The Usmeka System of Thought
Decolonising Science to Open Spaces of Epistemic Justice
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Resumen
El giro ontológico en las humanidades y las ciencias sociales puso de manifiesto cómo las estructuras de poder que sustentan la producción de conocimiento científico excluyen los conocimientos relacionales no occidentales por considerarlos epistemológicamente inválidos. Así, las respuestas a esta infraestructura de producción de conocimiento excluyente van desde lo anticientífico hasta el uso de la ciencia para validar los conocimientos indígenas. Sin embargo, esas respuestas pasan por alto las espiritualidades subalternas y cómo decolonizan la ciencia para abrir espacios epistémicos emancipatorios. Basado en una investigación etnográfica, este artículo describe la comunidad Usmeka en Bogotá. Al tiempo que aborda el conocimiento científico como un lenguaje de nivel medio para dialogar con la naturaleza, moviliza las posibilidades de emancipación epistemológica. El análisis contribuye a entender cómo los sujetos coloniales subvierten la investigación científica como herramienta de control epistémico.

Palabras clave: Decolonización de la ciencia, Justicia epistémica, Emancipación epistémica, Conocimiento subalterno, Pensamiento decolonial, Estudios sociales de la ciencia.
respostas ignoram as espiritualidades subalternas e como elas decolonizam a ciência para abrir espaços emancipatórios epistêmicos. Baseado em pesquisas etnográficas, este artigo descreve a comunidade Usmeka em Bogotá. Ao abordar o conhecimento científico como uma linguagem de nível médio para dialogar com a natureza, mobiliza as possibilidades de emancipação epistemológica. A análise contribui para compreender como os sujeitos coloniais subvertem a investigação científica como uma ferramenta de controle epistêmico.

**Palavras-chave:** Decolonização da ciência, Justiça epistêmica, Emancipação epistêmica, Conhecimento subalterno, Pensamento decolonial, Estudos sociais da ciência.

**Abstract**

The ontological turn in humanities and social sciences exposed how the power structures supporting scientific knowledge production exclude non-Western relational knowledges as epistemologically invalid. Thus, the responses to this exclusionary knowledge production infrastructure range from anti-scientific to using science to validate indigenous knowledges. However, those responses overlook subaltern spiritualities and how they decolonise science to open epistemic emancipatory spaces. Based on ethnographic research, this article describes the Usmeka community in Bogotá. While addressing scientific knowledge as a mid-level language to dialogue with nature, it mobilises epistemological emancipation possibilities. The analysis contributes to understanding how colonial subjects subvert scientific inquiry as a tool of epistemic control.

**Keywords:** decolonisation of science, epistemic justice, epistemic emancipation, subaltern knowledge, decolonial thinking, social studies of science.

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Introduction

The postcolonial shift of the late twentieth century increased the visibility of traditionally marginalised communities, questioning who, where, and how knowledge is produced. That opened some opportunities to include non-Western epistemological perspectives in debates about development, ecology, and sustainability, encouraging scientists and policymakers to create intercultural spaces where indigenous and scientific knowledges (Walsh, 2010; Gudynas, 2011; Calisto Friant and Langmore, 2015; Demaria and Kothari, 2017) and practices joint to create better environmental management tools and methods (Briggs, 2013; Watson, 2013; Tengö and others, 2014). However, most of these attempts to create intercultural spaces still use secular and scientific epistemic warrants to validate non-Western knowledges (Mazzocchi, 2018), thus reproducing the hegemonic infrastructure of knowledge production and limiting the epistemic emancipatory potential of these spaces.

Indeed, Western secularism may be complicit in making invisible the onto-epistemic horror that colonial subjects felt—and still feel—when forced to leave behind or fragment their spirituality. Indeed, to interact with development institutions such as the state or the humanitarian sector many communities from the Global South face a secular/rational minimisation or co-optation of their spiritualities. Therefore, within development processes, the definitions of being and self are at stake.

To challenge the secular reduction of their cosmogonies, subaltern communities decolonise modern concepts and constructs such as democracy, ecology, or science; often rekindling forms of practical spirituality that are deeply integrated into the socio-ecological and ethical aspects of their cosmogonies. Sometimes, these decolonisations imply building bridges between modern and subaltern systems of
thought, creating opportunities for epistemic plurality and emancipation.

In this vein, this article describes how Usmekas—a grassroots community from Usme, a peri-urban zone of Bogotá, Colombia—decolonise science to rekindle their sacred relationship with land and nature. Here science becomes a middle language that allows them to engage in a dialogue with land and nature, in a process that uses spiritual epistemic warrants to challenge the supposed universality of Western secular epistemic warrants.

