



Water, Life, and Loss: Aguasociality and Environmental Change in the Peruvian Andes¹

Malene K. Brandshaug | Postdoctoral Fellow, Oslo Metropolitan University

ABSTRACT Based on long-term ethnographic fieldwork in the Colca Valley community Yanque, this article investigates how small-scale farmers in the Southern Peruvian Andes relate to water and environmental change in intimate ways. It explores how the circulation of water in Yanque binds bodies, soil, crops, and mountains together – in a particular aguasocial sense. Building on the particularities of the Yanque waterworld, neo-material and posthuman scholarship that focus on more-than-human entanglements, and studies within the anthropology of water that foreground water's relationality, I argue for the need of ethnographic attention to aguasocialities. Attending to aguasocialities, my argument goes, implies a focus on more-than-human relations; likewise, it recognises water's potential to be social in its own right, and contributes with alternative stories to the dominant Anthropocene narrative by localising it, bringing in water and inviting to think the world differently.

Keywords: water, aguasociality, more-than-human relations, environmental change, Anthropocene, Peru

Introduction

On a cold evening in May 2016, I was chatting with Maria and Ignacio in their small kitchen in the Colca Valley farming village Yanque, south in the Peruvian Andes. While we were drinking hot water with herbs, Ignacio explained to me that the differences in the Quechua dialect between Yanque and the neighbouring villages are a result of the differences in the water they consume: “Chivay and Yanque have the same water; therefore, the Quechua is the same... Achoma has another water, Ichupampa has another water. Therefore, their Quechua is different”. The people who consume water from the same source speak Quechua in the same way. Therefore, people speak different kinds of Quechua depending on where they get their water from. Ignacio described how the water flowing through peoples' land and bodies influences the way they speak. Further, the various waters originate in different mountains. These mountains and waters that Yanqueños (people from Yanque) often relate to as sentient beings, play important roles in uniting as well as differentiating groups of the Colca Valley population. Just as language is formed by specific, localised waters that run through bodies and places, identity is embodied and emplaced through the flow of water.

This article examines how small-scale farmers in the Southern Peruvian Andes relate to water

¹ This article is based on data material which was gathered in 2016 when I did fieldwork for my PhD thesis. Therefore, there are a few minor overlaps between details in this article and my PhD thesis *Liquid landscapes: Water scarcity and human-water relations in Yanque, Peru*.

in intimate ways. Through empirical material based on long-term ethnographic fieldwork in Yanque, it explores how the circulation of water binds bodies, soil, crops, mountains, and sentient beings together – in a particular *aguasocial* sense (*agua* is Spanish for water). Moreover, it looks at potential implications that environmental change and lack of water have for more-than-human relations. The article suggests *aguasociality* as a concept to think about water, its sociality, and its relations to more-than-human entities and beings in the Andes. However, the term is also relevant for exploring water's relationality in other places, which is especially timely in the Anthropocene – since water is involved in many of the transformations taking place in the planet's new geological epoch. More broadly, the concept offers an approach for attending to the intimate and complex ways in which humans and the environment are intertwined, through water.

In the first part of the article, I conceptualise *aguasociality* and discuss how it draws on, expands, and combines aspects from related concepts, such as 'hydrosocial' (Linton and Budds 2014; Krause 2017), 'biosocial' (Ingold and Palsson 2013), 'more-than-human sociality' (Tsing 2013), and 'geosocialities' (Palsson and Swanson 2016). Building on the particularities of the Yanque 'waterworld' (Hastrup 2009), neo-material and posthuman scholarship that focuses on more-than-human entanglements, and studies within the anthropology of water that foreground water's relationality, I argue for the need of ethnographic attention to *aguasocialities*. Attending to *aguasocialities*, my argument goes, implies a focus on more-than-human relations; likewise, it recognises water's potential to be social in its own right, and contributes with alternative stories to the dominant Anthropocene narrative by localising it (e.g., Kuznetski and Alaimo 2020; Hetch 2018; in Gagné 2020; Neimanis 2017), bringing in water (Neimanis 2017), and inviting to "thinking the world otherwise" (Grosz, in Yusoff et al. 2012: 971)

Following the first part, I briefly contextualise the Yanque waterworld before I turn to a more detailed empirical description of how water circulates in and out of human and non-human entities. Through practices of drinking *chicha* (maize brew), working the fields, and making offerings to earth beings, we see how water is central in forging more-than-human relations. The examples show that water bodies can be social beings themselves and illustrate that in this landscape matter and meaning must be understood together, as material flow cannot be separated from social flow. The empirical descriptions also establish the significance of *aguasocial* relations to secure life, and hint that less water has the potential to affect significant relations and practices.

