Are Stones Living?

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Abstract   The article addresses a new theme in anthropology, focusing on intra-actions among humans and the mineral world. Within an anthropology of the environment, in the context of the Italian Piave river, where water and stones were described by old gatherers as living beings, my ethnography discerns a European form of animism that attributed subjectivity, intentionality, ability and agency to non-humans, revealing an interspecies network of relationships hidden by the western naturalistic worldview. These data contribute to a reflection on Descolian ontological animism, recomposing the discrepancies of perspectives vised as contrasting, as the Ingoldian perception of the *living being*, De Castro's perspectivism, and Barad's new materialism, towards an anthropology of life.

Keywords   Stones' gatherers. Animism. Ontologies. Mineral and aquatic world. Living beings.

Summary   1 Introduction. – 2 Humans. – 3 Stones. – 4 Water. – 5 Animistic-Perspectivist Interspecies Relations. – 6 Conclusions.

1   Introduction

The theme of the mineral world is not very popular in anthropology, or however much less frequented than issues related to animals and plants. Often it is quite excluded from the living world, or in other cases its place in the living world is uncertain. Eduardo Kohn (2013), for instance, says that mineral word is non-living, whereas Hallowell asserts that stones are alive and that they speak, for the Ojibwa people (as discussed in Ingold 2000).

I already had the opportunity to reflect on the issue in my studies and articles on the anthropology of nature (Breda 2000; 2001; 2016), where I have highlighted how an anthropological approach to the worlds of nature is definitely fruitful when considering not only human-animals-plants relationships, but also their relationships with water, soil and minerals. In this contribution I will focus on the mineral world, discussing some results of my field research and ethnographies (Breda 2003), and I will take a further step approaching the mineral and aquatic world, a theme to which I have dedicated other studies and the proposal of an Anthropology of Water (Breda 2005; Bougleux, Breda 2017). These studies reveal a network of relationships between the subjects in a living world that will contribute to a reflection on the categories of ontological animism, anthropology of life, intra-agency and other theories on the anthropology of the environment.

Specifically, the 'world of stones' I analyse here can be understood through a complex anthropological framework composed by Philippe Descola's anthropology of nature (2005), some reflections on the living being and on animism by Tim Ingold (2000; 2011), the integral approach to the anthropology of life elaborated by Perig Pitrou (2014), the living thought of Eduardo Kohn (2013) and the approach based on the performativity of nature exposed by Karen Barad (2017). I intend to articulate these views and categories with each other, in order to analyse my ethnographic context.

The background is therefore the Ontological Turn (Brigati, Gamberi 2019; Mancuso 2018; Pellizzoni 2015; Bennett 2010; Cole, Froste 2010; Breda 2021), while I specifically refer to the concept of animism as revisited by Philippe Descola (2005, ch. 6; see also Brightman, Grotti, Ulturgasheva 2014; Bird-David 1999), within his quadripartition of the ontologies (naturalism, animism, analogism, totemism). Descola's theory is enough renown to be summarised here, but it is important to underline that thanks to it, we can today speak of animism as a legitimate category of knowledge.

Moreover, I was inspired by Graham Harvey (2014) who asserts that animism is an 'expanding category', valid for reading the contemporary world, included western worlds, not only the colonial societies traditionally defined as animist in anthropology. Harvery's intuition of dismissing animism as just archaic belief was possible

through Descola's fundamental reinterpretation of animism as an ontology.

Within the form of animism I discern in my ethnographic case, I will also briefly refer to perspectivism, as theorised by Viveiros de Castro (2019), who makes of it a question of political ontology and proposes it as a method of political 'Amerindianization' of the West. I will not be able to delve deeply into this theme here, but the challenge I propose is to discern a form of animism in an Italian natural-cultural context, a form of unexpected western animism that appeared among the interstices of the western naturalistic objectifying worldview.

My ethnography deals indeed with a relationship between humans and non-humans, expressed in a local popular culture along the Piave river (Northeast Italy), through forms of full semiotic (symbolic, iconic and indexical forms, as in Kohn 2013), which entangle in an ontology we could define animistic, in which humans, minerals, water, plants and animals are closely interconnected in a perspectivist view, and provided with the same agency. It illustrates a peculiar case of interspecies relation among human subjects: the stone gatherers of the Piave area, the Piave river's water, and the river stones **[fig. 1]**.

Figure 1   The Piave river. Foto by R. Poloni, 2000

By a complex work of interspecific intra-actions and intra-agency (Barad 2017) as a tool for 'worlding' the world, I was introduced to an animistic context existing before the Piave river – today in full ecological crisis – was emptied of its waters and became the first European river to stop reaching the sea for more than a half of the year.