This analytical description draws from my long-standing ethnographic engagement with the Usmeka community from 2009 to 2019. I participated and witnessed the epistemological changes they instilled in Usme, within themselves and myself, including a shift away from anthropocentric ontologies and Western cosmogonies.

The following section will overview current approaches to create dialogues between subaltern and modern epistemologies and their limitations. Then, I will introduce Usmekas and their territory, contextualising their system of thought. Afterwards, the paper will analyse Usmekas’ decolonisation of science. Finally, I will reflect on the possibilities for epistemic resistance that emerge from the Usmeka perspective.

**Overcoming anthropocentrism: Dialogues between subaltern, postmodern, and modern epistemologies**

The ontological turn challenged anthropocentric views over non-human subjects because relational and more-than-human—hereinafter referred to as «MTH»—ontologies unsettled the fundamental blocks of scientific and Western philosophical inquiry. This ontological turn generated strong ripples in policymaking, for instance,
the current push to extend rights and citizenship to MTH entities (Sundberg, 2014). Most of these changes walk on the shoulders of Anglo-European relational ontologies that found a crucial political space within contemporary debates about environmental governance and policymaking. In comparison, non-Western systems of thought struggle to have the same impact on policy-making, especially when these knowledges are interdependent with non-Western spiritualities. So, even when a new rhetoric supposedly acknowledges Indigenous and non-Western knowledges (Watson, 2011; Sundberg, 2014; Nxumalo and Cedillo, 2017; Álvarez and Coolsaet, 2017), because of their spirituality, they are still rendered as primitive, exotic, and incapable of valid epistemic pursuits (Dey, 2021). Moreover, some of the seminal MTH conceptualisations —namely Whatmore’s (2002), Haraway’s (2008) «hybridisations», and Latour’s «cosmopolitics» (2009, 2004)— still carry the inherent risk of co-opting subaltern knowledge within modern systems of knowledge; depriving the subaltern of its social agency and hereby reproducing the modern/colonial power geometry and relegating subaltern knowledge to the margins (Sundberg, 2014; Thomas, 2015).

Likewise, there are emergent trends in policymaking, governance, and development that attempt to join subaltern and Western knowledges, especially from the discourses of «participatory» and «inclusive» development (Briggs, 2013). These trends use a neoliberal understanding of multiculturalism that creates governance models that limit the recognition of non-Western voices. They preach multiculturalism as a goal but end up promoting homogeneity because different communities are required to adapt to the forms of «participation» established by the state (Walsh, 2012; Demaria and Kothari, 2017). This is problematic because the ideologies of modern states are grounded on preconceptions about the inherent superiority of scientific epistemic warrants. Hence, if non-Western concepts
and constructs want to engage within a democratic space, they must be validated by science, extracting them from its own system of thought and diminishing their original—often highly localised—epistemic validity and explanatory potential (Watson and Huntington, 2008; Mazzocchi, 2018).

This extraction of subaltern concepts from their knowledge genealogies reinforces and reproduces a power structure rooted in coloniality. For instance, Ecuador’s government co-opted the 1990’s Quichua neologism Sumak Kawsay—also known as Buen Vivir (good living)—to reframe their extractive practices from an allegedly indigenous perspective. Ecuador’s government captured grassroots and indigenous demands within neoliberal economies and excluded indigenous communities from real democratic debates about land ownership and environmental justice (Alonso González and Vázquez, 2015; Villalba-Eguiluz and Etxano, 2017) This co-optation of the political and cultural proposal of the Sumak Kawsay delinked it from its communitarian roots, its capacity to incorporate plural visions, and its spiritual connection with land and nature (Ferreiro Lago, 2018). In that manner, Ecuador’s government captured Sumak Kawsay within a secular, anthropocentric and egocentric perspective, that allows the reproduction of extractivism (Calisto Friant and Langmore, 2015).

In this context, Fulvio Mazzocchi (2018) proposed a “radical version of perspectivism” in which subaltern and Western systems of thought may engage in deep intercultural dialogues. That requires the acknowledgement of: a) the existence of non-Western epistemic warrants, even when they are incomprehensible from a modern perspective; b) ontological dissent as a productive and even constructive force; c) that it is possible to reach some localised agreements regarding ways to interact with localised phenomena, even when it may be impossible to reach ontological harmony; and d) that representatives of different perspectives can sustain dialogical processes, where all voices should be heard. This
approach shows a commitment to open a space for a plural engagement in intercultural dialogues. However, as Mazzocchi (2018) acknowledges, his approach assumes that subaltern communities can engage with this approach on their own terms. In an attempt to show an alternative to the approaches outlined above, this article describes the Usmeka decolonisation of science as an example of a subaltern approach to join indigenous knowledges and science. The Usmeka perspective does not reject science but deconstructs the power structure that it imposes over the subaltern, especially in regards to their spirituality. Usmekas base their decolonisation of science on a hybrid self, akin to Gloria Anzaldúa’s (2009) New Mestiza Consciousness. Usmekas embody an epistemic frontier where different and sometimes conflicting systems of thought coexist. Usme is the threefold frontier where Muisca, Andean Campesino, and modern scientific systems of thought meet. From this space and consciousness, Usmekas decolonise science, creating a system of thought in which non-human entities are actors rather than passive recipients of knowledge, and science requires a spiritual epistemic warrant to validate the knowledge produced through the scientific method.