In the succeeding part, I discuss in depth how the empirical material from Yanque sheds light on *aguasocial* relations enforced by water's relational creativity. I also point to how water uncertainty makes humans and non-humans suffer together, underscoring the intimacy of water loss. However, changing waters do not only have the potential to threaten *aguasocial* relations but also to strengthen them. Following particular *aguasocial* flows and lack thereof, allows us to understand the significance of water and loss of water for local bodies, lives, and relations. Lastly, I conclude by arguing that *aguasociality* is a useful concept for understanding waters, more-than-human relations, and environmental change in the Anthropocene, in Yanque and elsewhere.

Thinking through aguasociality

For the past decade, humanities and social sciences have seen an increase in studies of water, a substance that was formerly treated as an object of study belonging to the natural sciences. Several scholars have emphasised the need to think the hydrological and the social together, linking the material flow of water to social relationships (e.g. Anand 2017; Barnes 2014; Linton and Budds 2014; Krause and Strang 2016; Krause 2017). Linton and Budds (2014) suggest the term *hydrosocial cycle* as an alternative to the scientific concept hydrological cycle where water is pictured as abstracted from the social. Further, Krause (2017: 404) argues that we not only need to consider water in relation to the social context (Linton 2010; Linton and Budds 2014) but also to explore the active role of water in making social relations.

Thus, the concept *hydrosocial* is a tool for exploring relationships between people shaped by water and is linked to classic understandings of human sociality and to the material flow of water (Krause 2017: 404). A focus on hydrosociality, as well as Krause and Strang's (2016) call for "thinking relationships through water", challenge a division between the social and the material and between water and human life. While "[h]ydrosociality [is] a way of relating among people" (Krause 2017: 404), Krause and Strang think of social relationships as not only bonds between humans but also between humans and "animals, places, things and materials" (2016: 634). However, in these water studies, sociality still implies the presence of humans. Water is social because of its role in human social, political or cultural life.

While building on the abovementioned contributions to the study of water and their call to think humans and waters together, I wish to go further and think of water's sociality as "made in entangling relations with significant others" (Tsing 2013: 27) – others that are not necessarily human. Inspired by my interlocutors' ways of understanding the social, as well as neo-material and posthuman, or more-than-human approaches to sociality, aguasociality implies a deeper, non-anthropocentric sociality of water. In Yanque, water is social – not just because it relates with humans – but on its own terms so to speak, regardless of human interaction with it. Moreover, the term hydrology embedded in the conceptualisation of *hydrosocial*, is attached to a dominant, scientific notion of water – what Linton (2010) calls 'modern water' – that is not relevant for and often conceals the particularities of what water is in Yanque and other localities. Instead, I propose aguasociality, as a term better equipped to capture the relations water makes between more-than-humans in Yanque, as well as the sociality of water. The concept seeks to contribute to debates on sociality within the emerging field of a more-than-human anthropology, by bringing in water and its relationality.

The development of a more-than-human anthropology is related to recent posthumanist and neo-materialist currents within arts, humanities and social sciences that confront dominant ideas of human exceptionality implying human superiority over things, matter, and other-than-human life. Neo-materialism calls for a return to matter (Barad 2003) and to approach the material and the social together (e.g. Mol 2002; Law 2007; Latour 2005), while "[p]osthumanism challenges [...] the analysis of social processes based solely on the grounds of human action and intentionality" (Papadopoulos 2010: 134). Studies related to these turns invite for reflexive examination of the creation of boundaries between humans and other-than-humans, take account of the more-than-human making of worlds, and show a curiosity towards the other-than-human things and beings of significance for human life. Scholars encourage to rethink what it means to act (e.g. Latour 2005), acknowledge the vibrance of matter (Bennett 2010), equate humans with other species (Haraway 2008), and

expand the idea of sociality to include all living beings (Kohn 2013; Tsing 2013).

