

Wixárika Practices of Medical Syncretism

An Ontological Proposal for Health in the Anthropocene

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Abstract

By understanding a community's medical system, we are able to see its body ontology and how the people within it live in relation to the world, a historically constructed ideological position. Modernisation and development have restructured Indigenous communities and devalued traditional ontologies, including medical systems. This is a global pattern, where historical power relationships defined the coloniality of being and from this, organised healthcare, governance, and education in relation to patriarchal and capitalist universals. These social structures underlie the Anthropocene geological epoch and planetary crisis. Wixárika Indigenous communities live a polytheistic sociality; their medical system treats the spiritual origins of illness, attending to social cohesion in a society of humans, the supernatural, flora and fauna. This system is subalternised by dominant universals of biomedicine, which treat the body as separate from the environment and society. I refer to this epistemological inequality as the ontological Anthropocene. Wixaritari use both allopathic and traditional medical systems, following a non-hierarchical syncretic understanding of wellbeing. Giving equal importance to both systems may be a framework with implications for wellbeing beyond human health. This Research Article proposes that by centring Indigenous sociality that is more-than-human we can reconceive our planetary relationships in the broadest sense.

Keywords

Ontology, Anthropocene, Traditional medicine, Indigenous, Mexico.

Introduction

I came to know Indigenous Wixárika communities through researching the health impacts of pesticide exposure on tobacco plantations in 2009. Most of the tobacco pickers were Wixaritari (plural for Wixárika, also known as Huichols),¹ who had travelled from their highland communities to the coast of Nayarit, north-western Mexico, for the duration of the picking season. The study I became involved with had measured cholinesterase depression, a biomarker for exposure to harmful organophosphate (OP) pesticides that are known to interfere with the reproductive process. As a medical anthropologist, what intrigued me was not the impact of OP chemicals on their bodies per se, but how Wixárika families, with their supernatural explanations of disease and illness, understood the effects of these. The knowledge I gained from this research guided my subsequent projects and continues to inform my critical questioning of how we ‘moderns’, a term I will elaborate on in the following section, understand illness causality.

Wixaritari practices in relation to health, illness or treatment cannot be separated from their ways of living in and with the world. Through learning about their medical system, I came to understand more broadly their ontology of life. Wixárika knowledge about wellbeing is holistic. It recognises more-than-human relations with (deified) ancestors, plants, and animals that inhabit their mountain ranges and ecosystems and, importantly, rests upon a social-spiritual system of community governance that brings together belief, ritual, and day-to-day existence. In contrast to ‘moderns’, Wixaritari do not view their health system as superior, contradicting with, or in opposition to biomedicine.

The term ‘Indigenous’ refers, broadly speaking, to groups of people who are the original inhabitants of the land on which they live, land that is often controlled by a dominant or colonial group, who arrived and settled there². By ‘moderns’, I refer to non-Indigenous people (Mendoza 2018, 111), the people of modern states which, to use de la Cadena’s (2008, 341) conceptual framing, are defined by, ‘organised politics [...] that have systematically privileged ways of being identified as modern and discriminated against those they identified as non-modern’. Modern states exercise the coloniality of power over communities of non-moderns. As I will explore in these pages, the coloniality of being has come to define the idea of ‘Man’ as a ‘modern’, where there is a hierarchy of humanness that subalternises non-moderns (see Wynter 2003; Tsing 2016).

- 1 Wixárika (singular)/ Wixaritari (plural) is the name used by this ethnic group. They are also widely known as Huichol/s, a name that was given to them by Spanish colonisers.
- 2 Settler and native go hand in hand, as there can be no settler without a native. Hence, as I understand this term, ‘Indigenous’ is a category that unites peoples based on a conception of time and space, and is contingent on non-Indigenous, from whom they are differentiated. Indigenous includes various regional categories such as aboriginal, First Nations, Native and Tribal, as well as specific groups such as Wixárika or Maori.

In terms of medicine, this hegemony/subalternity is, according to Eduardo Menéndez (1994), definitional: a traditional medical system is one that is subalternised to that of the dominant group in society. Wixaritari use both systems and often for the same illness incident as, from their perspective, these do not contradict one another. On the contrary, in their culture these two systems are complementary. Interacting with these healing realms, the religious/spiritual and the biomedical/modern, is a socio-cultural context and religious-agricultural subsistence economy that increasingly coexists with small-scale enterprise and migrant labouring.

In other work, I have written of the structural violence inherent in relationships between Wixaritari and the Mexican State (Gamlin and Holmes 2018). The coloniality of power has historically treated Mexican Indigenous Peoples as inferiors, with intent to assimilate them into the state. The process of Indigenous acculturation (or development/ modernisation) is differentially patterned across Mexico, however, and Wixaritari are an ethnicity whose socio-religious and political structure has served them well to defend themselves from such processes. Development is a story that has been written by and for moderns, who have used the opportunity to describe Indigenous communities as ‘primitive’, ‘poor’ or ‘needy’ (Robbins 2013), with indigeneity considered a causal factor of poverty (Bartolomé 1997, 28; Bonfil Batalla 1994³).

I will approach these complexities by challenging western categorical thinking and *staying with the forms* of thought that fall outside my scientific worldview (Kohn 2015, 320). I recall the moment when I first knew that if I could not suspend my disbelief in the supernatural, I would not understand the people I wished to know. It was January 2011 and I had been invited to a large family *fiesta*⁴ in the valley community where I did much of my early fieldwork. The ceremony was so big that six bulls, sat tied to a tree in minimal shade, were waiting to be sacrificed. I was helping my host Tutuú string up *tostadas* (toasted tortillas) that we had decorated with tiny wax animal figures; these would be hung around the altar in the *xixiki* (temple). Tutuú was explaining to me how the *kakau'yarixi* (ancestors) prefer natural colours: ‘they like everything more natural [than us]’, she said, as one of the *tostadas* slipped from the string and fell to the ground. I immediately bent to pick it up, but Tutuú quickly intercepted: ‘Leave it!’ she said, ‘the gods won’t like it after it’s been on the floor’. This was not a performance. Everything was done for the gods, and a very real sense of their presence hung thickly in the air: it was a deeply sacred event and the *kakau'yarixi* were quite clearly everywhere.

3 All translations from Spanish to English are my own.

4 The Wixárika family *fiesta* is usually held to fulfil or make up for a specific religious requirement on which wellbeing depends.