I developed my fieldwork in a particular island of the mid-course of the river, named *Le Grave* (a local term indicating gravel), a biotope consisting of a mix of gravel, stones and sand sediments, char-

acterised by a morphology defined "braided channels", with a desertic and steppic microclimate (Bondesan et al. 2000; Franzin 2006).

I present here my ethnography in three connected points regarding humans, stones, and water, before concluding with some remarks on the Amerindian ethnography about stones by Hallowell as reinterpreted by Tim Ingold and with an analysis of the ontological meaning of my case-study, proposing a theoretical composition of some discrepancies emerged among these authors' views.

2 Humans

I developed my research in a social context of historical marginality (Geremek 1978; Godelier 1977; Sanga 1990), meeting with the last stone gatherers (locally called *cariòti*, people gathering stones), whose livelihood was based on the gathering activity of natural elements, precisely the rivers' stones, which they used to sell to the owners of lime-kilns, in the surrounding villages. *Le Grave* island of the Piave river was suitable for this activity and often frequented also by other gatherers: boatmen, hunters, fishermen, shepherds, and marginal peasants.

Until the 1950s, *Le Grave* was a hunting and gathering territory, belonging to a temporary, marginal and seasonal agriculture, alternate with activities of pasture and haymaking. The people frequenting this island were generally called *gravaròi* (people of *Le Grave*/the gravel) whose subsistence system in anthropology is referred at as hunting and gathering, while nowadays it appears as a marginal subculture counting a few social subjects from the sub- proletarian class.

Le Grave definitely was the last expression of a non-industrialised culture and of a silently oppositional, invisible, informal workers scattered group, whose main characteristic was a close proximity with the natural environment, developed in a very close performative entanglement among humans and the environment.

The environmental history of *Le Grave* island deals with an increasing privatisation process, an agricultural industrialisation, and transformations towards more and more scarcely sustainable development trajectories. Nowadays, it is almost totally reduced to an agricultural flat landscape, fed by fertilisers, chemical pesticides and forced irrigation, traversed by some asphalted roads and new bridges, occupied by vineyards, luxurious mansions, restaurants, bars, and touristic facilities.

In 2003, during my fieldwork, in the Piave area only thirteen stones gatherers were remembered, according to the memory of the last two *cariòti* I met. They did not own any land; they were generally poor, living in modest dwellings usually located on the riverbanks; they only owned a cart and a draught animal, and often they had not even a stable for their animals. Their work was carried out with mo-

dalities typical of the paleo- and pre-industrial work. They transported stones to the limekilns in the surroundings, going back and forth, every day, all year round, sometimes making up to three trips in a morning, transporting 25 quintals load per trip.

3 Stones

All the Piave stones were known, named and evaluated by the gatherers. It is possible to draft a complete ethnomineralogy (Breda 2003), based on the complex knowledge of the environment by the gatherers. They classified the stones according to their colours, forms, dimensions, composition, similarities and mineral mixture. The stones were classified according to the following principal modalities of identification:

- colour: turquoise, brown, white, pink, red, green, dark colours;
- visual patterns: spotted stones, striped stones, etc.;
- metaphor: *pan fracà* (light coloured stones, flat, like a 'flat bread'), *scòrtha de bis* (similar to a local 'snake's skin' colour) **[fig. 2]**, *testa de bis* (similar to the colours of a 'snake's head'), *sangue de porthèl* (similar to the colour of 'pig's blood'), *mandoà* (looking like a handful of 'almonds'), *barbagigio* (looking like 'peanuts'), *venature di carne* (looking like 'flash veins'), *pestasàl* (similar to a 'salt pestle').
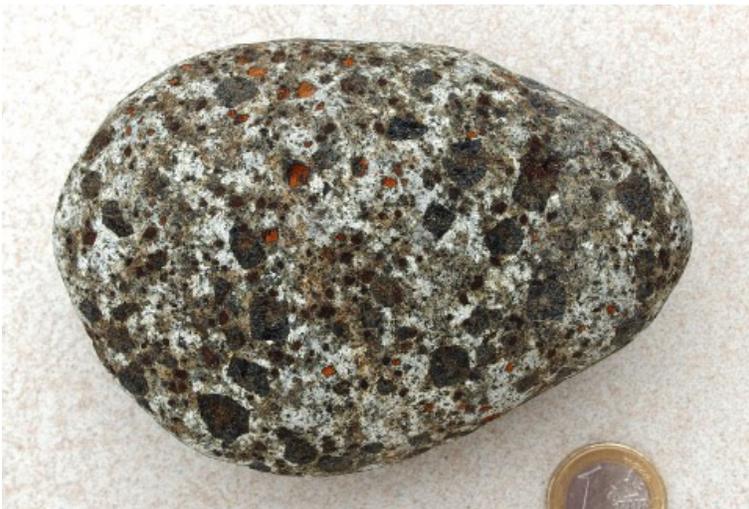