In the chapter “More-than-human sociality: A call for critical description”, Anna Tsing (2013: 27) starts by asking: “How could it have ever occurred to anyone that living things other than humans are not social?”. Critiquing currents within modern thought that have seen sociality as exclusively human, she concentrates on how living beings other than humans should be understood as social in their own sense, because they are co-constituted in meaningful relations with others. If we follow her argument and take the world of Yanqueños seriously, waters in Yanque can be understood as social because they are living beings. Different streams, lakes, and springs are named beings who can feel, act intentionally, and engage in meaningful relations with other beings in the landscape. Water’s aliveness makes its sociality obvious, but I want to make the point that water is social also because of its material relationality. There is a blurred boundary between thing and being in Yanque, and water can be understood as a non-human entity that is *not only* a being and *not only* a thing, but, like other entities in the Peruvian Andes, exceeds a condition of being *either/or* (de la Cadena 2014). Hence, understanding aguasociality in Yanque calls for considering not only the sociality of living beings but also the sociality of things or matter, or that which is both.

While Tsing’s (2013) concept of *more-than-human sociality* and Palsson and Ingold’s (2013) *biosociality* are concerned with species and organic life, Palsson and Swanson’s *geosociality* goes further by considering the liveliness of geology and the relations between geology and sociality, or “the entangled relation of the earth and biological beings” (2016: 150). They point out that it is challenging to imagine the hard geologic as lively in comparison to other-than-human beings who are alive (2016: 152). The substance water, on the other hand, with material properties that allows it to move, connect and transform (e.g. Krause and Strang 2016; Linton 2010; Linton and Budds 2014; Orlove and Caton 2010; Strang 2014) is an element that is easier to think of as vigorous. Furthermore, water is a precondition for biological life and is widely understood as a life-giving force. Hence, while geosociality focuses on geologic relations, aguasociality offers an approach to study lively aquatic relations.

Water, living bodies, and matter are closely intertwined, and water plays an active role in connecting entities to one another and to the world. Drawing on Alaimo’s term “[t]ranscorporeality [that] refers to ‘the literal contact zone between human and more-than-human nature’” (Alaimo 2010: 2, in Neimanis 2017: 33) and Haraway’s understanding of bodies as natureculture (Neimanis 2017: 34), Neimanis (2017) introduces the concept “bodies of water” to emphasise how all bodies – human and non-human – are made up of water and flow into one another. Humans, animals, and plants, as well as geological and meteorological phenomena are “bodies of water”, that together constitute “the watery world” (2017: 27). Thus, water pinpoints how the human body is always also more-than-human; it is made up of water, connected to others by water – entangled in the world through water.

The empirical example presented below illustrates how water is embodied and physically binds together more-than-human entities, but also that the relations are of a social character. Separating sociality and water does not make much sense, since the relationships between humans and waters in Yanque do not necessarily align with a nature-culture divide that sees water as material and humans as social. My interlocutors do not make a distinction between humans, plants, animals, earth, and water in terms of what could potentially be social. Attending to aguasocialities then, is productive in a landscape shaped by and entangled with water through and through, and where water is social all the way. I propose that in other

places as well, what we encounter are aguasocialities, that is, entanglements of waters and other materials and beings, rather than waters, humans, and others as separate entities.

The Yanque Waterworld in the Anthropocene

Yanque is located in the Colca valley in the southern Peruvian Andes at 3,417 meters above the sea. Most of the 2,117 people (INEI 2017) who live there make their primary living out of small-scale farming. During the nine-months dry season when there is no precipitation, the farmers have to irrigate their fields and carefully organise allocation of water within the community. Springs and streams with water from the tall mountains that surround the valley are collected in reservoirs and lead to the small plots of land in an intricate system of canals and ditches made of stones or dug out in the earth. A lot of the water used for irrigation is melt-water from ice and snow on the mountains that reach up to about 6,000 meters. Unfortunately, large parts of the tropical glaciers on these mountain tops that for centuries have worked as natural water reserves, are disappearing. In the Chila mountain range by Yanque, 98 per cent of the glacial areal has melted away in the past 40-50 years (INAIGEM 2016). The melting glaciers in the Andes are linked to human induced global warming and climate change (e.g. Rabatel et al. 2013) and effects the water supply in the area.



Fig.1. Yanque, its fields and mountains, including Mismi (in the middle of the horizon furthest away).
Photo: Marlene Brandshaug.