Indigenous cosmologies and myths are not pure. They are influenced by contact between ethnic groups and by colonialism, in a continually evolving process. The stories that speak of the Wixárika past have incorporated aspects of Christianity and colonial encounters (Zingg 2004). Wixaritari are a people and community who have chosen a life that combines aspects of modernity with the more-than-human. This ‘contact zone’ between different cultures and life forms offers the possibility for ‘studying modes of coexistence’ (Pratt 2019, 801). Or, as Tsing (2005, 4) puts it: ‘cultures are continually co-produced in the interactions I call “friction”: the awkward, unequal, unstable and creative qualities of interconnection across difference’.

In trying to understand Wixárika medical ontologies, other encounters ought to be considered. There is a more-than-human sociality (Tsing 2013), a community shared with deities, plants, and animals. When we speak of relationships between humans and animals, plant, or planetary forms, we are enquiring about ‘more-than-human contact zones’ and their possibilities (Isaacs and Otruba 2019). These relationships happen within an ongoing colonial ‘contact zone’ between Wixárika communities and the state, some of which occurs in spaces of health and healing, and the clinical encounter is a particular place of friction.

In this Research Article, I consider syncretic forms of the Wixárika health system and how these speak to the social organisation of health in the Anthropocene. This discussion is grounded in an ontological exploration of how the individualist notion of self and human exceptionalism was a reinvention of what it means to be human. Man, this modern human who now dominates the contemporary global order, was severed from spirits and separated from and independent of other planetary forms and life. I refer to the establishment of this thinking as the *ontological* Anthropocene, for being the epoch in which our understandings of planetary existence have become dominated by and centred on humans and their lifeworlds.

Beginning with a deconstruction of the process through which Europe redefined itself in relation to the colonial ‘other’, I explore the origins of the idea of universality and how this framing of human society was founded on dualities of nature and culture, the notion of human exceptionalism or ‘Man’s overrepresentation’ (Wynter 2003, 257). I examine these ontologies alongside the Wixárika mode of being, particularly in relation to health, to make the case that the Wixaritari people I know, live with and manage this ‘contact zone’ (Pratt 2019) or location of ‘friction’ (Tsing 2005) to their advantage. I suggest that we could learn from Wixárika modes of living to navigate our wellbeing in this Anthropocene epoch. By centring Wixárika worldviews and forms of more-than-human socio-spiritual organisation that become evident through the medical ontologies I have observed in my ethnographic research, I will ask how we can reconceive our relationships in the

broadest sense, with health, with each other, and with our planet in this, the Anthropocene epoch.

Methods: Ethical relationality and de-centring the human

If we take subjects to be ‘constituted in and by relations to each other’ (Pratt 2008, 8), then humans are products of more-than-only-human social relations. In the locations where I have carried out my fieldwork, the environment is not a backdrop; rather, it is part of the more-than-human community in which people live. It is a continuing anthropological dilemma that to study non-humans in human life, we can only do this from a humanist or socially constructed perspective (Kohn 2015). Nonetheless, we can critically question the imposition of the scientific lens and its complicity with the hierarchy about whose knowledge counts most. Papaschase Cree scholar Dwayne Donald’s concept of ‘ethical relationality’ is a useful tool for examining assumptions about responses to human and non-human relationships in the Anthropocene. The concept seeks to understand more deeply how our ‘different histories and experiences position us in relation to each other’ (Donald 2010, cited in Todd 2015, 249–50). Linked to this is the idea of Indigenous *Métissage*⁵, that ‘fosters reciprocal discourse between coloniser and the colonised’ with an ethic of historical consciousness which holds that ‘the past occurs simultaneously in the present and influences how we conceptualise the future’ (Ibid; see also Bonfil Batalla 1994). In line with this scholarship, here I intend to put into dialogue Wixárika sociality and modern forms of being in the world from a position of both equality and incommensurability.

I am a White European anthropologist. I spent a considerable tranche of my academic life in Mexico, where the work of Latin American critical and decolonial theorists took a central role in defining my thinking and writing. I make no claims to ownership of an Indigenous world view but am committed to a reciprocal discourse between coloniser and colonised, to questioning Man’s overrepresentation and to *staying with* the forms of thought that have been shared with me. The data on which I draw for this article have been gathered between 2010 and 2022 in the course of a long-term relationship with an Indigenous Wixárika community of Northern Jalisco State. During this time, I have ethnographically explored maternal and new-born health, pesticides, gender, and healthcare use. This community is located in a mountainous region inhabited by approximately 4,000 people spread across valleys and distributed between the community’s 17 *pueblos* (small towns or villages) many of which are accessible only on foot. Interviews were conducted in conversational style using a checklist of questions and transcribed directly into Spanish. These were complemented with ethnographic data recorded in field diaries. All research was approved by the local

5 *Métissage* refers to the cultural mix of Indigenous and settler peoples.

community general assembly and conducted with bilingual collaborators, who added context to the interviews as they accompanied me on often lengthy hikes between *pueblos*. It is my intention to write this article with the thoughts of Wixárika friends and not to reinterpret them. I will not attempt to translate Wixárika medical ontology into a form that *makes sense* to the scientific world view or conforms to a human-centric interpretation. I will speak of deities as my Wixaritari friends speak of them, as their ancestors, and of their medical ontology from the realness of its practice. As Eduardo Kohn (2013, 66) argues, ‘The world beyond the human is more than “something out there”, because the real is more than that which exists’.

This is a critical ethnography because it ‘rejects the taken for granted and articulates the objective and subjective dimensions of life in society’ (Fassin 2013, 125). Its aim is to unsettle. Deprioritising humans implies reevaluating the moral codes on which modern societies stand, beginning with the supremacy of humans. We cannot interrogate the Anthropocene as a human-centric geological time without questioning the confines of colonial knowledge forms and the premise of universality. One way in which we can attempt to do this is through rethinking ‘categories’, such as those which refer to what it means to be human. What I refer to as the ‘ontological Anthropocene’, the discursive, philosophical, and social centring of the human, is a construct with its roots in Western and modern thinking. As Kohn proposes, ‘categorizations can be socio-culturally specific and that can lead to a form of conceptual violence’ (2013, 85). This article is a call to appreciate the agency of the more-than-human, or the ‘ecology of selves’, including spirits and animals, even if this is an agency that we as moderns struggle to see *ourselves*.