**A brief description of Usme**

Usme is located at more than 2,600 metres above sea level and less than 20km from Bogotá’s administrative centre. It is at the crossroads of diverse historical trajectories. In precolonial times it was an influential Muisca religious pilgrimage destination and burial place (Gómez-Montañez, 2013). The Muisca are one of the most important indigenous groups inhabiting the territory where Bogotá is located. There are records of their presence since 800 CE. However, the colonial regime—and later the republican government—made great efforts to acculturate them, even to the point of creating a national imaginary of their disappearance. Since the
1990s they have been mobilised to be recognised as one of the ancestral people recognised by the state (Gómez-Montañez, 2010). During the seventeenth century, the Spanish Empire christened the location as San Pedro de Usme, transforming it into an evangelisation centre for Muiscas. Throughout the eighteenth century, indigenous pilgrimages were replaced with permanent settlements, and Usme became Bogota’s main food production centre, encouraging the establishment of the Campesino identity (Santafé, 1998).

From 1886 —seven decades after the independence from the Spanish ruling— until 1991, Colombia’s government exhorted the modernisation and hispanisation of the country. The constitution of 1886 declared Colombia as a «Roman Catholic state» and gave the Roman Catholic Church control over education. Administrative power was centralised in Bogotá, and Usme became Bogota’s repository of water, food, and cheap labour.

In 1906, Bogotá obtained administrative powers over the most important river in Usme: the Tunjuelo. Three decades later, the national government constructed La Regadera Dam flooding 3.8km² of Usme’s land and landscaping the surroundings with Canadian pines. The dam forced several Campesino families to move to emergent urban settlements, replacing agricultural labour with mining in the upper river basin, which intensified the destruction of the local ecosystem. Campesino communities were never connected to La Regadera water system, and by 1940 the dam could not meet Bogota’s water demands (Osorio, 2007).

In 1954, Usme was integrated within Bogotá’s jurisdiction (Presidential Decree 3640), becoming a reservoir for urban expansion. This coupled with the establishment of informal settlements during the 1960s and 1970s in the north-east zone of Usme —later legalised during the 1980s and 1990s— and the construction of Doña Juana Landfill at its outskirts. Usme and other surrounding localities became marginalised
urban settlements, expressed in the mismanagement of the landfill. Doña Juana Landfill has exploded or collapsed on four occasions (Santafé, 1998), most recently during 2020’s coronavirus national lock-down (Escobar Moreno, 2020).

The marginalisation drove the closure of public libraries, the governmental denial of Campesino way of life and Muisca heritage, the creation of a limestone mining complex within Bogotá’s jurisdiction. Finally, neoliberal structural adjustments and agro-industry hurt and diminished Usme’s prominent role as a local food producer.

In 2000, Bogotá’s mayor, Enrique Peñalosa, declared the urbansation of 9.02 km² of Usme. During fieldwork, community members stated that the «Nuevo Usme» urban development project intended to build 50,000 housing units in the middle of rural land. That threatened to displace Campesino families and severed their ancestral links with their territory because it replaced farming land and heritage sites with dense and tall buildings, which in turn disrupted the rural dynamics of the territory. They also affirmed that Bogotá’s government officials —especially representatives from Metrovivienda, the government agency in charge of urban development in Usme— and paramilitary groups hard-pressed families to sell their land at extremely low prices. Research participants stated that the price they were offered around 2002 and 2004 was about $2000 COP per square meter, the equivalent to $0.75 USD.

The events described above generated not only an atmosphere of oppression and exclusion in Usme, but also a strong community response. Usme communities started to reconstruct their memory and oral history, rekindle their spiritual connection with their land, and reconnect with their Campesino and Muisca roots. This process of resistance created a space where young activists —who studied bachelor degrees in biology, forrestal engineering, and ecology— engaged with Muisca and Campesino communities.
It was precisely these young activists who bridged the gap between Campesinos and Muisca communities, joining them in an ongoing process of memory reconstruction, which during the late 2010s took the name of the Mesa de Patrimonio Usmeka (MPU) (Usmeka patrimony roundtable). The Usmeka system of thought and identity emerged during this process. The Usmekas consider themselves «herederos de un mito perdido en la bruma del tiempo» (heirs of a myth lost in the midst of time) (El Pueblo de Usme, 2012: 2) and «guardian y custodios de Usme» (guardians and custodians of Usme) (Fieldnotes, 19 October 2012). As they explained to me:

- Look mate, if you are here, talking with us today, it is because our grandparents have called you to come here. They have called many of their children, and few have returned. But I hope you are feeling the call. The people who are walking today with us are responding to the call. Our Ancestors are making us rediscover our roots, realising that we are the children of the Muisca people.