Hence, human activities in other parts of the world contribute to changing waters in the Andes. Additionally, human extractive activities in Peru, related to, for instance, mining projects and large-scale irrigation projects, impact water quality and quantity in many

places in the country. In the water shed where Yanque is located, a mega-infrastructure project dams up water in the highlands and transports it primarily to coastal areas where it is used for large scale irrigation (Paerregaard et al. 2020; Stensrud 2016; Ullberg 2019). Highland populations are affected not only by the ecological challenges following the extraction of water from the landscape, but also by how the extracted water is distributed in the population. Although Yanque and other Colca Valley communities receive some water from this project, they are not prioritised in line with coastal populations and water demanding activities downstream. Moreover, due to asymmetrical power relations, they do not have much leverage in negotiations over water with other actors in water management. This follows a history of discrimination and marginalisation in national and regional water management – shaped by a colonial power hierarchy in which rural Quechua speakers are placed below coastal and urban populations (Brandshaug 2020). Thus, in Yanque, as elsewhere in the Peruvian Andes, water access is determined by political ecological processes (Andersen 2017; Boelens 2014; Stensrud 2014; Paerregaard 2018; Rasmussen 2015). Water flows are thus closely linked to flows of power, and, more broadly, waters in the Andes are influenced by different kinds of human activities. If we flip the coin, we see how water also influences humans in manifold ways.

Exploring situated aguasocialities is especially relevant in a time of changing waters in the context of climate change and extractivist activities, and, I suggest, it may offer insights to better understand the Andean Anthropocene. The Anthropocene – the name of the new geological epoch following the Holocene – was suggested by geologists with reference to the extensive, permanent human impacts on the planet’s geology, ecology, and climate (Steffen et al. 2007; Trischler 2016). However, since water plays a large role in many of the transformations our planet is going through in this epoch, there is a need for bringing water into the Anthropocene narrative dominated by geological thinking (Neimanis 2017). The term Anthropocene has also been criticised for being anthropocentric and for implying that a homogenous category of *Anthropos* (‘the human’) is now affecting the planet in pervasive ways, when far from all humans are to blame (e.g., Chakrabaty 2008, Malm and Hornborg 2014; Tsing et al. 2017). There have been several calls for localising or emplacing the abstract Anthropocene (e.g., Kuznetski and Alaimo 2020; Hetch 2018, in Gagné 2020; Neimanis 2017), supplement the tendency to ‘think big’ (Palsson and Swanson 2016), explore the details of more-than-human Anthropocene landscapes (Mathews 2017; Swanson et al. 2017; Tsing 2015), and focus on human–non-human encounters (Haraway 2016), as well as the ‘Anthropo-not-seen’ (de la Cadena 2019) – heterogenous worldmaking that is not based on a divide between humans and other-than-humans and that is concealed in the dominant, modern narrative.

As the Yanque waterworld is a place where Anthropocene phenomena are largely linked to water, a focus on aguasocialities invites for an exploration of the relations between heterogenous humans and waters in particular places, in the context of the Anthropocene.

Aguasocial Relations in Yanque

Margarita tips the large pottery jar carefully over and lets the yellow cloudy drink pour into the glass all the way to the rim. The fermented maize drink is still bubbling slowly when she hands it over to Rosa who has just arrived to help with the sowing. “Once a person arrives you give them a *roque* (a large glass). Later you serve in *medio vaso* (a smaller glass)”

Margarita explains as she instructs me to serve *chicha* during the sowing of her terraced maizefield. She is a Yanqueña (woman from Yanque) in her late forties who has grown up in Yanque, is married to a Yanqueño, and has raised her children there. Both Margarita and her husband are farmers but also work in tourism to make an additional income. This September day she asks me, as the only young unmarried woman, to serve *chicha* to the workers. The *chicha* is brewed from maize grown in the very same field the season before. It has been germinated, boiled, and fermented, with barley, wort and, of course, water from Yanque. This last ingredient is not only important for the corn brew to taste like proper *chicha Yanqueña*, but also to ensure the circulation of water from Yanque through bodies, crops, and land – which is important to succeed with the sowing.



Fig. 2. Chicha with pito.

The field I stand before consists of narrow terraces located on the mountain slopes of Yanque, on the opposite side of the river from the town. Placed higher in the terrain a good hour walk from town, the place overlooks the river, the clustered houses and the fields that climb up the slopes on the other side of the valley. A few of the tallest mountains with peaks above 6,000 meters are visible from the field, while others are hidden from sight by smaller mountains closer to the valley. Some are glaciated, some are bare, and springs and meltwater from them run in small streams and canals towards the terraced valley slopes. Margarita's field (*chakra*) is,

together with the other fields close by, irrigated with water from a 25-kilometre-long canal ditch that starts by the mountain Mismi.