Figure 2　Stone defined as *scòrtha de bis* (similar to a local 'snake's skin' colour). Photo by R.Z. 2015

But the most diffused and significant classification distinguished all the stones in 'good' or 'mad' and cover all the field of the Piave stones, with iconic, indexical and symbolic processes (Kohn 2017).

'Good stones' (calcium carbonate) were those producing lime. This category included the majority of white stones, the prototype-stones for lime making **[fig. 3]**.

Figure 3   The prototype of 'good' stone. Photo by N. Breda, 2010

'Mad stones' (basalt, silicate, dolomite, sandstone, metamorphic mylonitic, siliceous chalk, volcanic glass, etc.), instead, were not suitable for lime production. The *cariòti* did not collect them; they are in fact used and still visible in the construction of the local stonewall houses, and called 'stones for wall' **[fig. 4]**.

Figure 4   House built with 'mad' stones. Foto by N. Breda 2010

The *cariòti* work, therefore, did not consist in an indiscriminate gathering, but implied the selection, and the necessary knowledge about which stones were 'good' and suitable to be transformed in lime, and which were not. This is what allows us to define these subjects as 'erudite', because, despite their technically simple work, they developed a sophisticated knowledge about their environment, considering also that the Piave's riverbed, especially in *Le Grave* island, appears to an outsider to be covered with undistinguished generic white stones, apparently all similar, yet of a highly difficult specialised identification **[fig. 5]**.

Figure 5 Only the large stone at the top right and the large one below are 'good' stones to collect. Photo by R.Z. 2003

4 Water

Walking along the river shores, the *cariòto* had to decipher all the indications given by the natural context. We proceed, therefore, to deepen the relation between the *cariòto* and the principal element of this environment, the water. Among a varied local knowledge on water (here too a sort of ethno-mineralogy or ethno-water-logic, as I have discussed in my 2003 article), the most interesting for our consideration is the representation of the Piave water like 'water falling in love', as the local expression *l'aqua la va in amór* indicates. This happened during the spring floods, following the melting of the snows from the mountains. Water, at that time, used to rise in the middle

of the river. It develops, as well, a proliferation of water plants in its bed that coloured the water in green. By sticking to the stones, plants made the river's bottom slippery.

According to the *cariòti*'s interpretation, in May water was different, it had other characteristics: it bloomed with herbs, changed its guise, increased in dimensions, got swollen in the middle. It ran faster, greener, deceptive, on a slippery bottom. In fact, most experts in crossing the Piave were misled by the May 'water in love', which was hiding its crossing paths, essential for reaching areas in or beyond the river, when bridges did not exist. The water with its flood is a water in metamorphosis, its body is changing guise.

By this metaphor, water was conceived as a big body, a sort of an animal body, given the biological 'oestrus' of the metaphor about water 'in love'. It is described as a living body, a feminine body, looking pregnant when it rises, fertile, when giving life to many water herbs, also considering that the local language defines the river using the feminine gender *la Piave*. From the stones gatherers' point of view, three kingdoms melted into the water world: water is like a lively body, making possible the construction of interspecies relations among diverse worlds: animal, vegetal, and human ones.

5 Animistic-Perspectivist Interspecies Relations

We can now examine the connection of the three species – humans, stones and water – as a sort of perspectivist relationship, consisting in the vision of the gatherers about a 'humanised water' that moves the stones. To imagine the body as an ontological differentiator has a preponderant role in the anthropological animistic vision. In this context, the 'body of the water' has the characteristics of animal bodies (e.g. 'oestrus' and fertility), and is also gifted with intentionality, technical ability (knowing how to carry around elements), habits (as floods), affectivity (as love), and communication (indicating to connoisseurs where not to cross the river, avoiding slippery zones). Water moves the stones 'like a herder' conducing animals, from the mountains to *Le Grave* island: observing the water during the flood, the *cariòti* indeed claim it is conducting the stones 'as animals'. Downstream, the *cariòti* physically complete this kind of domestication selecting and collecting the stones steered by the water.[1] These views imply a chain of actors in simultaneous relations

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[1]   I have read these ethnographic data, in another essay (Breda 2019), with regard to the domestication process, where male and female animals are considered as 'good' or 'mad' – as well as the stones are considered here – and men have to let them go, or to protect them.

