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Gendered Geographies of Care: Women as Health Workers in an Indigenous Health Project in the Peruvian Amazon

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Gendered Geographies of Care: Women as Health Workers in an Indigenous Health Project in the Peruvian Amazon

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Introduction

ocal health agents and practices are inevitably entangled in the local, regional, and global geographies and politics of health (Farmer 2004, 2005; Gatrell and Elliott 2014; Janes and Corbet 2009; Kwan 2012). Any such "glocal" frameworks should also include gender politics as an integral part of healthcare conception, design, and delivery (Connell 2012; Hammarström et al. 2014). Amazonian geographies of health, whereby geographical conditions and perspectives are necessary for understanding the human-environment nexus, are critical for better understanding and conveying health-related practices and beliefs. Such a nexus includes medicinal knowledge and healing as sensitive ecological markers of overall social well-being and exchange. This nexus also includes and acknowledges the plurality of medical systems and their differential access. For indigenous people in Amazonia, health conceptually includes social, political, spiritual, and physical well-being of the individual and community, as well as, indeed, the environment (Alexiades 1999). One's body is first and foremost a social body that interacts with visible and nonvisible beings in an expansive world that can boost or maintain health or cause illness or death (Peluso 2004a). Health issues encompass inextricably related issues such as cultural identity and local knowledge, nutrition, sanitation, agriculture, and the conservation of natural resources. Local environments and home gardens provide most plants processed into therapies used in traditional medical systems which, in turn, are fundamental to much of the healthcare delivered in tropical nations.² Also, many explanations of illness and mortality involve environmental causes (Alexiades 1999; Peluso 2003, 2021).3 As Gray (1986) notes of the Harakmbut of the Madre de Dios province in the Peruvian Amazon, a native person's state of health is often seen as reflection of his or her relationship with the environment and other species, including other human and nonhuman beings. At the same time, indigenous healthcare systems' status and accessibility have deteriorated to a point that jeopardizes their sustainability.

Following the emergence of nongovernmental and conservation organizations in Madre de Dios during the 1980s (Peluso 1993, 2016), many of them attempted to finally recognize that "interactions" between indigenous peoples and their environments mattered in terms of key knowledge and sustainability. However, this initial wave of outreach did not consider a gender-balanced approach. Although women were not entirely absent from their plans (as women were community members and often sought after for their specialist knowledge about female reproductive matters) the projects that developed consistently overlooked women as primary healthcare providers, managers of indigenous knowledge, and as skilled resource management practitioners. Women were also ignored as leaders, thus limiting health and conservation projects' effectiveness, and further reducing women's public visibility and status. As women's knowledge systems and realms of influence were ignored, women's status continued to diminish vis-à-vis interactions with external agents.

- 1. The use of the term "indigenous" here refers to Amerindian peoples whose ethnic identity in Amazonia predate European colonization and takes into account the contested conceptual history of indigeneity (Kuper 2003; Canessa 2007).
- 2. The literature on the efficacy of traditional medicine is extensive. It is frequently stated that only 1% of tropical plants have been scientifically analyzed and that at least 25% of prescription drugs are derived from higher tropical plants (Balick and Mendelsohn 1992). Several essays have noted that tropical forests are a rich source of yet-unknown compounds that may eventually prove useful to modern medicine (Abelson 1990; Oldfield 1989). Farnsworth et al. (1985) explains that 74% of globally used drugs were discovered due to prior indigenous medicinal knowledge that the plants from which they are derived were used for the same purposes.
- 3. Apart from interactions with the environment surrounding indigenous practices and beliefs, this article recognizes that environmental causes also encompass toxicity and human impacts such as gold mining (Grandjean et al. 1999) and oil contamination (San Sebastián and Hurtig 2004).

4. For a detailed history of AMETRA 2001 in Madre de Dios see Alexiades and Lacaze 1996; Peluso 2016).

This article examines the role of women as health agents in AMETRA 2001 (Aplicación de Medicina Tradicional), an indigenous nongovernmental health project, as a case study for understanding the challenges that projects that promote indigenous health workers faced throughout Amazonia. Before examining the changing experiences of rural women within the healthcare setting, particularly as healthcare promoters, I review the cultural, ecological, geographical, historical, and circumstantial background of Tambopata, Madre de Dios, and the capital city of Puerto Maldonado where AMETRA 2001 was launched, flourished, and eventually dissolved.

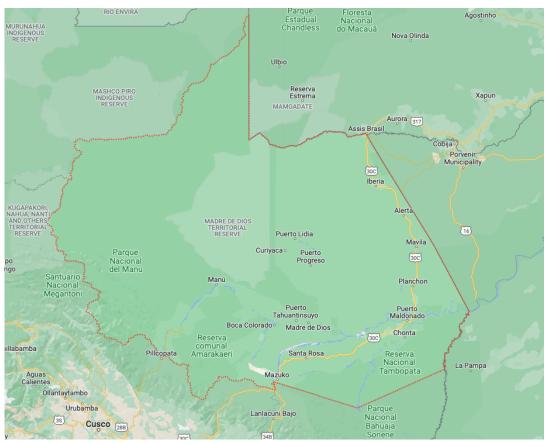


figure 1. Madre de Dios, Peru.