On the sowing day in Margarita's field, as many as fifteen men and five women have come to help. Apparently Margarita's husband Lorenzo always invites a lot of people, and a good bunch usually show up knowing that there is plenty of *chicha*, an occasion to socialise, and an opportunity of having the favour returned at a later point in time. The group of friends and family is served *chicha* again and again, while working and sweating under the strong sun in small teams. Some are ploughing the field with the help of an ox, some are working with hand-ploughs in those corners of the field where accessibility by the ox is not possible, some are putting seeds in the soil, others are repairing eroded parts of the terraces with carefully picked stones, and others again are cooking for dinner.



Fig. 3. Sowing the maize field.

After many hours of hard work Margarita calls a break and everyone gathers in a circle – sitting and standing – around five bags filled with maize seeds in different colours. These are the different kinds of maize sowed that day. During the break several people take the opportunity to give their benediction by pouring *chicha* on the seeds. Pouring a few drops of

chicha from the glass before drinking is an act of ensuring fertility – of making the maize grow and give good crops. Many also pour some *chicha* on the ground to Pachamama (earth mother), and flick some drops of *chicha* to the different Apus (mountain beings) around Yanque – making a *t'inka*. A *t'inka* is an everyday ritual act of sharing drinks with named earth beings² who reside in the surrounding landscape. Features of the landscape – such as hills, peaks, lakes, and spring – are beings who are gendered and make up a social community. They relate to one another through kinship, companionship, or neighbourhood, and some are more powerful than others both in relation to each other and to humans. The libation is one way of sustaining reciprocal relationships between humans and earth beings and in securing the goodwill of powerful other-than-human sentient beings vis-à-vis Yanqueños.

While resting and socialising, two glasses are passed around and one person at a time drinks a thick, mud-like substance of *chicha* mixed with *pito* (dry, grounded corn with sugar) to fill up the stomach and get energy to finish the workday. Meanwhile, Ernesto, a friend of the *dueños* (owners) and one of Yanque's ritual experts, arranges a colourful piece of woven textile with llama fat, local herbs, and maize from last year's crop. This small offering is vital to pay (*pagar*) and thank (*agradecer*) Pachamama for what she gives the farmers – an important ritual act in the exchange relationship between Yanqueños and this grand earth being.



Fig. 5. Pago al Mismi (offering to Tata Mismi).

Similar kinds of offerings are also made to the mountains and waters of Yanque – that are sentient beings manifested in the mountains and water bodies in the landscape where Yanqueños live. Mismi and other mountain beings and water beings enter in social relationships with each other, as well as with humans. As such, they respond to human behaviour by ensuring good crops and water, or by directing their anger towards humans when they do not engage in mutual relations of respect and care. For instance, during the yearly, four-day, communal work trip to maintain the irrigation canal from Mismi, *pagos al agua* (payments to water) are done to several water sources that also are sentient beings who can think, have feelings, will and intentions. Tata Mismi (father Mismi) is a male being that resides in the peak of the mountain Mismi and in the water stream than runs from it, and Mama Umahala is a female mountain and water body that is Tata Mismi's woman and companion. Together



Fig. 4. The bags with maize seeds in different colours.

²The Quechua name for these sentient beings is *tirakuna* (Allen 2002), which de la Cadena (2015) translates to *earth beings*.

they make up complementary forces in this landscape. Offerings are done to both, however, the *pago al Mismi* is the most important one and is made to ensure that Mismi continues to give water to the farmers of Yanque Urinsaya. This offering is arranged on every 1st of August before a new agricultural cycle, by that year's water mayor (*regidor*) who is responsible for the allocation of water and *pagos al agua* on behalf of the whole community.

I vividly recall the moment when water from Mismi tumbled down the mountainside for the first time in the agricultural season starting early August 2016, only six weeks before the sowing day in Margarita and Lorenzo's field. A group of festively dressed women with the water mayor's wife Flor in the lead, were gathered at the very end of a field, below a ravine with their hats in their hands. They were accompanied by hundreds of Yanqueños ready to celebrate the start of a new agricultural season marked by the arrival of the first water from Mismi. Flor stood ready with a large glass of *chicha*, waiting for the small water stream from the ravine to augment. Meanwhile a band played witiiti music, making the event even more sensational.



Fig.6. Celebrating the arrival of another water stream in Yanque.

The moment the new water reached the bottom of the waterfall, Flor poured the *chicha* in the fast-flowing stream, filled the glass with water and drank. Then she handed the glass to the woman on her right, who also took a large sip. Following her, all the others standing close to the ravine bent down and drank water from their hands. This marked the start of the agricultural cycle in which more-than-human collaborative work ensures a continued flow of water. The emotional event was celebrated throughout the night, with *chicha*, music, and dancing, underscoring the significance of water and its circulation for agriculture and life.