Modernity as the ontological Anthropocene

And that history was quite extraordinary, for Spanish colonialism was coterminous with the initial process of European state making. The sixteenth and seventeenth centuries, witnessing profound transformations in political and economic life, spawned nothing less than a cultural revolution—or, better said, a revolution in the possible ways of being human. (Silverblatt 2009, ix).

The social, political, and economic basis on which we organise nation states, the family and societal relations, relations between humans and non-humans as well as the categories we use to define these, are colonial. It is from this place, defined by Quijano (2013) as the ‘coloniality of power’, that Wixárika communities, through colonial contact, have been drawn into the modern social order. This process saw the reframing and reduction of Wixárika culture and tradition, to terms such as ‘savage’, ‘primitive’, and ‘underdeveloped’. In doing so, it undermined detailed medical and ontological systems that incorporate extensive knowledge of the lives,

behaviours, and medical uses of flora and fauna. In addition, it failed to recognise complex cycles of agricultural ritual around which society is organised and that are deeply interwoven with ethical and moral codes that define a more-than-human sociality. These framings are relational, since modernity and the modern human came into existence in relation to the 'other', the non-modern. It was through contact zones, or 'spaces where cultures meet, clash and grapple with each other, often in contexts of highly asymmetrical relations of power, such as colonialism' (Isaacs and Otruba 2019, 699), that the West defined itself and the 'other' in hierarchical terms.

With science as the method, what it means to be human was established at a global scale combining hierarchies of race and gender, issuing in a universalised form of human social ranking. Crucially, within this process and through dialogue occurring between missionaries, colonisers, and philosophers around the subjectivity of Indigenous native peoples, the definition of being human shifted (Wynter 2003). Rather than being a subject of God, the human was identified as a subject of the modern state, a process Wynter (2013, 264) refers to as the 'de-supernaturalisation of our modes of being human'. In summary, beginning in the 16th Century there was a transformation in the way European powers saw themselves and their populations. Through their dominance in the world, European powers projected these ontologies of self onto their colonial subjects creating racial hierarchies. Within this process, forms of Indigenous knowledge, such as intricate if not symbiotic understanding of plants, flora and fauna, were co-opted by moderns in a process of knowledge extractivism that continues to this day. As Tsing (2005, 91) describes it, there was an 'erasure of the collaborations that made global knowledge possible. European botanical knowledge in the sixteenth and seventeenth centuries was gained by learning from Asians, Africans and Indigenous Americans who introduced Europeans to their native plants'.

Universalisation, or the coloniality of knowledge

Thus arose an exciting reconsideration of knowledge which lasted two centuries [...]. Scholars of the diversity of life worked particularly from two resources: classical treatises, especially the work of Aristotle, and Christian teachings about the workings of God. Both taught of a universal Nature, accessible through reason and by studying life forms; both suggested the possibility of a singular global system uniting all life (Tsing 2005, 91).

This epistemicide, which resulted in the universalisation of modern forms of knowledge and subsequent subalternisation of Indigenous and non-modern epistemologies, is the coloniality of knowledge. Apparent or assumed universal categories for comprehending and understanding the world defined subsequent

forms of knowledge production. These categorisations became, to use Kohn's term, a 'constraint on possibility' (2015, 157).

Although some histories of science may suggest otherwise, 'universal' knowledge production was not a one-way process, and sciences such as botany were built on the intimate proficiency in the lives and uses of plants that Indigenous people passed on to moderns during their colonial expeditions. Botany became a testing ground for the creation of universal categories, 'perhaps the first science concerned with uniting knowledge from around the globe to create a singular global knowledge' (Tsing 2005, 89), a process that simultaneously contributed to the development of some modern medicines.

Categories that for Indigenous people may not have existed, such as tree or snow, bounded certain living and natural forms together and separated others. In contrast, forms of knowledge such as oral histories expressed in the form of myth, were relegated and attached to heathen belief systems. As Watts (2013) suggests, it was in part through the mythologising of Indigenous origin stories that non-human agency was removed from what constitutes a society.

Argentine sociologist and philosopher Sergio Bagú (1989) traced the roots of universal thinking and dominion to the European development of monotheism, the worship of one God for the whole of humanity. Under colonialism, Christianity and its accompanying sociality were deemed superior to other religions, specifically those that were polytheistic. Crucially, polytheistic social groups not only worshiped multiple divinities, but also deified humans, both living and dead, as well as plant and animal forms. Elements that were crucial to human reproduction such as the sun, rain, and wind shared the 'cosmos' with deified animals, plants, and humans (Bagú 1989, 63). Many of these societies lived a more-than-human sociality, where human communities conceived of themselves as entwined with and dependent upon other beings. In contrast, moderns—in their earlier pre-humanist reincarnations—were servants of God (Wynter 2003, 285). With one singular divine force, a Christian God, it followed that there should be one moral and ethical code, one notion of justice, and one form of social organisation for the whole of humanity. Hence, as Bagú (1989, 84) affirms, the notion of universality passed from the worship of one God, to one form of society and through science, to a universal truth. Centring the human *ontologically* heralded the onset of the Anthropocene, introducing modern thought and social processes, including the advent of mercantilism and capitalism.

The ontological Anthropocene

The colonisation of the Americas saw the obliteration of advanced civilisations and dispersal of communities and ethnic groups to such an extent that by 1650, only

an estimated 10% of the native population survived (Cook and Borah 1989). This emaciation of Indigenous populations resulted in significant changes to ecosystems. Where populations had lived and cultivated land, trees grew back, allowing the regeneration of over 50 million hectares of forest, grassland, and savanna. This resulted in a huge carbon uptake that has been identified in Antarctic Ice Core records, creating a marker of mass population change called the ‘Orbis Spike’ (Lewis and Maslin 2015, 175). But this is only part of the story of how human populations changed the surface of planet Earth. More significant is how the conquest and domination of the Americas was the beginning of the modern capitalist world system, which, within the space of a few centuries would establish as universal truth the idea of ‘Man’s domination’ of nature based. As Menéndez (2002, 348) argues, ‘The truth is that which is given by the *dominant* conditions of each culture’ [emphasis added]. The genocide of native populations created a new cultural landscape in which European settlers and growing *mestizo* (Spanish-speaking mixed-blood) populations dominated numerically as well as politically and ideologically. Moderns did not see themselves as interlinked with their environment; but as individuals separated from nature. This is the ontology that underlies the human-dominated epoch after which it is named, the ‘Anthropocene’.