Madre de Dios province's located in southeastern Peru has contributed to its cultural and biological diversity. It lies within the Amazon basin and is bordered to the east by Brazil and Bolivia and shielded by the Andes mountains. European exploration of this area began in the sixteenth century with many failed expeditions in search of "el Patiti", a city of gold (Moore and García 1993; Alexiades and Peluso 2003). Juan Álvarez de Maldonado drafted the first written account of the Madre de Dios river basin area in 1569 (Ulloa 1899). In 1877, the geographer and explorer C. R. Markham referred to it as being "the most important unexplored region in this part of South America" (1877:42). Though the second wave of the rubber boom that so tragically affected indigenous Amazonians throughout lowland South America didn't become economically viable in Madre de Dios until the turn of the twentieth century. Rubber extraction increased with the establishment of the Inca Mining and Rubber Company in the forests of Astillero (Upper Tambopata), which rested on the back of the success of the Santo Domingo gold mine (Upper Inambaeri) in Tirapata until the collapse of the rubber boom (Peluso 2014). The Peruvian government

gifted the Inca Mining and Rubber Company 640,000 acres for building an eighty-mile trail, completed in 1906, between Cusco and Juliaca that linked the Tambopata River to the region and attracted commercial attention (Wright 1908; Fawcett 1911; Greer 1986; Gray 1996). Furthermore, the company forged a mule path between Tirapata and Puerto Markham, which lowered the costs of moving rubber, allowing transport to the Pacific coast (Alexiades 1999; Garland and Gepp 1908; Moore 1984; Jacobsen 1993). This established the Tambopata River and its adjacent environs as a major axis of communication, opening up the region to further extractive activities.

Despite the ongoing development and exploitation of its natural resources, Madre de Dios holds significant importance for global conservation projects (Mittermeier et al. 1999). Currently, over 5 million hectares are set aside for conservation, containing three national parks and several reserves widely known for their "pristine," accessible environments (forests, lakes, savannahs, and bird and mammal clay licks—areas where many animals congregate to feed), and for its extraordinary diversity of flora and fauna. Unsurprisingly, national and external conservation and community development projects heavily target the area, which participates in a vibrant environmental service economy (Peluso and Alexiades 2005; Peluso 2016, 2018). Yet these areas also attract oil and gas exploration as the state hands out concessions to various national and international prospectors (Ráez 2008) and gold-mining (Wagner 2021), prostitution and sex-trafficking (Goldstein 2014), and alleged drug-trafficking operations (Froese et. al. 2022). The geographic area most pertaining to this case study encompasses what is now known as the Tambopata National Reserve, a biodiversity hot spot adjacent to Bahuaja-Sonene National Park. These form part of a "mega-corridor" aimed to tie together Bolivian and Peruvian protected areas on the eastern flanks of the Andes (Bennett 2004).

Madre de Dios' richness in biodiversity is equaled by its richness in cultural diversity. It is home to thirty-four native communities from eight distinct linguistic families, and it is the third largest in size though least populated department in Peru. At the time of this case study, Madre de Dios had a population of approximately 47,000 people concentrated in the provincial capital of Puerto Maldonado and an estimated 5,000 indigenous people dispersed throughout 85,300 km² (Egido et al. 2001). In 1988 the indigenous federation, Federación de Comunidades Nativas del Rio Madre de Dios y Afluentes (FENAMAD),⁵ recognized five language families and thirteen indigenous ethnicities (see Table 1). Despite its late start in Madre de Dios, the rubber boom had a dramatically negative impact on indigenous people of Madre de Dios, leaving nearly half of the area's ethnic groups with populations lower than 100 and the total indigenous population at a reduced population of approximately 5,000 (Moore 1990; Alexiades and Lacaze 1996). Alexiades and Lacaze (1996:345) note that "the combination of epidemics, genocide, and intertribal warfare triggered by rubber tappers combing areas for slave or indentured labor, led to the decimation of the native population." Indigenous ethnic groups from other parts of the Amazon (see Table 1) were relocated to Madre de Dios to compensate for the lack of sufficient indigenous labor. Additional groups relocated as a result of intra- and intertribal war, the establishment of missions, and the presence of the department capital, Puerto Maldonado. The indigenous population has been increasing alongside the decrease in warfare and processes of ethnogenesis and indigenous urbanization (Alexiades and Peluso 2015, 2016; Peluso and Alexiades 2005; Peluso 2004b, 2015). Though there is a strong thrust toward increased urbanization, individuals still maintain strong links in their communities, and migration to cities tends to be temporary, seasonal, and nonpermanent (ibid.). Nonetheless, makeshift indigenous peri-urban neighborhoods now form part of the capital's geographic landscape while several indigenous communities model themselves on urban residential geographic blueprints (ibid.) AMETRA 2001 created a positive exception to interindigenous exchanges, as previously it was only at gatherings

5. FENAMAD, created in 1982, is the regional federation of native communities in Madre de Dios, representing all ethnic groups in the department. A publicly elected board of individuals representing different ethnic groups and communities administers FENAMAD. The federation addresses issues such as land rights, education, health, and development.

organized by FENAMAD, nongovernmental organizations (NGOs), regional election party candidates, and sporting events, that distinct indigenous groups had the opportunity to meet and interact with each other.

LINGUISTIC FAMILY	ETHNIC GROUP	NUMBER OF COMMUNITIES
Arawak	Matsiguenka	6*+
	Yine (Piro)**	2*
Harakmbut	Arakmbut	5*
	Arasaeri	1
	Toyeri	2*
	Kisamoaeri	1*
	Amaiwere (Pukireri)	1
	Wachipaeri	5*
	Amahuaca	1
Pano	Shipibo-Conibo**	3*
	Yaminahua	2
Quechua	Kichwa Runa**	2
Tacana	Ese Eja	4*

table 1. Recognition of Ethnic Groups in Madre de Dios, Peru, in 1988.

- * At least one community is shared with another ethnic group.
- + Some individuals/groups are dispersed in Manu National Park.
- ** Members of this ethnic group were brought from other provinces by rubber tappers.