During the celebration a less welcomed detail of water's arrival came to the surface. In a small circle of *chicha* drinking Yanqueños, the Mismi water stream was discussed. One of the men turned to me as I approached and noted that the water stream was unusually poor this year. When I asked why it was so he and the others explained that the volume of water from Mismi could vary, but that it has been noticeably decreasing in recent years. Shifting their gaze between the stream and each other, they speculated whether the community had not done sufficient maintenance work on the canal this year, if it was Mismi that was punishing them for lack of respectful behaviour, or if the decrease was a result of climate change. The men did not seem to agree on one or a combination of these explanations and left the question hanging.

On Margarita's sowing day, she also shared her concerns for less water with me. Seated on a rock each in the shadow of a eucalyptus tree by the side of her *chakra*, she spoke of her worries concerning the decrease in water flow from Mismi. "I don't know how we will make it without the water from Mismi", she said while carefully adding small pieces of pumpkin into a large pot of simmering water. She told me that the tall mountain and Apu Mismi right above the valley slopes used to have a solid ice cap all year around. Now, it only had small spots and temporarily snow on it, which made Mismi and Yanqueños suffer together. She

added: “Sometimes, there is no water at all”, which resonated with utterances I heard many times during my time in Yanque. She explained that the new dam-project in the highland further up the valley would gather more water and transport it through the valley but added: “That water is not for us in the valley, but for those by the coast”.

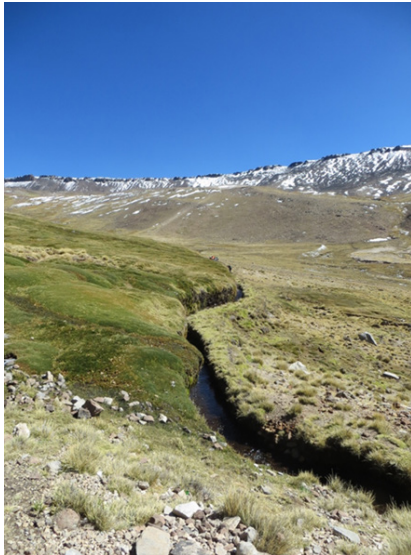


Fig. 7. Water from Mismi.

Lack of water is, among other things, felt in relation to irrigation. Many times, I went to irrigate with Yanque farmers, they had to walk up and down the mountain slopes and terraced fields to look for water that had flowed in other directions than expected, evaporated because of unusual heat, or been sucked up by the dry soil. One time I was joining Margarita’s father Ignacio to irrigate his field, the water had frozen in the altitudes due to especially low night temperatures and would not come down to the valley at the expected time, which meant that the water reached the fields later than anticipated. In effect, there was less water for those who had been scheduled to irrigate and less time to water their fields that day. When Ignacio eventually received water, he explained that the practice of irrigating is a way to *enseñar al agua* (teach water) the ways it flows in the field (e.g., Brandshaug 2020: 116-125; Stensrud

2014: 87; Treacy 1994: 113), indicating that water is a substance capable of learning. While he made small ditches and paths in the dry soil in-between the plants with his shovel small streams of water followed it. He told me stories of the relation between farmers and water, and described how water sometimes makes them cry. According to him and many other Yanqueños, a balanced relation is founded on patience, respect, and care. His youngest son Luis, Margarita’s brother, however, pointed out to me that some do not respect water that much anymore, especially in the younger generation.

Practices of searching for water and negotiating about water with humans as well as non-human beings are all well-known in Yanque since there has always been lack of water in the landscape. The difference between before and now is that lack of water has become more frequent and unpredictable which makes it difficult to make a living from small-scale farming. A growing number of people are therefore forced to make a living on non-agricultural activities just as participation in communal work parties such as the one above is decreasing. But even though some people do not know Mismi that well anymore, as a community they agree on the significance of sustaining close bonds to Tata Mismi because they have relied on this being before in difficult times. In fact, one can even sense an increased awareness of the importance of water for life and of the practices that strengthen the community’s relationships to earth beings. Less water then, has the potential to affect aguasocial flows in various ways.

