos y ambas piden en “pago” elementos idénticos que observamos en el culto que se les rinde. En el ambiente rural, ambas han de vigilar por la fertilidad del ganado, los cultivos de la chacra y la oportunidad de las lluvias. Ambas reciben las ofrendas de flores, frutas y semillas y ambas han de cuidarles y regenerarlas en el próximo ciclo agrícola” (van Kessel 1992:1). Note also an interesting recent Indigenous ritual that was performed in the Vatican, with a “dance resembling the ‘pago a la tierra,’ a traditional offering to Mother Earth” (see Mares 2019).
 - 14 I.e., ‘around or near,’ rather than ‘together’ with “Cretans.”
 - 15 Dora Maritza García Patzán (Kaqchikel), Romelia Mo’ Isem (Poqomchi’), Héctor Aj Xol Chòk (Q’eqchi’), and Crisanto Kumul Chan (Yucatec).
 - 16 Carried out with the help of Romelia Mo’ Isem in October 2021.
 - 17 ”De manera general nos referimos a la tierra como nuestra madre, pero igualmente hay espacios o áreas específicas que pueden ser masculinos tal es el caso de algunas montañas que son reconocidas como masculinos y llevan nombres masculinos, pero en su mayoría es femenino. También es importante mencionar que hay algunos lugares que no se define si tiene sexo, solo se sabe que es sagrado y tiene un nombre. [...]. En fin en nuestra comunidad por ejemplo en su generalidad es

Qatut Ak'al, pero si nos referimos al Volcán de Agua, le decimos la Yuuk' Jun Ajpú o Qatat Yuuk' Jun Ajpú, y Jun Ajpú en nuestro imaginario y tradicion oral es Masculino, aunque sigue siendo parte de un todo.”

18 Epigraphic references to earth gods include the phrase *kanal k'uh kabal k'uh*, or “celestial gods, earthly gods” (e.g., Tikal Stela 31 and the “Vase of the Seven Gods” [K2796]).

19 Although references to earth as “mother” exist in the modern Maya worldview, I have yet to encounter any explicit references to female earth deities in a pre-Columbian Maya context.

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Abbreviations of dictionaries and other linguistic sources:

ALMG: *Academia de las Lenguas Mayas de Guatemala*¹

DQEQ: *Diccionario quechua-español-quechua*

SSA: *Suomen sanojen alkuperä: Etymologinen sanakirja 1-3*

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¹ Note that most of the ALMG dictionaries do not list authors.

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