- Does you mean you are Muisca?

- Yes and not... I mean, we are children of our ancestral grandparents, but we are not today’s Muiscas. We lost our path; we need to recover it. We are not Muiscas even when we long to be. We are the people from Usme, grandsons and granddaughters of Muisca and Campesino ancestors. And we are responsible for taking care of this land and the grandparent that rest here. We are the new guardians of this sacred place. (Maurice, 7 August 2012; translation by the author)

1 Throughout the article, I employ pseudonyms to protect the identity of participants.
To build a new consciousness, Usmekas acknowledge they have disconnected from their Muisca roots; thus they cannot be indigenous any longer. However, their memory prompts them to reconnect with their indigenous roots. So, they trace their history to times before Spanish colonisation and reterritorialise Usme as the land that the Muisca bestowed them. This entails an embodiment of a spiritual connection with Usme, their «love nest» as it is called in Muisca language, and the spirits of their ancestors who called them to protect their land.

A pivotal element in their Usmeka consciousness is the Hallazgo: the rediscovery of the Muisca Necropolis in 2007. This archaeological site was found during Nuevo Usme’s works within a place known as Hacienda El Carmen. Because of the community opposition to urban development in Campesino land, many activists watched closely the construction site. The community noticed human remains and pottery among the excavation debris. So, they denounced this situation to the media and local government. Unfortunately, the media paid little attention to the community’s claims. Additionally, the Usmekas argue that urban developers tried to hide it from the public. As one of them mentioned:

-We noticed the bones and pottery emerging from the construction, and we denounced the construction. We hoped somebody would pay attention to this, but there was too much money at stake. So, we collected some of the pottery pieces as evidence of what was happening. We also rallied and protested on the site, hoping somebody would pay attention to what was happening here, so they could help us to stop urban development. .
We always imagined what archaeologists found later. (Horacio, conversation during fieldwork conducted in Usme, 12 August 2012; translation by the author)

Usmekas sat down in front of the bulldozers’ preventing the works from continuing. They also entered the construction
site during the night, trying to salvage whatever remains they could find, mainly pottery and jewellery. Through direct action, Usmekas significantly slowed urban development. The community believed that the remains they rescued were of great value for their memory. However, the government believed a mass grave had been uncovered during the construction and sent a forensic team to survey the place:

-We were sure something big was buried there. You see, we were rescued from destruction by pottery and jewellery. We felt a call from the necropolis, like our ancestors saying, «you need to save us from oblivion». But the government believed otherwise. They thought it was a mass grave, attaching us to a story of violence. They [the forensic team] did not expect to find the cemetery. They were in shock when they realised that human remains were old, like 1500 years old. And Metrovivienda [the urban development company] was angry. El Hallazgo became a big problem for them. (Horacio, conversation during fieldwork conducted in Usme, 12 August 2012; translation by the author)

In 2010, archaeologist Virgilio Becerra and his team stated that this was the most important archaeological discovery in Colombia (Becerra, 2010). They found 135 tombs and extracted 300,000 fragments of pottery. The team calculated that the cemetery contains at least 3,000 graves, perhaps being the most important religious place for precolonial Muisca people (Becerra, 2010; Palacio, 2011). El Hallazgo is a turning point for Usme activists; it materialised Usmekas’ oral story, provided them with the legal tools to stop urbanism, and linked their memory with their spiritual and religious beliefs. Therefore, El Hallazgo is an Usmeka’s sacred space from which they enunciate their role as guardians of Usme.

From that point forward, the Usmeka community embodied Usme differently. Since then, they have seen the destruction of
nature and land, and the exclusion of the Usmeka community, as a consequence of modern systems of knowledge that situate nature and humanity in different—and sometimes antagonistic—ontological places. Therefore, they propose an alternative way to understand the relationship between humans and nature, sustainability, science, and environmentalism.