Flow and Lack of Flow

As shown above, water plays a central role in making relationships between humans, plants, mountains, earth beings, and soil; it flows in and out of human and non-human bodies –

forging not only material but also social ties. The substance of *chicha* illustrates well how the circulation of liquids connects more-than-human worlds together. Before the sowing, Margarita made the *chicha* with maize grown in the fields of Yanque and with water from the Yanque landscape. The maize had been sowed and harvested with the hands of Yanqueños and irrigated with water from the nearby mountains. The water had been given by earth beings, flown through the landscape, irrigated the very same fields and plants, and entered bodies as a life-giving substance. During the sowing people drank this *chicha* together, shared it with earth beings, used it to fertilise the new seeds, and used their sweating bodies to work the earth and plant the seeds with the help of oxen and tools.

Thus, soil, seeds, last year's crops, future life, human bodies, and non-human beings are tied together through the liquid *chicha*. We see that the drinking of *chicha* plays a role in creating good relationships between the hosts and the workers during the sowing, but also to Pachamama who ensures the earth's fertility and to Mismi who supplies Yanqueños with water. The water that runs from Mismi to Yanque is used to saturate the soil and irrigate the plants, while it also circulates through Yanqueños. This is illustrated when the season's first water arrives and Flor pours *chicha* (made from last season's water and crops) in the stream and then drinks from it, so it enters her body and thus binds together different times, bodies, waters, soil, crops, and more.

Furthermore, the opening vignette of this article shows how the flow of water also forms language and identity. Ignacio explained how the water people consume influences how they speak and who they become by making bodies and connecting people to concrete places in the landscape, to specific mountains, which ultimately also make groups of people different from one another because they consume different waters derived from different mountains or apus. Different human communities relate to different earth beings. In such more-than-human communities, water beings have their own social lives where they interact with other non-human beings – all alive and active in shaping their own and others' lives. Mama Umahala and Tata Mismi's companionship, and their relations to Yanqueños are of an aguasocial character – simultaneously material, social, and emotional, and central in sustaining life.

While water is made to flow through entangled relations in ritual practices such as *pagos* and *t'inkas*, the same goes for the more mundane acts of drinking, cooking, eating, and washing. Moreover, through everyday activities, such as irrigation, humans and water collaborate in saturating soil and crops – each with powers of their own. Yanqueños work hard to 'teach' water and make it flow in their favour in times of less water. On the other hand, water both gives, creates troubles, and makes people cry. In some of these practices, water is enacted as a sentient being or as several sentient beings, in others as a liquid substance central for life but not necessarily responsive as a result of its will or intentions. Sometimes, its subjectivity is important, while at other times, its sentience does not matter much. Whether considered a being, a life-giving thing, or both, across this multiplicity and heterogeneity in what water becomes in different settings (Andersen 2018; Brandshaug 2020; Stensrud 2014), water is a substance that makes relationships in Yanque.

Water shapes Yanqueños in many ways and affects everything from language, emotions, and communal identity to economic and biophysical survival, or even political life, as I have highlighted elsewhere (Brandshaug 2020). Similarly, Karsten Paerregaard emphasises that water in the Andes has powers to influence human life physically, socio-politically, and culturally. He describes the circulation of water in the Andes as a particular form of

hydrosocial cycle (2018: 4), or as I have coined here – aguasocial, to put forth even more ‘porous’ (Lea 2015) or ‘watery’ (Neimanis 2017) understandings of human–non-human entanglements enforced by the flow of water. Moreover, through the acts of making *pagos* and *tinkas*, of drinking *chicha*, and of cleaning water canals and irrigating fields, as described above, Yanqueños participate in making water flow to ensure vitality. Hence, its circulation is a collaboration, which includes a more-than-human reciprocity³ based on human practices of care and water’s relational creativity. However, while the flow of water binds together, lack of flow has the potential to obstruct or transform aguasocialities. Thus, given water’s role in creating aquasocial relationships of significance for life, changing waters have implications in Yanque.

Many Yanqueños I spoke to, described themselves as always having suffered from lack of water. For many generations they have lived in a semi-arid area shaped by colonial power hierarchies where it has been necessary to work hard in collaboration with each other and the landscape to make water flow the right ways in sufficient amounts to secure all kinds of life. However, the situation is getting more precarious with melting glaciers, extractive activities, and a continuation of marginalisation in national water management. The common expressions *No hay agua* (there is no water) and *Estamos sufriendo del agua* (we are suffering from water [loss]), are frequently heard in the area, referring to experiences of loss and suffering that have gotten more frequent in recent years. Moreover, the prediction that there will be even less water and more uncertainty in the times to come causes worries for Yanqueños concerning the future of water and life, as underscored in the description above. As Yanqueños are intimately entangled with the world through water – socially, emotionally, and materially – ecological changes and uncertain water flows threaten relationships and activities that are central for life and enter Yanqueños in intimate ways. Therefore, water loss becomes highly personal, emotional, and embodied (Kuznetski and Alaimo 2020: 140; Neimanis 2017).