(Sources: FENAMAD/Centro EORI n.d.; Alexiades and Lacaze 1996; Moore 2003)

Indigenous Health and Gender

Changes in geographic settlement patterns, such as those described above, have had profound impacts on indigenous health. Epidemics, which usually result from mobility and the arrival of new diseases, still present a health threat to isolated groups such as those indigenous peoples in voluntary isolation (Huertas 2004; Napolitano 2007; Rodriguez 2008; Feather 2015; Shepard 2016; Rodriguez and Feather 2014), located mostly in the Alto Rio Piedras, Manu, and the Alto Purús (Garcia Altamirano 2002; INRENA 2002). Yet sedentarization has prompted new health-related challenges. Seminomadic lifestyles and low population densities typical of many Amazonian groups have been effective in limiting levels of parasitism and transmission of some infectious diseases (Polunin 1967). Sedentism and overcrowding lead to soil and water contamination, which increase exposure to respiratory and contact infections, tuberculosis, and fecal-orally transmitted diseases (Kroeger 1980; Kroeger and Barbira-Freedman 1988). These lifestyle changes have also placed increasing pressure on local natural resources such as soils, wildlife, and timber, leading to environmental degradation and a concomitant impoverishment of health and nutrition (Alexiades and Lacaze 1996).

The history of colonization and development in Madre de Dios provides the social and ecological setting to explain a long series of interrelated changes that account for many current health problems in native communities (Alexiades and Lacaze 1996). Access to Western healthcare has increased and improved since this case study took place, and most native communities now have a Western-style health post that health personnel staff on a semiregular basis. Yet in the 1980s an estimated 90 percent of indigenous populations lived in rural areas

with poor or no access to Western healthcare. Nonetheless, native communities continue to have high morbidity, mortality, and malnutrition rates, an increase of mercury in their food, and exposure to diseases such as malaria, dengue, and leishmaniasis that fluctuate around gold mining and other extractive activities (Osores et al. 2012; Sanchez et al. 2017; Martinez et al. 2018).

Historically, in Madre de Dios, indigenous women have played a visibly important role in the daily community healthcare (Alexiades 1999; Alexiades and Peluso 2009; Peluso 2003, 2021). Apart from women's roles in agriculture and nutrition, where they tend to work and cultivate the bulk of nutritional staple food intake, they are also the tenders of medicinal plant home gardens and collectors, preparers, and administrators of plant-based medicines. The research I conducted in the late 1980s and early 1990s in Madre de Dios supports the position that women act as overseers of daily household health, and the administrators of primary healthcare are responsible for a large percentage of the population's health (Peluso 1993). My study confirms that women most often detect and treat symptoms of illness, especially among children. Through the use of a methodological tool for recording multiple preferential treatment choices for illnesses, I established that the first several treatments for nearly all illnesses are of botanical origin and administered by women (Table 2). It is only when and if these treatments are not effective that alternative medical providers are sought, such as shamans or state health professionals (cf. Baer 1976). Though men also have important health knowledge, they are not typically involved in health matters at the onset of illness. The data further details each choice in terms of decision making, preparation, and administration of treatment choices. Larger aspects of the study encompassed differential perceptions of health, illness, disease, and curing; the use of different medical systems: the indigenous, the state, and the indigenously controlled cosmopolitan system AMETRA 2001 organized in 2001; and lastly, how and on what epistemological basis individuals diagnose and treat illness and disease. In sum, the study established women as the first port of call for individuals and families regarding the diagnosis and treatment of illness. Their household primacy placed women at the forefront of community health.

FIRST CHOICE	SECOND CHOICE	THIRD CHOICE	FOURTH CHOICE
Botanical knowledge - 80%	Botanical knowledge - 60%	Shaman - 80%	Shaman - 60%
Shaman - 12%	Shaman - 20%	Botanical knowledge - 10&	Medical Post - 10%
Nothing - 4%	Pharmacy - 10%	Medical Post - 10%	Pharmacy - 10%
Pharmacy - 2%	Medical Post - 10%		Hospital - 10%
Medical Post - 2%			

table 2. Treatment Preferences for Diarrhea (n=50)*

One example of women's primacy in others' well-being is how they guard against, diagnose, and treat diarrhea, the most common cause of mortality among indigenous children younger than five years of age in Madre de Dios, from its onset. Table 2 represents a study size of fifty households (inclusive of the entire community) where women claimed to be the main decision makers concerning health. In over 90 percent of cases, women diagnose illness, make choices about which treatment(s) to pursue, and prepare and administer the treatments (Peluso 1991). Furthermore, women decide who to consult and, in cases where "healers" or other experts are consulted, they often carry out treatments such individuals prescribe,

^{*} Cases followed in one community, random household sample (Peluso 1991).

^{6.} A preliminary survey conducted among native communities in northern Madre de Dios (Cueva 1990), reports rates of child mortality of 30%; I have recorded rates of over 40% in southern communities. More than half of mortality occurs among children younger than 5 years old, with the two most important causes being digestive disorders, mainly diarrhea and dysentery, and acute respiratory infections. Most of the deaths associated with diarrheic disorders occur as a result of dehydration. These preliminary results correspond with data obtained in other areas of the Peruvian Amazon (Elliott and Whelan 1977; Polunin 1967; Werner 1981). Acute respiratory infections and gastrointestinal disorders are also the two most important causes of morbidity, accounting for 45% of the nosological spectrum. The prevalence of heavy infestation rates with intestinal parasites among acculturating Indians in the Amazon is widely documented (Hansson et al. 1986). High levels of helminthic infestation are correlated with anemia, malnutrition, gastrointestinal disorders, and lower resistance to other diseases (ibid.). Preliminary indices of infant malnutrition, based on weight and height, vary from 26% to 57% (Cueva 1990). Cases of dysentery are also regularly reported among the infant and adult population (ibid). Skin disorders are generally the third most important cause of morbidity. Other fairly common ailments include tuberculosis, rheumatism, malaria, snakebites, conjunctivitis, abscesses, and fractures.