As Davis and Todd explain, ‘the Anthropocene continues a logic of the universal, which is structured to sever relations between mind, body and the land’ (2017, 762). If we are to take the Orbis Spike as a starting point, humans began to alter geology at the same time as they changed their conception of self in relation to the environment; a transformation that happened in parallel to the global expansion of capitalism. What it means to be human gradually evolved over the 16th, 17th, and 18th centuries in a relational process that created hierarchical categories. In so doing, it devalued the knowledge of some actors in relation to others, in ways that have altered how humans perceive their relationship to each other and the natural environment: this is the ontological Anthropocene.

Whilst modern societies have historically tended to separate the human and non-human, there are other societies for whom this more-than-human sociality is entwined in everyday existence. That Wixárika have far closer relationality with the more-than-human is apparent in their language and social rituals. For instance, the word ‘tree’ does not exist, since these are known by their individual species name. Also, the colour brown does not exist, but there are a variety of plant-specific colours. Furthermore, animals and plants are brothers, sisters, grandparents, and parents and have an agentic role in illness causality and prevention. The ritual that accompanies the agricultural cycle is at the heart of many polytheistic societies. It implies a code of conduct framed by the relationship between humans and divinities and recognises the agency and animate status of nature accordingly

(Bagú 1989, 26). In Wixárika society, this code of conduct pertains to a community in which humans and divinities—including plants, animals, and non-living forces or elements, coexist and interact. According to this system, wellbeing and survival as a community is dependent on good relationships with deities. This, then, is their medical ontology. Giraldo Herrera (2018), through the idea of ‘shamanic microscopy’ and referencing the skills of Wixaritari *mara’akate* (shamans), suggests that it may be possible that shamans can see and hence communicate with the microbial agents that live symbiotically with humans. While this idea attempts to explain shamanic health practice using the perspective of scientism, it also alludes to a more-than-human relationality.

Contact zones: *Wixárika yei yari* (the Wixárika way) and the Mexican state

Historical and decolonial research demonstrates the coloniality of Mexico’s modernisation and development, a process aimed at building a modern *mestizo* nation state. Investigation into the conquest of north-western Mexico identified how at the time of invasion, systems of tribal governance varied greatly from the patriarchal governance arrangements that were later put in place. There is evidence of women, men, and children taking leader roles, of power sharing in tribes that consisted of more than one ethnic group, or cases of shared governance by a child and an elder or two adults of the same ethnic group (Regalado 2021), suggesting non-hierarchical relationality between ethnicities, ages, and genders before what Rivera Cusicanqui has called the ‘colonial seal of the exclusion of women’ (2012, 106).

In the process and aftermath of immediate colonial genocide during the first century after colonisation, Indigenous communities experienced ‘social decapitation’ (Regalado 2021). They merged, regrouped and gradually modernised, many losing their language and traditions to *mestizo* culture, becoming ‘de-structured, fragmented and socially diminished’ (Ibid.). Importantly, like their predecessors, new leaders were political as well as religious leaders, but this time of the Catholic faith instead of polytheistic religions. When independence followed in 1810, state powers were transferred to dictators, and it was not until after the Mexican revolution, in 1920, that the nation defined its trajectory of national unity as a nation of *mestizos* (Bonfil Batalla 1989). This process of modernisation instilled and enforced the ‘modern’ human, as *mestizos* became the ‘people of reason’. Consequently, this resulted in the subalternisation of the Indian, whose inferior status was essential in creating the dominant *mestizo* class. This inferiority extended to all things considered Indian, including the land itself (Bonfil Batalla 1989, 86).

Wixárika homelands are located high in the Sierra Madre, straddling the states of Jalisco, Nayarit, and Durango. In contrast to most lowland populations, Wixárika communities held out against colonial rule until 1722 when the Mesa del Nayar region fell. However, it was only ever a partial conquest. Each of the governorships were granted their own constitutions as autonomous Indigenous communities toward the end of the 18th century. Multiple attempts were made in the 18th, 19th and 20th centuries to evangelise the Wixaritari. For instance, in the mid 19th century Wixárika *tukipas* (temples) were destroyed and churches built in their place, though many of these now lie in ruins. What remains are Catholic influences on their polytheistic spirituality. For example, the story of Noah's ark has been integrated into their myth of creation in which the Wixárika god Takutsi Nakawé creates the first people. A conversation with community elder Uxutemai⁶, illustrates how the Jesus and Mary statues (Tatata and Tanana) that were brought to their communities were adapted to their religious mode:

Interviewer: Do you know when they brought Tatata and Tanana [to the community]?

Uxutemai: Since before [...]. Apparently, they came from the dioceses of Zacatecas. The priests brought them with an intention, but it didn't work because the Wixaritari chased them out and all they left were the *santos* [Tatata and Tanana]. Because the elders told us that these priests burned the *tukipa* [sacred house] and ceremonial centres. They burned everything that was there.

Interviewer: When did this happen?

Uxutemai: Since before. I'm told that they said 'everything that you do here is wrong, the real gods are these, the ones that are in the church'. [and they burned the *tuki*'s] but we built them again...but inside the *tukipa* there had been original gifts, these were lost. [...] I think that Holy Week belongs to the *teiwari*⁷, but we have adapted it to our mode... but when you analyse things you will find many of them...starting with the calendar, because the Wixaritari had their own calendar, and the only calendar that remains is that of the ceremonial centres, because they organise their ceremonies in accordance with the rain.