The assemblage of the Usmeka system of thought is formed through the coexistence of Campesino, Muisca, and scientific systems of knowledge. For the activists in Usme, inhabiting an epistemological frontier where three different epistemologies coexist together, a decolonial consciousness has awoken. Usmekas got used to the messiness of embodying different epistemologies and spiritual worlds at the same time and changing modes of thought constantly. In the case of Usme, this entails rejecting modern ontological dichotomies such as modern/traditional, rural/urban, Indigenous/non-Indigenous, nature/humanity, spirituality/rationality, and object/subject:

-How is Uni going?

-Well, I’m doing good. But, you know, I struggle a lot with the mindset. I realised that science is important to understand ecological structures. But I disagree with managing nature [...] we should talk to Mother Earth rather than managing her. Ecology without spiritual connection with land is empty [...] When I raise these issues, I am dismissed by lecturers [...] They talk all day about nature, and yet, they don’t understand that we and nature are the same, that traditional thought is not different from modern thought. You know, they keep maintaining a distinction between humans and the mountain, the three, the eagle [...] (Horacio, conversation during fieldwork conducted in Usme, 21 November 2015; translation by the author)

Rejecting Western-based dichotomies is crucial to the Usmeka system of thought, and its decolonisation of modern
ecology and science. First, dominant global environmentalism and sustainability trends draw on an ontological differentiation between humanity and nature. Therefore, nature can be measured and controlled through human knowledge and technology (Martinez-Alier, 2003; Clark, 2011; Proctor and others, 2013; Cubitt, 2014). On the contrary, the Usmeka system of thought addresses nature and natural entities as spirits, and therefore social agents with different cognition forms. Within the Usmeka ontology, nature has its own spirituality, epistemological warrants, and language; even if modernity is unable to understand it:

-Grandpa and Grandma rest on the mountain and the river, on the land itself. Their spirits have returned to Mother Earth, and they are calling us to defend the land. You know, we all must return to Mother. People forgot we come from the same place as the eagle and the threes. People forgot how to talk to animals, plants, and the land. We are recovering that, we are talking to our land, to our territory… You only need to open yourself to it, listen to what the moss is telling you to the way it thinks. Can you? (Jota, conversation during fieldwork conducted in Usme, 9 September 2012;[translation by the author)

This understanding of nature opens epistemological and ontological possibilities to the Usmeka community as they can establish dialogues with nature. In the praxis, Usmeka communities use two main approaches. The first is to use locomotion as a semantic process: walking is like speaking with the territory. The second one is delinking science from its genealogy of knowledge and transforming it into a language to communicate with nature: science is like a translation device between Spanish and nature’s languages.

This is not a minor endeavour because it implies an ontological shift for both Spanish and scientific language. In that sense, decolonising science implies to rekindle the spirituality that
secularism condemned. It re-emerges as a subversive spirituality that deterritorialises science and transforms scientific practice into a spiritual practice, creating an option for emancipation from a secular mechanistic view of reality, that devours human lives and spirits. Spirituality allows the Usmekas to empathise profoundly with MTH entities and other human lives.

The Usmeka way to decolonise science

Usmekas argue that the best way to address planetary environmental destruction is by helping humans to spiritually reconnect with nature and territory and engage in dialogues with non-human entities. That seems to be easier said than done, as Carmela stated during a public gathering:

-In a globalised world, populated by more than seven billion people, how to reconnect with nature and re-establish an equilibrium? In an urbanised world, where many people grow up without knowing how food is produced, how to make them realise that is Pachamama\(^2\) provides for them? In the era of globalisation, how to restore the bonds to different territories? How do we make people realise that all-natural entities are sentient, cognizant and wise? I think the response can be found in science. . . not any science, a humble science a science embedded within a spiritual connection with the land. (Carmela, public performance, 2 June 2012; translation by the author)

\(^2\) Pachamama is a Quichua word usually translated in Western languages as «Mother Earth». However, this translation does not convey the complexity of Pachamama as a spirit that transcends linear understandings of time, and the origin of all life (Apaza Huanca, 2019). The Usmekas reassembled Pachamama within their own system of thought, which is important to overcome linear and dualistic thinking.
Usmekas are aware of the hegemonic place scientific discourses have in the contemporary world. They also acknowledge science’s explanatory potential. However, they argue science must be humble enough to recognise its epistemic limits. From a modern Western perspective, it is impossible to understand profound spiritual connections and belongings to land and MTH entities, unless these connections are filtered and validated through scientific epistemic warrants, capturing their spiritual connection within secular ontologies that dismiss their capacity to produce meaningful knowledge. Therefore, they put scientific and religious or spiritual epistemic warrants at the same level. This is not a naïve anti-scientific perspective. It does not deny the importance of scientific method; yet scientific claims are not rendered as facts but as statements within an ongoing polylogue with their spiritual connection to land and nature. As Carmela continued:

-Science is very powerful. It helps us to quantify and describe the effects of extractivism over nature. Science offers some solutions to the global warming conundrum. But science by itself won’t solve the problems. The solution is spiritual. Stop trying to manage or control nature! We need to talk to it. If we listen, instead of measuring her, then we may be able to find better solutions, and perhaps, revert environmental destruction. Otherwise, she will get angry, she is already scolding us, and we are not listening to her! [...] Speaking with Mother Nature will help us to comprehend that nature is us and we are nature. (Carmela, public performance, 2 June 2012; translation by the author)

Usmekas embed science within their system of thought, deconstructing in the process the subject/object divide presented in most scientific approaches. Nature is not there to be studied, but it is a social agent, an interlocutor who shares knowledges and stories. The challenge —from the Usmeka
perspective— is that modern enlightened ontologies prevent humans from speaking with nature and the spiritual world. However, science may provide a solution: it becomes a middle ground language that allows Usmekas to communicate with nature. But that solution requires detaching science from its genealogy of knowledge, discarding secular and patriarchal urges to quantify, classify, and control nature (Watson, 2011). In words of Horacio, one community leader:

-Scientists seem to disbelieve everything we do here, but what if science and our spiritual knowledge are connected? Then scientists would realise, as we have, that science is just a vehicle that allows the territory to send messages to us. Just think about global warming [. . .] Do you really think that technology is going to save the planet? [. . .] I think that if we are still disconnected from the land, from the soil, from the planet, we are not going to be able to contribute to the re-establishment of equilibrium. Science is great, but only if it is part of a spiritual system that allows us to reconnect with our land. (Horacio, conversation during fieldwork conducted in Usme, 19 October 2012; translation by the author)

For the Usmekas, scientific instruments, measurements, and methods are not objective ways to quantify and classify nature. On the contrary, they should be understood as a way to establish dialogues with natural spiritual entities. In a casual conversation with Horacio, he mentioned that trees can communicate among themselves using a complex network of fungi and chemical signals. I instantly searched on my phone and showed him the study by Simard and others (1997), confirming what he explained. Horacio looked at me with a certain contempt, as if to point out that he did not need my approval or confirmation. I looked down, realising that I had taken the usual modern stance, using academic knowledge to verify or confirm the Usmeka system of thought. He stated:
-You know what is surprising about scholars —besides their egos— is how even when they are surprisingly smart people, they tend to focus on the less important pieces of their work [. . .] You did not pay attention to what I was trying to say. Like all biologists, ecologists, and forestal engineers I have met. . . they focus on measuring and classifying. Trying to «crack the code» of how trees communicate. And yet, they still think trees cannot convey thoughts of their own, similar to what they call «rational» thoughts [. . .] We are missing an opportunity to reconnect with threes, to find a way to translate our ideas to them and their ideas to us. We have the means to communicate with trees. (Horacio, conversation during fieldwork conducted in Usme, 19 October 2012; translation by the author)

He rebuked my scholarly subjectivity and critiqued the scientific community ethos. For Usmekas, that ethos prevents science and scientists from engaging in a horizontal, spiritual relationship with nature. Nevertheless, many younger activists studied life sciences Bachelor and Master’s degrees, which on the surface seems contradictory. However, from the community perspective, such contradiction does not exist because they actively deconstruct the dichotomies between science and other systems of thought, and between positivism and spirituality. Through their praxis, they create spaces where spirituality coexists, and even creates synergies, with science. As Maurice, a community leader, once said to me:

-For the spirits of grandmother and grandfather are part of this territory, you cannot possess this territory because you cannot possess their spirits. Otherwise, you would kill the territory, and you would only have a barren land. A soil without spirits is not soil, honestly. And that is the problem of science as well as spirituality. They tried to separate from each other, but in the end, they ended up empty. Knowledge without spirit is pointless, and spirit without knowledge is empty.
[...] Luckily, we have learnt both ways. Today we can actually use scientific words to bring people closer to grandmother and grandfather, to the spirit of the mountain and the river, to the spirit of the paramo and the river. A few of them have awakened and started to hear the ancestors calling through scientific jargon. This is not about religion; this is about realising that nature and our ancestors are trying to talk to us. (Maurice, conversation during fieldwork conducted in Usme, 2 June 2012; translation by the author)

Maurice explained there is not a binary between science and spirituality, as these are not competing systems of thought. For Maurice neither science nor spiritual connection in isolation can provide an epistemic warrant. In other words, science is not validating knowledge about reality, nor is spirituality confirming scientific theories. Instead, there is a double assemblage of epistemic warrants in which spirituality is at the same level as science. If spiritual epistemic warrants do not validate scientific claims, the knowledge obtained through the scientific method can be seen as «pointless». And if spirituality does not validate an empiric observation of the world it can be seen as «empty». In that way, the scientific method is not used solely to understand physical phenomena. Instead, it is a language that Usmekas use to re-establish the spiritual connection with nature that was severed during the colonisation/modernisation of Usme. In this way, this decolonisation of science helps the Usmekas to reconnect with their ancestral memory and indigenous roots, overcoming anthropocentrism and egocentrism from an MTH relational ontology that challenges secularisation as an ideological dispositive that excludes non-Western systems of thought. For the Usmekas, neither science nor rationality are opposed to spirituality. On the contrary, science is a tool that can reignite a spiritual connection with land and nature.