(as in Viveiros De Castro's *birra y manioca*), where appearances and resemblances change according to the subjects' actions and where the body (and his exteriority) is the fundamental subject.

As we know, in Descola (where perspectivism is an "ethno-epistemological corollary of animism", Descola 2005, 202), animism is characterised by the equality of interiority and difference in exteriority, and implies the attribution by humans to non-humans of an interiority identical to their own. Such a stance humanises non-human elements, in this case water, and allows to establish communicative relationships among them. Therefore, the similarity of interiority authorises an extension of the state of culture to non-humans, with all the attributes it implies, from intersubjectivity to communication (Descola 2005). Here I assume that an animistic ontology in my ethnographic context is perceptible by the attribution of a feminine body to the water, the attribution of qualities to the stones and by specific interaction of the gatherers with all the environment. Their perception of the environment is that of a chain of intra-actions in-between gatherers, stones and water. The vitality of this type of animism results from the complex network (maybe an Ingoldian meshwork) of relationships between the actors of this environmental scene.

Now, specifically, I want to recall Hallowell's ethnography, *Ojibwa Ontology. Behavior and World View* (1960), on the Ojibwa's account about a stone that opened its mouth, rolled a long way and answered human questions. We find an interesting discussion of this case in Tim Ingold's essay, "A Circumpolar Night's Dream", included in his book *The Perception of the Environment* (2000). Here Ingold asks how to face the challenge of 'bringing people back to earth', restoring them in the context of their full involvement in an environment. As we know from his huge theoretical work, he intends to investigate what actually is that makes something alive or animated. As we also know from the controversy with Descola (Breda 2021), Ingold does not consider in his theory nor ontological approaches, nor cosmological representations, but develops a relational approach, defined as *in-between*, seeing the world as a total field of relationships, in continuous generation and flow, which he also calls *meshwork* (Ingold 2011).

Particularly, in Ingold's *The Perception of the Environment*, we find a discussion concerning being alive and living things centred on the nature of stones in the Ojibwa's view, as described by Hallowell, a well-known reference for the Ontological Turn and for many related considerations.

Starting from his question "What makes something alive, or animate?", Ingold refers to Hallowell's interesting anecdotes on stones:

> Hallowell heard tell of an instance in which, during a ceremony, a stone was observed to roll over and over, following the master of the ceremony around the tent, another in which a boulder with

contours like a mouth would actually open its 'mouth' when tapped by its owner with a knife, and yet another where a man asked a particular stone whether it belonged to him and received a negative response! (Ingold 2000, 97)

When Hallowell finally asked an old man if *all* the stones were alive, the man "reflected a long while and then replied, 'No! But *some* are'". Ingold proceeds in his analysis:

> As Hallowell recognizes (OO, p. 23), the categorical distinction between animate and inanimate is not one that Ojibwa articulate themselves, but was rather imposed by Western linguists [...]. Ever since Plato and Aristotle, it has been customary in the West to envisage the world of nature as made up of a multitude of discrete objects, things, each with its own integrity and essential properties. [...] There has been much debate about what it takes for something to be alive: vitalists argued for the existence of some mysterious life-force that they thought was infused into all organisms; mechanists dismissed the idea as unscientific hocus-pocus, but in their enthusiasm to reduce organisms to clockwork they virtually dissolved the animate into the category of the inanimate. The problem was only resolved, after a fashion, by the discovery of the DNA molecule, popularly hailed as the 'secret of life', which seemed to offer a basis for distinguishing living things that satisfied the objective canons of natural science. Throughout all this debate, however, one fundamental idea has remained unquestioned, namely that life is a qualifying attribute of objects. (96)

For the Ojibwa, instead, animacy depends on the context, on the whole field of relations in which things are situated:

> the liveliness of stones emerges in the context of their close involvement with certain persons, and relatively powerful ones at that. Animacy, in other words, is a property not of stones *as such*, but of their positioning within a relational field which includes persons as foci of power. Indeed strictly speaking, there are no 'natural objects' in the Ojibwa world to classify [...]. The point is not that Ojibwa draw classificatory distinctions along different lines, but rather that in their ontology, life is not a property of objects at all, but a condition of being. (97)

As we know, Tim Ingold observe particularly the role of the movement in living process:

> [Returning to] the rolling stone that had been observed to move following its master ... On what grounds was it judged to be alive?