Uxutemai went on to describe how the Wixárika calendar is marked out by night and day, with night being the months of the year when it rains and maize grows, and day beginning when maize is harvested and the rain has stopped. As is the

6 All names have been changed.

7 Teiwari (teiwari in plural) are non-Wixárika mestizo and modern society and people. Curiously the root of teiwari is 'teiwí', meaning people and the extended teiwari is also used for the solidified souls of ancestors, revealing the linguistic non-separation of living people and deified ancestors.

case throughout much of Mexico, maize is the sustenance of both people and gods, and it is of notable symbolic and nutritional significance. Health promotor Yulia had two children, one of whom died in infancy. She spoke to me about maize and the vitality of the plant on both spiritual and interactional levels as she explained how her child had died:

‘...it was because of our *costumbre*⁸ [...]. There were no doctors, I went to the *mara’akame* and he said that “baby was leaving”. I think the *mara’akate* see it, they see the spirits leaving [Yulia taps the top of her head indicating where the spirits leave] [...], he said it was because of the maize. That it is the maize that kills us. It’s that we grow maize, we do ceremonies for maize, we care for it but it we don’t do ceremonies for it, it will kill us. This is what our *costumbre* says, this is *ikuxiya* [illness of maize]. It’s that the *mara’akame* told me that as I didn’t go to the fiesta, you see we have to do a fiesta for the maize, well that is why he died, because I didn’t do the fiesta. That is why *ikuxiya* happens.

This intertwining of maize as nutrition, maize as a sacred being that is giver and taker of lives, speaks to its central role in both cosmic and human community, forming a more-than-human ontology of wellness. Communing at a more-than-human level is essential to wellbeing and survival for these communities. Formal education and modern institutions arrived gradually and incrementally during the 20th century, sitting alongside rather than replacing Wixárika *costumbre*. In the 1940s, small numbers of Wixárika children were rounded up and taken to schools run by the military, then sent back to teach literacy in their communities. Uxutemai’s father was one of these children. He returned to his valley community to open the first school, but it was not until the 1960s that the Ministry of Education rolled out a system of bilingual boarding schools through the *Plan Huicot*⁹, an infrastructural project that also built clinics and airstrips in the Gran Nayar region.

Gradual but continual acculturation was initially met with resistance. When Uxutemai’s father suggested that he start a school, elders were not keen. ‘What are you doing? Are you going to sell the community to the *teiwarixi*¹⁰?’ they asked. Over time schools and *teiwari* healthcare infrastructures have gained more and more acceptance and are no longer considered an overbearing threat to their community and cultural survival. In addition to schools with their attached boarding houses, there are primary care clinics, attended by qualified medical doctors, trainee doctors, and nurses. Basic medication and care are also available in *casas*

8 *Costumbre* is used by Wixaritari when speaking Spanish to refer to their specific set of practices, spirituality and the social institutions—healthcare, agricultural rituals, maize production—that keep this in place. The title of Bartolomé’s book ‘Gente de costumbre y gente de razón’ suggests the dichotomisation of *costumbre* and reason.

9 The *Plan Huicot* (from *Huichol*, *Cora* and *Tepehuano*) was a programme initiated in the late 1960s with the aim of delivering infrastructures including schools, clinics, and transport, to the three Indigenous groups who reside in the region.

10 *Teiwari* (*teiwarixi* in the plural) which directly translates as ‘neighbour’ is a generic term for non-Wixárika people, although the term is more precisely used to refer to non-Indigenous people including *mestizos* and non-Mexicans.

de salud (health houses) in each of the smaller pueblos. A travelling doctor does their rounds on a monthly basis to see pregnant women, provide vaccination, and weigh babies. But possibly the most important task of health promoters who work in these clinics is supplying scorpion antivenom. When clinics were first built, there was considerable distrust. Women were unused to birthing in institutional settings, and were reluctant to be seen by male doctors. In the five decades since the first health centres were built, this has changed considerably. Up to half of women now choose to deliver in highland primary care clinics, and for younger generations who have attended school and are confident Spanish speakers it is the preferred option (Gamlin and Holmes 2018). Wixáritari, like all social groups, have developed their own system for attending to health, illness, and treatment. They have, 'structured a knowledge to confront, live with, solve and if possible eradicate illness' (Menéndez 1994, 71). Importantly, allopathic medical systems have managed to operate in parallel to and at times in combination with the traditional Wixárika system of care. This medical syncretism sees Wixaritari upholding social and spiritual cohesion while also acknowledging the value of lifesaving biomedical care.

Medical encounter as contact zone

In his conceptualisation of medical systems (*'modelo médico hegemónico'*) Eduardo Menéndez acknowledges that 'sickness, death, and attention to both of these, should be considered social processes, not only defined by specialised and specific professionals and institutions, but also as social facts around which societies need to construct actions, techniques and ideologies' (1994, 71, my translation). In so doing, he suggests locating all medical systems in the historicised context of collective social meaning and practices, an interpretation which also informs my thinking. From this standpoint, he suggests, illnesses can be conceived of as generic metaphors or symptoms of cultural conditions (Menéndez 2002, 311). Wixárika medicine developed within and is intricately linked to their polytheistic spiritual social organisation and agricultural-ritual cycle. *Mara'akate* (shamans) treat illness and health within an ontology of life that locates humans as part of a cosmic community or more-than-human sociality, shared with plants, animals, and deities, as Yulia's retelling of the reasons attributed by the shaman for her child's death illustrates. According to Menéndez, illness, disease, and conceptualisations of what causes harm have been, in different societies, some of the principal areas of social and ecological control at macro and microsocial levels through condoning, sanctioning, and celebrating behaviours. This control operates through three processes: firstly, the existence of illnesses which infer collective negative meanings. Secondly, the development of behaviours that need to be stigmatised or controlled to prevent illness and thirdly, the production of institutions that take charge of meanings and controls, both

technical and socio-ideological (Menéndez 1994, 71–2). According to such beliefs, successive generations of a family can experience repeated ill health, accidental death or misfortune, if obligations to their ancestors have not been fulfilled. Consequently, such failings attributed to these beliefs and associated financial burdens can weigh heavily on individuals and families if they do not correct them. When talking about his own sacred journey, my host and community elder Don Gonzálo explained the reason his children had remained in good health: ‘I have fulfilled, and I know what we have to do. We have been to all the sacred sites and we leave offerings and here we do all the ceremonies’. He further elaborated on this by saying that if the gods were not happy, then things could go wrong: ‘the solidified souls¹¹ of gods live in each rancho, sometimes these gods don’t allow a baby to be born, and this is why women sometimes struggle, for their debt with sacred places or gods ... the Wixáritari know why this happens’.

Mara’kate (shamans) preside over community wellbeing by ensuring the continuity of ancestral social and spiritual practices that aim to provide harmonious relationships between sacred, human, plant, and animal members. There is no organised training as such, their learning comes about on an individual basis, through dreams that reach them directly from the *kakau’yarixi* (ancestors). The knowledge and songs that they gain in this way are unique to them. Although individual practices may diverge, the process does not. At times, *mara’kate* will act together. In so doing, they will manage meanings and exert both technical and ideological power to ensure community adherence to their cycle of rituals and obligations.