Additionally, Usmeka’s decolonisation of science allows them to have better conversations with state officials, academia,
and the general public. For example, since 1997 communities in Usme have engaged in a long governance debate about Doña Juana Landfill and the actions the government should consider to minimise its social and environmental impact over nearby communities. So, in 2012, when Bogotá’s government opened participatory spaces for land management communities Usme put the landfill theme on the table. Some government officers dismissed Usmekas’ arguments, mainly denying the value of Usmeka’s spiritual connection to their land. Reacting to the government officers’ rejection, Jota, one of the younger activists, rendered his spiritual connection with Doña Juana, in a way that was understandable for officers:

-We know that after the landfill construction, Doña Juana hill became terribly ill and sick. Nobody asked her for permission, nobody consulted her. You just filled her with garbage and wounds! If the government were a little more connected with the territory, it would ask for permission. Part of asking for permission, would be to carry out proper research before constructing a landfill, like finding out whether the soil can filter the leachates or not [. . .] But because the government saw only a mountain surrounded by poor people, it thought it didn’t have to respond to anybody. A spiritual connection with Pachamama is important because it leads us to be more sensible and responsible with the beings who share this land with us. I am sure that if the government officials would have this spiritual connection, they would at least be respectful enough to carry out proper research, which allows them to listen and understand what Doña Juana would say about the landfill. (Jefferson, conversation during fieldwork conducted in Usme, 3 November 2012; translation by the author)

His intervention changed the environment in the room. Not because government officials —focused on pushing the urban development agenda— changed their opinion, but because
they changed their disposition to dialogue. They even started engaging with the community at a personal level. For instance, I remember a brief encounter with a government official. I met him the second sunrise of a four-day walk through the Tunjuelo River basin:

-Andres: I’m glad we have the opportunity to see this landscape. [. . .] the espeletia forest, the Paramo lakes with tiny icy thingies on the surface. . . walking within the clouds.

-Gerardo: You’re right mate! I wish more people would attend the calling from our ancestors. Many of my colleagues are unable to grasp it. I reckon because sitting on a desk all day gets on to your head. But anyhow, I’m happy I met Maurice and Javier. They invited me here.

-Andres: Oh! For a moment I thought you were one member of the movement I hadn’t met before.

-Gerardo: I wish, but I don’t have much time. Between my work and family it is hard to find the time. I work for the city’s government. I met them in a forum, and since then, I have attended a few walks [. . .] When I came for the first time to Usme, I never imagined that I would become an environmentalist. [. . .] In the beginning, they saw me as the enemy. And we had some discussions, but then. . . then I started to listen closely. It wasn’t easy, but they nurtured me. Nowadays, I know I can speak with nature and that all the measures, indexes about biodiversity, soil acidification, and so on, are messages nature sends us [. . .] (Gerardo, conversation during fieldwork conducted in Usme, 15 June 2012; translation by the author)

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3 A wider variety of grassroots organisations and environmental movements organised the four-day walk, and its reach extended beyond Usmekas. However, Gerardo was invited by Usmekas, and therefore we were camping nearby.
Delinking science from its genealogy of knowledge has allowed Usmekas to establish an intercultural dialogue with people working in modern institutions, by opening plural spaces outside formal «participatory» practices. In that manner, Usmekas are starting to challenge the exclusion of their cosmogony and gain some critical allies within governmental institutions and academia. At the same time, Usmekas are opening avenues for MTH ontologies within modern institutions. As mentioned before, modernity keeps an ontological division between human and MTH entities: either nature is a resource to be controlled and managed, or it is a pristine realm that must remain unspoiled by human action. Arguably, this ontological division contributed to the global mindset from which the current ecological crisis emerged (Martinez-Alier, 2003; Erickson, 2018). Thus, it is not a surprise that during the past two decades Anglo-European post-structural philosophy and geography have generated a response to this division in the form of relational ontologies and ethics, such as the one proposed by Sarah Whatmore (2002) in the form of «hybrid geographies» and through the exploration of animal subjectivities, such as in the case of Donna Haraway (2008) or from the advancement of the actant-network theory to understand the cosmopolis as the place where MTH entities and humans meet (Latour, 2004, 2009).