^{7.} Demographic variables were tested against these results to find the possible existence of correlations or trends.

whether in Western or traditional medicine. Therefore, women's invisible expertise in the everyday healthcare of indigenous communities is crucial. Yet most efforts to ameliorate health problems, whether indigenous, regional, national, or international, neglect to include women as formulators, participants, and/or beneficiaries of their projects. The omission of women in the planning and implementation of projects is a widespread endemic problem (Molyneux 1985; Moser 1989).

Why Had Women Been Overlooked as Health Workers and Resource Managers?

In 1985 a grassroots indigenous health NGO, AMETRA 2001, formed in Madre de Dios and attempted to involve individuals from all indigenous communities. AMETRA 2001 was founded by Guillermo Arévalo, a traditional Shipibo healer, Didier Lacaze, a French health practitioner, and several indigenous individuals. The organization did not underplay the value of Western treatments but rather tried to place them in adequate perspective relative to indigenous communities' socioeconomic realities (Alexiades and Lacaze 1996). The organization encouraged a policy of cooperation and integration between medical systems, which often required a combination of medicines and medicinal plants, traditional healers, and doctors. In fact, the NGO maintained informal and formal working relationships with government health institutions and was adopted by FENAMAD as the official indigenous approach to health in Madre de Dios. "AMETRA 2001" was inspired by "AMETRA," a health project among the Shipibo-Conibo ethnic group of the Ucayali region, Peru, that began in 1982 (Follér 1989). From 1987 through 1991, AMETRA 2001 trained FENAMAD personnel in logistical, technical, and administrative aspects of running the various projects. In the FENAMAD Congress of August 1992, FENAMAD undertook full responsibility for all AMETRA 2001 projects, renaming the program "Programa de Medicina Tradicional." That same year, the project was dissolved, as its funding collapsed.8

AMETRA 2001 recognized that the state of community health tended to deteriorate as indigenous communities become more integrated with the regional economy. Its philosophy was that health conditions among the rural population could never be properly addressed by a vertical, centralized medical system (AMETRA 2001 1986). Although AMETRA 2001 began as a health project, it soon became obvious that it was critical to consider related issues such as the conservation of natural resources. The project's environmental dimension was also instrumental in allowing the project to access funds in an otherwise unfavorable political and economic climate. When AMETRA 2001 introduced the concept of village-based primary healthcare workers—as health promoters, educators, and deliverers of traditional medicine and basic primary healthcare—each indigenous community in Madre de Dios elected their own health worker but systematically ignored women as potentially serving in this position, a point I will detail later. Like many health interventions, this was caught in a gender-biased paradox concerning men and women's differing roles in private and public social spheres.

The idea of the "health worker" or "promoter" was a popular approach and cornerstone to rural development outreach programs throughout Latin America beginning in the early 1970s that the World Health Organization promoted. Particularly appealing about this approach was that individuals from within their communities were trained so as to avoid relying on nonpresent outsiders. The viewpoint behind this approach was that these individuals would return to their communities trained and empowered with new sets of skills to respond to their community's health needs. AMETRA 2001 staff and the rural indigenous communities in which AMETRA 2001 worked viewed the "health worker" as a position that external forms of power and control sanctioned. Despite its mostly indigenous leadership and its visits to different communities, communities still viewed AMETRA 2001 as an entity external to them. As such, the potential role of a health promoter was perceived as being a

8. The dissolution of AM-ETRA is beyond the scope of this article. Had it not been discontinued, my personal opinion is that it would have thrived, meeting its challenges successfully. The repercussions and impacts of this sole project continue to reverberate throughout the region. Its dissolution is a complicated matter, having much to do with political competition among various agents vying for greater influence among indigenous people in the region; many of these agents were supported by powerful Westerners and international funding streams. AMETRA 2001 is strongly linked to the resurgence of indigenous and ethnic identity, processes of reindigenization and ethnogenesis, a local and indigenous awareness of the richness of biodiversity in a global context and hence an alignment with conservation, the braking of indigenous medicinal erosion, the intra- and interexchange of medicinal knowledge and practices among ethnic groups within Madre de Dios, and a broad shift in indigenous confidence about their own expertise—and hence a boost in overall well-being (from the psychological to the environmental).

9. AMETRA 2001 as an organization was sensitive about how the merging image of indigenous peoples as "natural" conservation experts was being held up in Western conservation discourse, as portrayed by Conklin and Graham (1995), in unsustainable ways.

10. See Werner 1981 for a detailed description of the limitations of the healthcare promoter approach.

path to outside resources not usually accessible to indigenous individuals and communities. In turn, community members perceived men, and mostly still do, as the political mediators with matters outside the community. Indeed, interacting with external agents is an aspect of social relations that has historically been consistently relegated to men. The health promoter role was reified by its greater ongoing exposure and familiarity with noncommunity life and depended upon skills such as literacy, travel, and the ability to negotiate with men and nonnatives. Such skills tended to be more pronounced among young men, and in turn, these roles helped further develop these skills, thus increasing the gap between young men and women, as well as between young men and older generations.

As had transpired with agricultural outreach programs worldwide, once processes of commercialization begin and ensuing monetary compensation practices are in place, key roles shift from being female to male controlled (Mies and Shiva 1994). Likewise, Madre de Dios also suffered, and still does, from government and NGO outreach programs that overwhelmingly target men rather than women. Therefore, as outside forces increasingly control healthcare and conservation initiatives, positions become "officialized," and women are pushed out of the more visible and public aspects of their domestic roles. Hence, men assume greater official responsibilities and roles, often in areas in which they have little competence or even internal credibility. Nonetheless, it is still mostly men who interface with development workers, health officials, conservation organizations, and government agencies.