During my early stays in the highlands, I heard various accounts of how children who were boarding at the primary school *albergue* (hostel) had become ill, waking in the night and running around howling like wolves. They had climbed and scratched at trees and had crawled on all fours. This had lasted for several months. It had begun in one town and later spread to all other *albergues* in the governorship. Don Gonzalo, who had been accompanied by a wolf spirit-animal in his own trajectory of *mara’akame* training, explained to me that this had happened because ‘when the *albergue* was built it was constructed over the pathways of wolves. He told me that the *mara’akate* had not realised this when they had built the hostel. Because of this, they had not done the correct ceremonies to ask for thanks and to request permission from the wolves.

One of the school teachers, Soledad, further explained these episodes:

Many years ago when the school was founded, they built it on land that belonged to the animals. They [the animals] were unhappy with the

11 Solidified souls (*teiwaxixi*) are small rocks kept in the home or carried on the person.

construction of the school. Although they didn't live there anymore, it had been their land for many years and they [the government] covered it all with cement and buildings. And so the illness came. Children started to see animals, climb trees as if they were animals, behave like animals and run madly all over the place. To calm them we had to take them to a sacred site, there close to [the town], an open space, like rock, all white, and after some hours they calmed. [And so in 1993] all the *mara'akate* met, they are all dead now, and they had a meeting and made an agreement to do a whole cycle of five year ceremonies so that this would end.

In later visits, I witnessed the annual ceremony of thanks that teachers now do to keep their ancestors happy, and so that they can continue to use the land for their schools. Adherence to a reciprocal and respectful relationship with ancestors, life forms or natural forces evidences their participation in a cosmic community. Good health and wellbeing depend on this.

Mara'akate, heal through communication with their ancestors, but this does not mean that they see cosmic communication as the *only* way to heal. Nor do they have objections to referring patients to medical doctors when necessary. When Tukarima, a teenage friend I had known for some years, went into premature labour early one morning, she explained how she first called for the *mara'akame*, only to be told that she must make haste to the clinic. It was, in fact, too late for that, and her baby was born in the front seat of their pick-up truck outside the clinic. Soon, however the Dr Medina emerged and drove her and the baby directly to hospital. Elsewhere, I have documented stories of women seeking care (Gamlin and Holmes 2018, Gamlin and Osrin 2020) with both a *mara'akame* and a medical doctor and I have spoken to women who went into labour in valley communities where there was no doctor. Many of these women delivered healthy babies alone or were helped by a family member. In some cases, there were complications and a *mara'akame* was called but could not save the baby, or the mother. Some told of how the *mara'akame* would foretell a death, saying that the baby was 'only passing through', or that they could see that the soul was departing. Often in these narratives, there were references to failings to adhere to traditions: an inability to pay for the required *fiestas*, that a father failed to take woven arrows to a sacred site before the birth¹², or that the baby was paying for the errors of their ancestors. In all of these descriptions, the absence of good and timely medical care also played a part in the death.

Increasingly, younger women in the community are choosing to travel to the foothill towns, where there is a hospital that can carry out emergency caesarean sections.

12 Religious obligations tie father to mother during pregnancy and early childhood to ensure the child's good health. This by no means prevents single-parenthood, but is an example of how Wixárika socio-religious structures are bound with health and wellbeing.

However, hospital births are generally shunned for fear of unnecessary intervention, mistreatment, or because of possible language barriers (Gamlin 2013). As Suku, who went into labour while working on a tomato plantation and delivered in a city hospital, shared with me: ‘I dunno, there are some words I don’t understand. Well they said things to me and I didn’t understand and so I didn’t say anything, they even said to me “don’t you understand? We are speaking to a person and not a dog”’. Although such encounters are not habitual, they have a long afterlife. Accounts of such abuse connect to histories of racist and classist discrimination that have been documented elsewhere (e.g., Smith Oka 2022, Bautista and López 2017, Gamlin 2013), and reverberate around the community as hearsay. Birth in a hospital is a point of ‘friction’ (Tsing 2005), a ‘contact zone’ (Pratt 2008) from which meanings and choices are generated. Experiences such as Suku’s cannot be seen in isolation from the context of coloniality or the objectification and discrimination of the Indigenous female body. This objectification is the cultural context within which modern ethics of care are formed.

Over the years, the primary care clinic in the highland town where I spent a considerable amount of time has adapted to the presence of *mara’akate*. Clinicians have learned that if they do not welcome them, the women may not come. For Dr Medina, a doctor at the clinic, the presence of *mara’akate* proved to be an experience in and of itself, and she shared with me one of the most significant of these events:

I have only ever sent two women to Huejuquilla¹³ in nine years here. One woman came to me when she was six-months pregnant. The baby was transverse and I told her that if the baby didn’t turn she would have to go to Huejuquilla. Well, I saw her again when she was about eight months pregnant and the baby was still transverse. I told her that the baby wasn’t going to come out, that she had to go to Huejuquilla. But I kept seeing her around. She would walk past the clinic and of course the day of the birth came and she turned up at the clinic. She was four centimetres dilated and the baby was still transverse. Now, I said to her, you have to go to Huejuquilla. I am going to find a truck to take you. But she didn’t want to go, and she called for the *mara’kame* Alfredo. When he came I left the room and let them get on with it. A little later he left, I don’t know what he did but the baby’s head was crowning. You could see the head and then it came out. Healthy. No problem.

‘Well, the ancestors are beside us when we give birth, that’s what we think, we give ourselves over to the *Kakau’yarixi*’, my host’s wife, Juana, tells me. When I

13 Huejuquilla is a municipal town in the foothills, from where transport to the highlands comes and goes. At the time of this interview there was a small hospital where caesarean sections could be carried out. A new multicultural hospital was built in 2015 offering biomedical care and traditional therapy.

asked Dr Medina what Alfredo had done, she responded uncertainly: ‘I really don’t know [...], it’s always with the *muvieri* [feathered wand]. He moves it above her like this [...] and sort of whispering. I never really see them touch the body, it’s all with the *muvieri*’.