The value of such approaches is undeniable. They provide an alternative to the ontological division between culture and nature that has created a power geometry in which nature is not understood as a social agent but as a resource at humanity’s disposal (Plumwood, 2015; Latour, 2009, 2004; Watson, 2011). However, as pointed out by Juanita Sundberg (2014) and advanced by Amanda C. Thomas (2015) and Samuel Spiegel and others (2017), academic and public discourses have given prominence to the mentioned Western MTH ontologies, excluding indigenous spiritual onto-epistemes from public deliberation. That reinforces a power geometry that
generates epistemic asymmetries. That is worrisome because most indigenous systems of thought —already— provided an MTH ontology, and relational ethics that can expand environmental justice further than Anglo-European MTH, because their spirituality already had in place the epistemic warrants required for considering MTH entities as equals (Watson, 2013; Cubitt, 2014; Thomas, 2015; Escobar, 2018). Since non-Western systems of thought are not equally listened to in public debates and considered important in academia, we may miss opportunities to open spaces for epistemic justice that could provide crucial opportunities required to navigate the anthropocene.

Local grassroots and indigenous MTH ontologies, such as Usmeka decolonisation of science, can be an alternative to Anglo-centric MTH. They have the potential to create spaces of polylogues, or at least plural dialogues between different ontological and epistemic perspectives, while providing the basis to deconstruct dichotomic thinking without rejecting neither the explanatory potential of science nor the meaning provided by spiritual connections with nature and land.

**Does the Usmeka system of thought open spaces for epistemic emancipation?**

From a postcolonial point of view (Spivak, 2010; Santos, 2012, 2014), it is arguable that Usmekas are captured within hegemonic epistemologies because they need to translate their non-modern conceptualisations into scientific knowledge in order to be heard in modern institutions. Hence, instead of a case of epistemic justice, Usmekas can be seen as a reproduction of how the subaltern is forced to use imperial languages, narratives, and practices to find a place within modern institutions. In other words, the Usmekas cannot talk on their terms, reinforcing an epistemic power geometry rooted in coloniality.
Nevertheless, as shown in the works of Anzaldúa (2009, 1987), Walter Mignolo (2007, 2019), and Arturo Escobar (2018, 2007, 2012; Escobar and Esteva 2017), it is essential to acknowledge that the colonial subject can and —in many cases— does delink Western concepts from their genealogy of knowledge to use them on their own terms. That shows colonial subjects’ capacity to resist and context exclusion and oppression and find creative ways to deal with the colonial geometry of power and challenge its epistemic control. In that sense, Usmekas created through their praxis a methodology in which they use the «master’s tools» to produce spaces of epistemic emancipation (Luke, 2017). Usmekas got used to changing modes of thought, to navigate between the hegemonic and the marginal world simultaneously. They live in a frontier space, where they are not required to learn the «master’s tools» because the process of colonisation etched these tools in their bodies and carnality. However, as colonial subjects, their carnal experience is also constituted by exclusion and deprivation: the «master’s tools» are also a burden, because they also know how the «master tools» exclude worlds that escape the epistemic limits of the hegemonic system of thought.

To be an Usmeka implies to understand and embody —even against one’s will— hegemonic epistemologies, while at the same time comprehending and embodying other systems of thought. That position can be a vantage point from where the Usmekas not only deterritorialise modern concepts, practices, and knowledge but also delink from their genealogy of knowledge, to reterritorialise them within a spiritual world and use them to emancipate themselves. As Allan Luke (2017: 18) explained, it is like using the «master’s tools» to build one’s house without losing one’s soul in the process. As this article has shown, Usme communities know how to use science as a bridge to reconnect their spiritual connection with nature as well as deliver their system of thought into the realm of modern institutions. They are opening a third space from where they
overcome binaries such as rational/spiritual, object/subject, nature/humanity. This third space entails possibilities for epistemic emancipation, plurality, and interculturality. These possibilities may not be found on the Anglo-European MTH ontologies and ethics because they still entail a significant risk of falling into epistemic traps of co-opting non-Western knowledges.

The Usmeka epistemology exists within a third space where Muisca, Campesino spiritual, and epistemic worlds coexist with scientific and urban knowledges: a space of messiness and uncertainty, but also creativity and plurality. From there, they created a decolonial science that challenges the secular ideologies that made invisible the onto-epistemic injustices of coloniality, and naturalises the narratives of consumerism that commodifies human spiritualities and knowledges. Therefore, the decolonisation of science is a space from which Usmekas resist epistemic, civic, and political domination. It does not necessarily imply a naïve harmony between epistemes but a world that teaches how to deal with epistemic clashes and misunderstandings instead of avoiding dissent.

References