In Amazonia, as elsewhere, the daily reiterations of gender performances contribute to ideas of gender stereotypes and gender-specific knowledge and roles; yet this does not always imply the existence of rigid sexual divisions of labor or deny women and men's interdependency in managing their personal and household subsistence and cash economies (Murphy and Murphy 1985; Peluso 2003, 2017, 2020, 2021). It is important to note that though divisions of labor, as processes of production and consumption, sometimes separate men and women, they can also bring them together as individuals or groups. They may work in mixed or same-sex groupings in varying contexts (Hugh-Jones 1979). Men have long attended to negotiations with external others. This greater articulation with outsiders, coupled with local and regional gender hierarchies in adjacent towns, hampered the perception of female leadership by men, women, and organizations at the time AMETRA operated. Thus, it should not be surprising that in the case of AMETRA 2001, young men were chosen over women for the same reasons they were also generally not successful as health workers. First, male "health workers" were unable to interface directly with women, in part, because the types of required interactions in such a role would often be deemed inappropriate gender-role behavior. For example, men do not approach women on their own, particularly if their husbands are not present. Even when husbands or other male kin are, men are generally not in the habit of initiating such interactions. Second, social relations between health workers and women were often awkward. For example, age and kinship deference was often expected. Third, it was not considered socially appropriate for a woman to travel alone. If women were to travel, they would need to be accompanied by an appropriate person and any younger children. Indeed, this continues to be an obstacle (Espinoza 2017). Lastly, as I mentioned earlier, the men themselves viewed the job of "health worker" as a vehicle to interact outside their communities rather than within them.

Consequently, the health worker role became more administrative than applied. This gap and the need for daily healthcare promoters within communities prompted AMETRA 2001 to reevaluate its projects. This self-appraisal confirmed their need to include and address women in their projects as facilitators and beneficiaries. At the same time, the organization realized that the "health worker" approach was not as effective as creating a small "health team" to work within each individual community. This new team approach recognized that most communities are organized around family social structures rather than

the notion of "community" (Alexiades 1999, Peluso 2003, 2021) and would better benefit from the participation of a cross-section of the community (Alexiades and Lacaze 1996). The team approach also takes pressure off individuals in actualizing health initiatives by working alongside others. Such cross-gender, generational-household, community forms of care more closely resemble indigenous social and power relations and can be accommodated accordingly.

Women's Participation

In 1990, the "First Meeting of Indigenous Women of Madre de Dios" took place with sponsorship from AMETRA 2001 and FENAMAD (FENAMAD 1990). It was a five-day event among women from different communities and ethnic groups with a special focus on health and traditional medicine. I was invited to attend by both AMETRA 2001 and FENAMAD, and assisted the three indigenous female FENAMAD delegates who organized the meeting and who had worked diligently to bring women together to represent their respective communities.¹¹ The meeting was held in Centro Ñape, AMETRA 2001's community health center located on the Tambopata River in an area that overlapped with both the Tambopata Reserve Zone and the native community of Infierno (Alexiades and Lacaze 1996). Centro Ñape is an area abundant with wildlife and quite removed from the everyday hustle and bustles of life, more closely resembling the setting of a hunting refuge. Several indigenous groups in Madre de Dios built Centro Ñape as part of AMETRA 2001's inclusive initiative, and this setting was more closely aligned with how people are accustomed to living in their communities; i.e., wooden platforms built off the ground, comfortable palm rafter floors, and open outdoor cooking areas. This way, the women at this encuentro were able to bring their children, and in several cases their husbands or kin, to accompany them at the event. Accompanying husbands were asked not to participate in the meetings and to instead assist with various things that needed to be attended to at Centro Nape.

The meeting began slowly. Many of the women attending the workshop had arrived serendipitously. For example, in one instance a woman's child was sick; she wanted to visit Centro Ñape, knowing that some of the healers working with AMETRA 2001 would be present. It was the first time that several of these women had traveled outside their communities. Although only women were present within the meeting space, many were initially too embarrassed to say their names aloud, and many indeed did not. As the female organizers tried to encourage dialogue among everyone, the attendees seemed to insinuate that they wanted outsiders to come and "teach them" (such as doctors or nurses). In fact, the organizers had invited several women to come from Cusco and Lima to help facilitate the meeting and workshops: one was an Andean healer and the other an indigenous rights advocate. However, because of trouble with the airlines at that time, the invited guests never arrived. This disappointed attendees because they did not consider that they might have the knowledge or the practices to teach one another or worthwhile stories to share.

After the first day the women began to feel more comfortable at Centro Ñape, and once their children settled in playing with others they became more visibly relaxed. Through this process of settling in, the women began to exchange details about their divergent and/or similar lives and livelihoods. Because of how the workshops were facilitated, women also began to share their knowledge about health and illness. Some of the most valuable exchanges occurred outside the meeting's formal spaces and encounters, and took place when women walked together in the forest, sharing their ideas about the flora and fauna of riverine and interfluvial habitats. These ideas ranged from metaphysical to physical characteristics of plants, animals, and/or environments. Apart from a general pool of culturally shared knowledge (cf. Boster 1986), some individuals had specific skills, such as bone-setting, the application of plant-based plasters, the preparation of psychomagical treatments, and assisting pregnancy, birth, and postpartum needs.

11. Although these three women were "delegates" of FENAMAD, they had extremely tangential roles with very little decision-making power or responsibility compared to the male delegates or administrators. One of these women also worked with AMETRA.