Many years later, I asked Dr Medina what she had learned from her time as a medical doctor in the town in the highlands. ‘That everything is possible’, she replied. The meanings that are generated in these contact zones do not fit with established categories. Instead, they rupture bounded ideas about how traditional and modern medical systems might operate, where one ends or the other begins, and whether anything close to a single truth exists. Syncretic forms of care offer the opportunity for health, illness, and care systems which literally offer the best of both worlds. Medical attention that can save lives and social-spiritual care that manages community cohesion.

Embodied inequalities of Anthropocene ontologies

Ontological anthropology is not generically about ‘the world’ and it never fully leaves humans behind. It is about what we learn about the world and the human, though the ways in which humans engage with the world—attention to such engagement, often undoes any bounded notion of what the human is (Kohn 2015, 313).

As I said at the start, in this article it is not my intention to translate more-than-human communication or social relations so that it resonates with biomedical or scientific understandings. Rather, the intention is to unsettle categories, such as ‘human’ and ‘health’, to bring to our attention how our wellbeing depends on more-than-human relations, and how the embodied inequalities of the Anthropocene can be reconsidered through medical ontologies. I argue that as medical anthropologists we can reproblematised strategies for addressing anthropogenic catastrophe by unsettling the ontologies on which public health is built. Here I wish to ask: how can we unsettle the category of human health as a biomedical subject? How can we undo the separation of culture and nature, the body, planetary health, and the wellbeing of the more-than-human community to embrace more systemically the interdependence of human wellbeing with planetary life in the broadest sense?

The scientific community is (almost) unanimous in recognising that how ‘moderns’ manage and utilise animals, plants and land, particularly through intensive and industrial farming and production, is generating new illnesses and circumstances that are damaging to all forms of life (Manyi-Loh et al. 2018; Segata et al. 2021) Research in this field is growing and being disseminated in popular publishing domains too. For instance, the British newspaper *The Guardian* recently

documented how the use of antibiotics in intensive pig farming is contributing to the crisis of antibiotic resistance (Wasley et al. 2021); and the impact of trawling on absorption of carbon dioxide from the atmosphere (McVeigh 2021). Almost every human on the planet has been affected in some way by the COVID-19 pandemic, a viral disease that has brought to the fore how reducing animal habitat is leading to closer human-animal interactions and thus providing more opportunity for zoonoses to occur (Gamlin et al. 2021). As Tsing poignantly puts it, ‘We humans are the products of the multiple nonhuman beings that have come to make and continue to make us who we are’ (2013, 34). Our health depends on how we treat these non-human beings. For ‘moderns’, this is a relationship mediated through a capitalist world economy whose existence depends on the exploitation of nature, making the current political economy implicit and complicit in how humans relate to the more-than-human. This entanglement has led some to define our current geological epoch as the ‘Capitalocene’ (Haraway 2016), a useful term that also politicises the Anthropocene. The argument that I am putting forward here, draws attention to the ontological underpinnings of this positionality.

The Anthropocene puts *Anthropos* at the centre at the same time as it shifts what it means to be human. Unsettling the ontological Anthropocene thus stretches the methods and tools of scientific inquiry. As anthropologists we seek to access and understand broader forms of knowledge. However, how we theorise and communicate these diverse forms of knowledge without appropriating or translating them into scientific language remains a challenge, as does the ‘afterlife’ (Fassin 2013) that our ethnographies generate. The concept of the Anthropocene has drawn attention to the fact that the human race or, more specifically, ‘moderns’ have had such a profound impact on the Earth that our ways of being in and with the planet have fundamentally changed, and with them, our prospects for survival. Davis and Todd (2017, 776) define the root of the problem as the ‘severing of relations through the brutality of colonialism, coupled with an imperial universal logic’. Drawing on this point, and using medical anthropology to think through the embodied inequalities of the Anthropocene, I have examined how Wixárika conceptualisations of wellbeing form part of a medical ontology that does not see a separation of human and non-human forms, and is organised around a socio-spiritual community governance that both responds to and reproduces a historicised context of collective social meanings. This collective is more-than-human. *Mara’akate* as healers and spiritual leaders treat illness in line with this socio-spiritual system, and lead Wixaritari to care for their more-than-human community. Wixárika moral and ethical codes of caring for the lives and forms of their community apply beyond the human, but do not aspire to universality. Wixaritari also do not position themselves hierarchically in relation to *teiwari*, hence theirs is a social system that sits alongside others. *Mara’akate* know the parameters of their knowledge and social role and do not act in opposition to or

rivalry with medical doctors. They differentiate between illnesses caused by *costumbre* and hence treatable spiritually, and those that are not. Pregnant or birthing women may seek medical care to deliver their baby, and spiritual care to ensure that they and their children lead healthy lives. This will be a moral reason, a call to ensure that the family are caring for their more-than-human community, so while pleasing the gods, they are also attending to community cohesion and continuity. Biomedicine has taken the opposite to the extreme, objectification and racialisation of the body such as is experienced by Suku, many cases of which have been documented elsewhere (Smith Oka 2009; Bautista and Lòpez 2017; Gamlin 2013). Contact points between these two medical systems create frictions and dialogue that open possibilities for new understandings, although this must be on non-hierarchical terms.

Taking the Anthropocene also to refer to an epistemological imperialism—the ‘overrepresentation of Man’ (Wynter 2003) and the subjugation of non-scientific world views, enables us to see anew the manifold embodied inequalities of our current status quo. As Indigenous people within a highly unequal but moderately wealthy nation, Wixaritari have inequitable access to healthcare. Very few Indigenous families are affiliated to health insurance schemes so the majority rely on the basic level of service available through the *Instituto de Salud Para el Bienestar*, a national health system for the uninsured (previously *Seguro Popular*).

Medical infrastructure in their communities has improved a little since my first visit in 2009. Since then, clinics have been provided with their own ambulances, but treatment continues to be undermined by subtle forms of racism that generate distrust. This unequal social dynamic or contact zone between Indigenous patient and *mestizo* practitioner can translate into unequal service provision, as the anticipation of negative or racist interactions often leads to an avoidance of institutional settings (Gamlin 2013). Although some local clinics have taken important steps to address this, for example, by inviting *mara'akate* to attend births in the clinic, this is not the norm. The Wixárika medical system exists in a historical context characterised by epistemologies shaped through relations of hegemony and subalternity. Biomedicine has been recognised by ‘moderns’ as one of these institutionalised forms of attention to illness and it has been identified as the ‘most correct and efficient form of thinking and intervening in illnesses and the ill’ (Menéndez 1994, 72). For dialogue to happen, this hierarchy must be addressed.