> Clearly, the critical criterion was that it had been observed to move [...]. The movement is not an outward expression of life, but is the very process of the stone's being alive. The same could be said of trees, which are included in Hallowell's list of things formally classified in Ojibwa grammar as 'animate' (OO, p. 23). [...] the winds and the sun are persons for the Ojibwa, and can move trees much as powerful humans can move stones. (98)

Thus, Ingold concludes about this life process:

> these movements, of the sun in the heavens, of trees in the wind, of animals and human beings as they go about their everyday tasks, do not take place against the backdrop of a nature that is fixed, with its locations and distances all laid out in advance. For they are part and parcel of that total life process, of continuous generation, through which the world itself is forever coming into being. In short, living beings do not move upon the world, but move along with it. (Ingold 2000, 98)

> But life in this sense is not given, ready-made, as an attribute of being that may then be expressed in one way or another. It is rather a project that has continually to be worked at. Life is a task. As an ongoing process of renewal, it is not merely expressive of the way things are, but is the very *generation* of being. (97)

6   Conclusions

In my anthropology beyond the human sphere, I adopted a composite approach in order to elicit the nature/culture relation between human and non-human, also inspired by Descola's and Ingold's theories, with the corollary by Viveiros de Castro and by some suggestion on the non-constructivist method by Karen Barad and Eduardo Kohn that explores representational forms that go beyond human language.

This approach allows us to read a series of ethnographic data in an innovative way that shows a diverse relation of humans with the so called 'nature', which has been socially and culturally activated in the western world, and hidden by naturalism, a western cosmology where nature is externalised, objectified and commodified.

The animistic relation is here instead constituted by continuous passages and connections between human and non-human bodies, by the acknowledgement of the agency of natural elements, and by the full vitality of water. A view that includes a specific attribution of subjectivity, intentionality, ability and agency to non-humans, specifically to the water.

So, are stones living? If my analysis is correct, we can answer 'yes', within an 'extended' animistic ontology. In the Italian context presented here, we find only traces of animism, which probably lack references to myths and signs of metamorphosis. Nevertheless, some interesting conclusions can be found.

Stones gathering did not take place with respect to a passive, unchangeable material. Gathered stones constitute a product itself, a result of several *agencies*. Stones were found and could be gathered only if the Piave river drove them downstream – mixed by its floods, whirled, shaped, strengthened. This elaboration is an important conceptual step, in order to understand that 'good' stones were provided by the water agency, they came with it, mixed by it, hiding some 'mad' elements and highlighting some 'good' ones, and because of the lack of floods, nowadays extremely scarce, the gatherers could no longer find good stones.

The *cariòti* do these actions in a relational world, a world connoted by some animistic/perspectivist characteristics, where water play the most important role, a role of minerals' domestication that humans can read and inter-act with (Breda 2019). The relation stones/water/people does not lead to a dependence of nature from human beings, as in a complete domestication process, where animals definitely depend on humans (Barrau 1978; Ellen, Fukuj 1996; Haudricout 1962). The animist relation with stones and water has to be repeated and constantly renewed at any season. Humans and non-humans are in a co-evolutional living process (Stepanoff, Vigne 2019), a lively cooperation into a shared environment, a *natural-cultural* resonance where nature and culture are inter-active or intra-active subjects.

In this process, the relationship between subjects is a form of local, traditional, indigenous ecological knowledge (the IK, or TEK). It is the recognition of a sort of equal relationship between humans and non-humans that allowed to perceive and to manage their shared environment as a whole, remembering Ingold's theory:

> Animacy, in other words, is a property not of stones as such, but of their positioning within a relational field which includes persons as foci of power. (Ingold 2000, 97)

As Tim Ingold writes, life is not an intrinsic property of objects but a condition of being dependent on the context, and vitality is not a property of isolated individuals, but of the total field of relationships in which they are interacting. He remembers that " living beings do not move upon the world, but move along with it " (Ingold 2000, 98). So, the stones of the gatherers live within a living world composed of humans, water, landscape etc., in a context I defined animistic. Definitely, reading these data through Descola's and Ingold's theories, and recomposing some of their discrepancies, we can say that we are

dealing with an ontological animism where stones are living in this moving world of humans, stones and water.

Altogether, on a theoretical level, these ethnographic data are significant if considered through the lens of Descolian animism, Ingoldian environmental perception, and Viveiros de Castro's perspectivism, an entanglement in which these data work together composing an Anthropology of Life (Pitrou 2014) as a field in a world *with it*.

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