Women also engaged in lengthy conversations about how they acquired their knowledge. Many skills derived from a wide range of people and had not been passed along gender lines: from mother to daughter, father to son. Instead, mothers, fathers, aunts, uncles, and neighbors were often cited as having taught these various skills to them. It did not matter whether this was exclusively "women's knowledge" but that these women had acquired specialized skills through the interplay of idiosyncratic circumstances, and that on a day-to-day basis it is still primarily women who exercise these skills. In sum, it was outside the formal workshop setting of this first indigenous women's *encuentro* of Madre de Dios that knowledge was enthusiastically exchanged via nonstructured and more spontaneous forms of participation. Furthermore, women's interest in each other's ideas made them aware, as individuals and as a group, that they have significant expertise and that their views matter. Toward the end of the *encuentro* the women agreed that they indeed had "specialized" and "useful knowledge."

Another outcome also aligned well with AMETRA 2001's vision: women do not view "conservation" in terms of resources that should be left alone. They, similar to men, view conservation as processes of maintaining and caring for their natural resources and environment. As I discuss later, local peoples' interactions with their environment encompass ontological outlooks that engage with nonhuman others as subjects (Viveiros de Castro 1998), making environmental interactions relational. Women expressed ideas about how natural resources are best cared for when they are being utilized, tended to, and nurtured. For instance, among the Ese Eja, an indigenous group in Madre de Dios, the word they repeatedly use toward the natural environment is *tiiani*—something that needs to be tended, protected, and, in a sense, cultivated. Hence, although growth is a spontaneous process, it also requires intentional action. It is precisely this concept of causing action that reflects the importance of active nurturance and caretaking—as in raising children—which is an activity shared with other household members (Peluso 2015).

The encuentro had several positive repercussions regarding women's broader political involvement. That same year, a Huachipaeri woman, Berta Solizonquehua, who had been part of the meeting, was elected vice president of AMETRA. She became part of the "health team" consisting of mostly men and began facilitating workshops at the community level. The workshops were informal and took place in individual family homes. Because of their wider gender appeal, most villagers across age and gender differences, and sometimes the entire community, attended the workshops. A primary operational ideal was to address immediate health needs in each community and therefore prepare remedies onsite that had pressing application. For instance, if community members were suffering from skin problems or viral infections, the health team would prepare remedies from locally available resources to alleviate these ailments. Because of the broader gender appeal and their practical and accessible approach toward illness, communities widely and successfully received the health team. There were occasions when a community was suffering from social ills and pursued an interest in drinking ayahuasca, a psychotropic plant mixture, so they could address nonvisible negative influences on their community. This was done in a ritual setting with male shamans. Indeed, AMETRA 2001 was influential in the emergence and reemergence of ayahuasca in Madre de Dios (Peluso 2016) 'while at the same time, by acknowledging womens' expertise, male shaman roles were not overly exhalted.

Women's participation enticed a more open discussion and, in turn, generated greater participation of women and their knowledge at both the community and organizational levels. Although, as I have previously mentioned, knowledge does not necessarily belong exclusively to women, there are still many remedies and their sources that women seem to use more than men. In Madre de Dios, certain plants, just as certain activities, are more strongly associated with women than with men and vice versa. For instance, *guayaba* (*Psidium*) is associated with female knowledge and cultivated and used by them. The leaf buds and green fruits of *guayaba* are used to treat diarrhea, gastrointestinal disorders, coughs, and colds. Clinical trials

12. The Ese Eja word tiiani means to mature or to become old; -tii implies "old" when used as a suffix with nouns referring to people: e.g., eponatii ("old woman"), etii ("old person"). Furthermore, the transitive tenses in which it is most often used, tiimeeaña or tiimee, translate as "I'm causing-helping them to grow." It also refers to the raising of biological and adopted children (Peluso and Boster 2002; Peluso 2003, 2015, 2021). By injecting the infix -mee-, the verb linguistically reflects the action of someone other than the subject, implying nurturance.

have found it to contain antimicrobial properties and high dosages of vitamin C and other positive health effects (Gutiérrez et al. 2008). The shoots (young leaves) are used to make an oral rehydration drink (water, salt, and the young buds of cashew). This is an important prescription since, as I mentioned previously, diarrhea and its ensuing dehydration is the main cause of infant mortality. Another remedy women prepare is derived from the latex of papaya fruits; it is an effective antihelminthic treatment (Krishna et al. 2008) and is readily at hand in the fields that women cultivate on a regular basis. Some plants are preventative or useful for general health and immunity, or as part of daily nutrition. Other plants indirectly shape health and well-being in their uses as fuel and animal feed, and for coppicing, construction, artisanal production. In sum, health and well-being further encompass positive livelihood and subsistence practices such as gardening, hunting, gathering, construction, and so forth.

The geography of health in areas such as Madre de Dios, although internally diverse, distributes and shares many consistent characteristics regarding concepts, patterns, and diagnosis of health and disease (Gesler 1991) among individuals and communities in this multiethnic region. ¹⁴ Despite differences in the medical systems between and within ethnic groups, there are several culture-bound syndromes and concepts for disease causation found in most communities that are shared across differing socio-cultural-economic conditions as responses to disease. Some of these concepts, such as *saladera*, a psychosocial illness (de Rios 1985), were introduced by the adjacent or migrant Andean population or through the influence of particular ethnic groups (Chiappe et al. 1985; Bennett 1988; Alexiades 2000, Alexiades and Peluso 2009). Other concepts have existed independently with slight variations in form.

In conversations at the women's *encuentro*, notions of health and well-being were seen as directly related to notions of caring for one's family and caring for one's surroundings and nonhuman others. This was discussed as part of an overall interactive nurturance between people and their living environment that includes the retention and transmission of knowledge and tending to natural resources. Gender roles, relationships, and interactions are some of the ways that such a complex cultural geography of health can be better understood.