Wixárika care-seeking practices are syncretic; they combine two different sets of belief and practice. This syncretism should not be confused with institutional attempts to provide forms of ‘intercultural’ healthcare, for example, such as hospitals with both biomedical and traditional medicine provision. These have been largely unsuccessful in terms of care provision, and have done little to challenge

the ontological hierarchy of biomedicine over non-biomedical medical systems (Menéndez 2016). Wixárika medical syncretism reflects a non-hierarchical attitude towards medical systems and their adjacent social structures. This is possible as their ontology of the self is not limited or bounded by categories of universality or a belief in superiority.

As Menéndez (2016) notes, it is flawed to suggest that change is not occurring in Indigenous communities. As an ethnographer, I am intent on exploring ontologies and revealing realities. As such, I am not in denial of the fact that, increasingly, Wixaritari who have spent time outside their community have greater faith in biomedicine than their own system, and are less likely to consult a *mara'akame* for illness. Wixárika world views are not static and there is a desire to allow knowledge and modernisation into their communities, but very clearly on their terms. Wixaritari who have studied in cities and returned to the highlands very often take on positions of responsibility that come with a commitment to their community. Temporary migration to cities brings social change and modernisation, but this is measured. Some of the newer generation of leaders who are university educated are bringing back knowledge from the cities and adapting it to their own culture and community. In this way, they are negotiating the contact zone, although not without resistance and push back from (mostly) elders who police the inevitable encroachment of acculturation. However, despite these types of negotiations, the introduction of new knowledge is primarily a one-way process. Here, I am calling for contact zones to facilitate a knowledge exchange that goes both ways, and to apply it to the spaces where medical systems converge.

'If nature is our ground, it is natural for us to think of ontology as a search for what really exists' (Kohn 2015, 319). Wixárika shamanic healing exists as a whole therapeutic strategy, not just a set of religious beliefs. Not only does it exist as a cultural and healing practice, but also as a cohesive social force and form of leadership. It exists within a sociality that rests upon the conviction that human survival is dependent upon its relationship with the non-human, and encompasses human respect for the environment and the life forms that humans share this world with. This ethos was recently outlined at the Wixárika led 'Earth Renewal Ceremony' held on 18 March 2022 in the hills of the sacred site of Wirikuta, referred to as '*An ecosystem and biocultural treasure where all the deities that support the pillars of our universe are based*' (see in full in Barnett 2022), that is threatened by mining corporations.

Decolonial and epistemic shifts are needed to centre a non-hierarchical syncretic medical system that treats the body as part of an ecosystem. This Research Article asks whether by centring Indigenous worldviews and forms of social organisation that are more-than-human, we can reenvision how the health challenges that

characterise this epoch are being addressed. Can we envisage a syncretic medical model that treats the physical body as part of the the society and environment upon which it depends? Can this reconceptualisation unsettle capitalist modernity? To use Eve Tuck's (a Unanga scholar and member of the Aleut community of Alaska) words 'I invite you to join me in re-envisioning our communities, not only to document the effects of oppression on our communities' (2009, 154). And as an anthropologist I invite the reader to re-envision how knowledge travels between social groups, and the possibility of this happening in a non-hierarchical, decolonial exchange.

Indigenous knowledge continues to contribute to shared and universalised understandings of science and medicine in ways that remain unrecognised. Modern science's tendency to appropriate Indigenous knowledge of nature and bodies as their own, is a form of extractivism that poorly serves humanity by its disdain for care and healing practices that do not conform to colonial methods. Giraldo Herrero (2018, 15) suggests that the perceptual capabilities demonstrated by shamans for entopic microscopy and their potential for engaging with microbes that determine human health, indicate how 'natural sciences are also rooted beyond the west'. Yet, such knowledge frequently follows categorisations that during the colonial eras were established as magic and witchcraft.

Social medicine is taking hold in academic circles in Europe and North America offering a counterpoint to mainstream approaches to public health, by moving beyond the individual to addressing societal issues as a whole. As Breilh (2008) argues, its focus is the social determination of health. Similarly, the concept of *Buen Vivir*¹⁴ embraces the notion that wellbeing can only be possible within the context of a community that is more-than-human. (Gudynas 2011, 441). Such notions of wellbeing align closely with Indigenous ontologies of care. As I have noted elsewhere (Gamlin and Berrio 2020), theory in medical anthropology has been greatly influenced by collaborations with Indigenous activists and communities. Can we reframe global and public-health understandings of wellbeing around a more-than-human sociality?

To decentre the human is to reconceptualise the place of humans in the world and those with whom we share our society. At an ontological level, this requires us to decolonise the notion of 'human being', and to recognise the vitality of other life forms to our existence. As Gilbert explains 'We evolve as teams, as consortia- and we likely always have' (2017, M83). At a conceptual level, we need to rethink how we name, and therefore, how we relate to and communicate with nature. At a relational level we need to recognise that it is possible to learn to communicate

14 *Buen Vivir* or *sumak kawasy* in Kichwa alternative to development focusing on good life in the broadest sense encompassing life, community and nature.

with nature and other species as Kohn (2013) has demonstrated. Learning from Indigenous communities may be one way to achieve this, although such an objective must only happen when knowledges can be shared by Indigenous teachers and not colonised or claimed by moderns. Only a like-for-like knowledge exchange will interrupt epistemological hierarchies, the coopting of Indigenous knowledge as ‘science’ simply serves to reproduce scientific hegemony.

To reconceive of our more-than-human *consortia* (Gilbert 2017, M83) as essential to our own wellbeing and survival, we may want to begin with the most obvious—changing our relationships with the animals that humans consume and the patterns of production that form a chain of environmental, ecological, viral, social, and human harm. We may also want to reconsider what we do to the land that gives us life. Organophosphate chemicals are designed to alter reproductive systems, for instance. These affect the ‘pests’ that grow on tobacco, the bees that pollinate our flowers and crops, and also the humans that work on the plantations where produce is grown and harvested for global markets. ‘Moderns’ need the moral compass that healers display in their respect for the more-than-human.

Authorship statement

The article was conceived and written in its entirety by the author.

Ethics statement

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