For instance, when Mismi loses its snow cap, humans and non-humans suffer together, especially since the water from Mismi has significance for many aspects of life. Diminishing water affects practices that are not only vital for economic survival, but that create meaningful relations, for instance between Margarita and Lorenzo and their family and friends who work and drink *chicha* in their field, between more-than-human beings who share *chicha* together and collaborate with irrigation and sowing, or between hundreds of dancing Yanqueños who welcome water from Mismi. Work parties such as the one described above have become rarer, many Yanqueños do not know Mismi that well anymore and question his support, and some people of the younger generations do not have the same respect for water as their parents do.

Hence, in Yanque where the landscape is made up of beings and places of respect and care, the demise of water undermines aquasocial relationships founded on a more-than-human community of particular beings and entities. However, the risk that lack of water flows poses to Yanque’s particular aguasociality, is not only for the worse. One can also see tendencies of a strengthened emphasis on the importance of continuing with and intensifying practices that make water flow and enforces more-than-humans ties (Brandshaug 2020). It

³ Other ethnographic studies from the Colca Valley also describe how people and water are closely related (e.g., Gelles 2000; Paerregaard 2018; Stensrud 2014; Valderrama and Escalante 1988). Further, scholars have emphasised how the notion of reciprocity in the Andes includes human and non-human entities together (e.g., Allen 2002; Harris 1995; Paerregaard 2018; Stensrud 2014; Valderrama and Escalante 1988; Ødegaard 2008), and that the circulation of liquids, such as blood, water, and alcohol, is vital for the flow of life (Bastien 1985; Gose 1994; Harris 2000; Paerregaard 2018; Stensrud 2014).

remains to be seen how this develops further. Nevertheless, the purpose of zooming in on aguasocial relations in Yanque have been to show what kind of intimate relationships the term aguasociality invites to investigate, as well as what it can mean to be open to the sociality of water.

Conclusion

In this article, I have developed the concept aguasociality with inspiration from my Peruvian interlocutors, debates within the anthropology of water, and neo-material, posthuman, and more-than-human approaches. Especially, I have drawn upon Yanqueños' way of relating to water as a sentient being and a circulating, life-giving substance; the invitation to think relationships through water (Krause and Strang 2016) and to focus on hydrosocial relations (Linton and Budds 2014; Krause 2017); and the exploration of 'watery relations' (Neimanis 2017), as well as other forms of more-than-human socialities (de la Cadena 2015; Ingold and Palsson 2013; Palsson and Swanson 2016; Tsing 2013).

I argue that a focus on aguasocialities calls for ethnographic attention to how waters are relationally creative not only because of particular material properties or because of their close connections to human social life, but because of a liveliness that also includes sentience and meaningful relations to other-than-humans. Conceptualising water's relationality as aguasocial is a way to recognise different waters' potential to be social in their own right, as well as waters' potential to create significant relationships between entities that cannot be understood as only material or only social, thus exceeding a nature-culture divide.

While the article has explored the specific aguasociality of Yanque, I suggest aguasocialities as a valuable approach for exploring intimate more-than-human entanglements in other places as well. Concentrating on aguasocial relations allows for an appreciation of the many qualities of water that shape human life in various ways. Further, following specific water flows – and the way they change – discloses the intimacy of water and environmental change. In the Andes and elsewhere where the Anthropocene to a large extent is linked to changing water, a focus on aguasocialities draws attention to the particularities of different waters, humans, and their relations that have the potential to work as counter narratives to dominant tales of the Anthropocene and function as exercises in thinking differently about the world.

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Acknowledgements

A warm thank you to the editors of this special issue, Karsten Paeregaard and Paula Uimonen, and to the anonymous reviewers for thorough and insightful suggestions for the article draft. Thanks also to Martine Greek and Thomas Stolp Jacobsen for comments and discussions. This article is based on empirical material gathered during the fieldwork I did for my PhD project that was part of the research project '*New Forms of Andean Water Cooperation: Negotiating Water Values and Water Rights in Peru's Highlands*', financed by the Swedish Research Council (Vetenskapsrådet). At the time I was employed at the School of Global Studies, University of Gothenburg. During revision of this article, I have been employed at the Department of Social and Educational Sciences, Inland Norway University of Applied Sciences.