Ojé: Women Entering Male Arenas

As AMETRA 2001 advanced, the NGO encouraged more women to become health promoters, and gender-balanced health teams consolidated and visited the communities. Women's participation did not stop at integrating what they already knew or were familiar with; they also began to cross new terrains of knowledge into areas traditionally dominated by men that had become abandoned. Such is the case of the use of *ojé* (*Ficus insipida*). *Ojé* is an ecologically important, pioneer species tree that grows along riverbanks and prevents soil erosion and affects large-scale phytogeography (Honorio Coronado et al. 2014). In Madre de Dios and other parts of Amazonia, *ojé* sap (latex) is known to kill parasites (Phillips 1990). Yet not all ethnic groups in Madre de Dios, including the Ese Eja and Harakmbut, have a tradition of using it as an antihelminthic (Alexiades 1999). Clinical trials have shown its sap kills five types of parasites effectively, including *Giardia* (Hansson et al. 1986). *Ojé* is also more cost effective than pharmaceutical products, as one can prepare it oneself and often its administration is needed for more than one family member. Indeed, the AMETRA 2001 *ojé* campaigns administered it at the community level so as to diminish the community parasite load.

Once the sap of $oj\acute{e}$ is collected, it is mixed with alcohol and left to ferment for two days. It can then be conserved for up to six months. It is then taken for three consecutive days. As practical, economical, and available as $oj\acute{e}$ is, the knowledge and use of this resource is endangered for several reasons. First, the use of this tree lies in the male domain, and they are no longer as actively interested in exploiting that knowledge. Second, the use of indigenous

- **13.** It should be noted that *guayaba*, like papaya, which has similar local uses, is also used in cosmopolitan settings.
- 14. The study of the spatial variation and distribution of disease patterns is often referred to as medical geography (Pyle 1976, 1979), however, more recently such studies encompass the distribution of health beliefs, health services, etc. and the related study of their conditions, causes, meanings, and environmental perspectives (Jones and Moon 1987).
- **15.** This is one of many ways that *ojé* can be prepared.

medicine has a low status vis-à-vis pharmaceutical products. Lastly, even for those interested in using $oj\acute{e}$, many do not know the correct procedures and doses, and therefore do not feel secure in administering it to their children.

In 1991, I offered to facilitate any aspects of health promoter work for the FENAMAD and AMETRA 2001 project as needed. As a result, Berta and I decided to explore why a treatment as potent as ojé was not being implemented, and we began to systematically ask women why they did not use ojé in their communities. There was a wide variation of responses within and among the ethnic groups we worked with as to why. Most commonly, women just plainly did not know how to harvest, prepare, and/or administer ojé. Yet rather than to focus on teaching people how to prepare ojé, we focused on better understanding women's motives for not using ojé and encouraged them to talk about it among themselves. After this was contemplated, we were able to identify the most popular reasons, which were often paired in combination with others. Overall, there was a general perception among men and women alike that ojé, like other plant beings, is a nonhuman other with nonvisible properties. As such, *ojé* has its own unique perspective and intentionality, which is commonly described as strongly aggressive and therefore potentially quite harmful. Like humans, plants are also said to experience excessive emotions fraught with potential danger. Such local and indigenous ontologies align with broader pan-Amazonian ideas that espouse perspectival and animist outlooks whereby nonhuman others are free-standing agents who, in turn, have their own perspectives (Viveiros de Castro 1992, 1998, 2018; Descola 1994, 1996, 2006). These views accentuate a perceived vulnerability based on ojé's feared nonvisible properties that can potentially kill. The latex also has its own intentionality, both as part of and separate from the tree with related dangers of pollution if not handled properly (Alexiades 1999, Peluso 2003, 2021). Further reasons for disregarding ojé include a dislike for the taste of its sap, a perception that the diet that accompanies the treatment is rigid and difficult to follow, the fear of a particular venomous snake that is believed to cohabitate with the *ojé* tree, and the belief that the most accessible ojé trees, those which grow close to settlements, are contaminated by human presence, and are hence ineffective. Furthermore, administering ojé is meticulous and must take place at the same time each day without interruption over two weeks. This sequence is often accompanied by much trepidation about the perceived possible negative repercussions if one is to "break" it, with death being the most severe consequence.¹⁶

Through this process of one-on-one and group discussions, villagers designed many creative strategies, some of which included men's help, to overcome some of the obstacles that deterred their use of *ojé* so that they could manage this resource for its potential use benefits. For instance, they could ask men to assist in harvesting distant *oje* trees; women could then process and administer it. This also solved a common problem: many women were unwilling to collect *ojé*, but most were eager to learn to prepare and administer it. It also addressed the predicament that men might not be available for the full length of time the administration of *ojé* required. By superimposing cultural and ideological gendered maps upon a geographical map of an environmental resource such as *ojé*, AMETRA 2001 was able to make a small inroad into issues of healthcare, natural resource use, and the strive toward a more gendered balance in indigenous healthcare legitimacy.

Conclusions

This article examined how the healthcare promoter approach, as AMETRA 2001 employed toward indigenous health in Madre de Dios, went through several stages of formation and development, initially ignoring women and later incorporating them in all aspects of its facilitation. The process began with health project organizers and communities disregarding women as potential outreach workers and specialists of health knowledge and practices—a pattern consistent with projects elsewhere (Moser 1989). This, in turn, meant that men assumed

16. Beliefs about how to administer *ojé* vary across indigenous groups. AM-ETRA chose this particular formulation based on Shipibo Conibo use of the plant. Hansson et al. (1986) studied this formulation

the more formal roles in healthcare once such roles became more visible and public; indeed, it is a worldwide trend that when women-centered livelihoods achieve greater visibility and renumeration, men usurp their roles (Mies and Shiva 1994). In addition, the association of formal roles with men reflected broader gender norms across the region that supported men in more public positions, further prioritizing them for achieving literacy and affirming their ability to travel independently vis-à-vis women (Radcliffe 2002; Peluso 2003, 2021).

As AMETRA 2001 began to more fully acknowledge and rely upon women as health promoters, the novel idea of "health teams" arose as a sensitive response to how they saw the project operating within the communities. Such teams over time were ideally composed across gender, age, and families—uniquely crafted depending on individuals' availability and the communities being visited, as each community had their own representatives. The example of ojé provides an example of how ideological and gender-based practices can be superimposed upon a geographical natural resource map while also showing how gender-imbalanced areas of knowledge, practice, and specialization can in some instances be surmounted. Nonetheless, such conscious participation best occurs at both the organizational and grassroots levels so that challenges can be identified, learned from, and overcome. The unified health team—approach to health promoters facilitated the instrumental importance of women's inclusion in more formal roles by demonstrating how communities best work across gender, age, and specialisms.

Although the initial conceptual and design stages of any project is critical for the proper inclusion of all beneficiaries, AMETRA 2001 did succeed in including women within their organization and outreach despite their original omission. Indeed, they were at the forefront of an empowerment approach toward indigenous women well ahead of its times for Amazonia. One also needs to consider that this timeframe reflects the early years of the creation of indigenous federations, whereby they were still coming to terms with their power and jurisdiction. In this period they struggled with their own position of representing indigenous peoples to the state and the state to indigenous peoples (Rubenstein 2001). It is understandable that in miming surrounding power structures, the inclusion of women was not immediately visible (Peluso 1993). Furthermore, gender equality struggles in lowland South America and Latin America cannot be fully equated with Western feminism (de Chungara and Viezzer 1978; Kelly, Burton, and Regan 1994) just as the unity of women and feminism also cannot be assumed (Mohanty 1988, Mohanty et.al. 1991). Women's struggles in indigenous communities have been part of the overall struggle for indigenous rights. Though local gender differences are constituted in various ways, they are primarily complementary in practice (Belaunde 2001; Peluso 2003, 2020, 2021, Mezzenzana 2018) and become more pronounced as they are integrated within regional, national, and international economies.

An important aspect of the indigenous health promoter project was its respect for and use of local notions of health, particularly the idea that health is not only a physical condition but also one's state of mind that results from interactions with its social environment. Such an environment includes the natural world and all living entities and nonhuman others. Such a position acknowledges perspectival and animist views, and it also recognizes that indigenous peoples employ these views depending on context and their own individual needs.

In this way, health is defined as well-being and "living well," a concept now well-entrenched in the Amazonian literature (Overing and Passes 2002; Sarmiento Barletti 2016). AMETRA 2001's intentional inclusion of the relationship with and care for one's environment as part of their definition of health meant that beliefs aligned with Western notions of conservation were pronounced in their activities.

As mentioned, Madre de Dios is a heavily forested region where millions of hectares have been designated as national parks or reserves, and it is rich in biocultural diversity. For several decades now there has been interdisciplinary interest in the complex links between the fate

of tropical forests and the peoples that inhabit them. A strategic convergence of interests has been apparent since the 1990s: those working in conservation realized that tropical forests are not "empty" and that conservation efforts must incorporate local human populations. Those interested in rural poverty, development, and indigenous peoples' rights often began to see conservationists as potential allies. Thus, the awareness and interface between indigenous peoples and conservation was taking place precisely at the time of AMETRA 2001. Like many Amazonian geographical regions, extractive economies continue to dominate Madre de Dios, though in recent decades tourism and the environmental service economy have become locally significant sources of revenue and employment (Peluso 2018). While mainstream "conservation" discourses, as used in the development world, are Western constructions, embedded in their projects are assumptions regarding what variables are important and the necessity of these variables to be articulated and coordinated with Western-styled organizations. In the 1980s and 1990s the implementation of conservation outreach projects in Amazonia typically drew upon social roles designated for men, particularly at the initial stages. Such assumptions often excluded women and, additionally, ignored non-Western domains of conservation such as healthcare. This meant health promoter programs were never seen as an adequate level for capacity-building or knowledge exchange. These two dominant discourses, Western healthcare and conservation, inadvertently worked together to exclude indigenous fields of health and women as administrators of such domains of knowledge. Thus, as this case study demonstrates, by embracing a more holistic definition of health to encompass social relations, including those with nonhuman others as part of the environment, women become key authorities and transmitters of knowledge and skills in project areas normally overlooked by conservation and dominated by men. Although both men and women ideologically tended to see the management of forest resources as resulting from their direct and practical use of those resources, women more explicitly vocalized a politics of care that that reflected indigenous ontological views of the environment of which they consider themselves part. They did so by speaking openly about the relationships between health and their environment, not by viewing natural resources as something to preserve or as being external to humans, but as being part of the social relations and the social worlds that shape well-being beyond the human individual.

Although the women's *encuentro* set in motion a public forum whereby women could relate to each other as women, it did not change the fact that when women returned to their communities they preferred to work alongside their kin and residential household units, returning to their local regimes of care practices. Indeed, with time, the health team approach was developed in response to the reality of each community. This meant attempting to approach each community at the level of its own culturally relevant or significant social unit, be it a household, cluster of households, or a clan—eventually encompassing the entire community. Furthermore, by addressing larger social issues such as "health" rather than, say, "women's health," then women's leadership can be more encompassing. From this point onward, projects could be further refined for any purpose, including gender-specific health issues.

Health and conservation projects that use the village promoter approach would benefit from building upon informed ideas about local ontologies and village social organization and activities to have a better chance for success. Recognition of indigenous political structures, regimes of care, and the actual day-to-day realities of gender dynamics are vital in any quest to formulate and implement effective, culturally appropriate models of intervention to promote gender-sensitive well-being, environmental knowledge, and practice, and thus foster sustainable health for all.

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