

Ethical Issues in Indigenous Archaeology: Problems with Difference and Collaboration

Alfredo González-Ruibal

Volume 2, Number 3, 2019

L'Éthique en Archéologie
Ethics in Archaeology

URI: <https://id.erudit.org/iderudit/1066461ar>

DOI: <https://doi.org/10.7202/1066461ar>

[See table of contents](#)

Publisher(s)

Programmes de bioéthique, École de santé publique de l'Université de Montréal

ISSN

2561-4665 (digital)

[Explore this journal](#)

Cite this article

González-Ruibal, A. (2019). Ethical Issues in Indigenous Archaeology: Problems with Difference and Collaboration. *Canadian Journal of Bioethics / Revue canadienne de bioéthique*, 2(3), 34–43. <https://doi.org/10.7202/1066461ar>

Article abstract

The critique of archaeology made from an indigenous and postcolonial perspective has been largely accepted, at least in theory, in many settler colonies, from Canada to New Zealand. In this paper, I would like to expand such critique in two ways: on the one hand, I will point out some issues that have been left unresolved; on the other hand, I will address indigenous and colonial experiences that are different from British settler colonies, which have massively shaped our understanding of indigeneity and the relationship of archaeology to it. I am particularly concerned with two key problems: alterity – how archaeologists conceptualize difference – and collaboration – how archaeologists imagine their relationship with people from a different cultural background. My reflections are based on my personal experiences working with communities in southern Europe, Sub-Saharan Africa and South America that differ markedly from those usually discussed by indigenous archaeologies.



ARTICLE (ÉVALUÉ PAR LES PAIRS / PEER-REVIEWED)

Ethical Issues in Indigenous Archaeology: Problems with Difference and Collaboration

Alfredo González-Ruibal*

Résumé

La critique de l'archéologie dans une perspective autochtone et postcoloniale a été largement acceptée, du moins en théorie, dans de nombreuses colonies de colons, du Canada à la Nouvelle-Zélande. Dans le présent texte, j'aimerais développer cette critique de deux façons : d'une part, je soulignerai certaines questions qui n'ont pas été résolues ; d'autre part, j'aborderai les expériences autochtones et coloniales qui sont différentes de celles des colonies de colons britanniques, qui ont façonné massivement notre compréhension de l'indigénité et de la relation entre l'archéologie et celle-ci. Je m'intéresse particulièrement à deux problèmes clés : l'altérité – comment les archéologues conçoivent la différence – et la collaboration – comment les archéologues imaginent leur relation avec des personnes d'un autre milieu culturel. Mes réflexions sont basées sur mes expériences personnelles de travail avec des communautés d'Europe du Sud, d'Afrique subsaharienne et d'Amérique du Sud qui diffèrent sensiblement de celles que l'on retrouve habituellement dans les archéologies autochtones.

Mots-clés

archéologie autochtone, postcolonialisme, multiculturalisme, altérité, éthique archéologique

Abstract

The critique of archaeology made from an indigenous and postcolonial perspective has been largely accepted, at least in theory, in many settler colonies, from Canada to New Zealand. In this paper, I would like to expand such critique in two ways: on the one hand, I will point out some issues that have been left unresolved; on the other hand, I will address indigenous and colonial experiences that are different from British settler colonies, which have massively shaped our understanding of indigeneity and the relationship of archaeology to it. I am particularly concerned with two key problems: alterity – how archaeologists conceptualize difference – and collaboration – how archaeologists imagine their relationship with people from a different cultural background. My reflections are based on my personal experiences working with communities in southern Europe, Sub-Saharan Africa and South America that differ markedly from those usually discussed by indigenous archaeologies.

Keywords

indigenous archaeology, postcolonialism, multiculturalism, otherness, archaeological ethics

This article is based on a paper presented at the “Archaeo-Ethics” conference, accessible in [English](#) and in [French](#).

Introduction

In this article I will explore briefly some ethical questions that, in my opinion, are left unresolved by prevailing indigenous and postcolonial archaeologies. The ethical critique so far has exposed the traditionally unvirtuous behaviour of archaeologists vis à vis indigenous and other subaltern communities, whose viewpoints have until recently counted very little if at all. Ethical codes in force since the 1990s have gone a long way in decolonizing archaeology, although much work is still needed. In this paper, I will expand the ethical critique by examining some assumptions of critical archaeologies (postcolonial and indigenous). This is not intended as an attack against such approaches, which have been vital in developing more critical and socially-responsible forms of research, but rather as a means of encouraging further ethical discussion and self-reflection within the discipline. Some of the problems have already been detected and criticized by other archaeologists, including epistemological difficulties [1,2] and political shortcomings [3].

I explore two issues that have to do with the moral imagination of archaeologists: alterity and collaboration. Regarding the first issue, my impression is that visions of difference continuously oscillate between an excess and a lack: at times scholars depict non-Western communities as if unaffected by processes of global capitalism that have been ongoing for over 500 years – a critique made by Vivek Chibber [4] in sociology and Charles Orser [5] in archaeology – and at times, or even simultaneously – postcolonial practitioners criticize the divide between Us and Them, saying that the idea of the Other is a by-product of colonialism and that we are not that different after all [6,7]. My point is that both positions fail to grasp an important difference: capitalism has radically altered the globe and its depredations have deeply affected the lives of non-Western societies, but at the same time radical alterity still exists and is more radical and more disturbing than many practitioners are ready to accept. Failing to understand alterity means that it is difficult to tackle the second issue, collaboration, in a critical way. Only if we address the political economy of alterity and inequality will it be possible to develop ethical research projects in postcolonial contexts, particularly (but not only) in those places where both radical difference and extreme asymmetries in power are to be found.

The moral imagination of indigenous and postcolonial archaeologies has been shaped by the experience of settler colonialism in the United States, Canada, Australia and New Zealand. Archaeologists, indigenous archaeologists and indigenous communities from these countries were among the first to denounce epistemic imperialism and cultural expropriation and have been fundamental in advancing an activist agenda in archaeology [8]. Yet, the experience of both settler colonialism and indigeneity in these countries is specific and is not necessarily transferrable to other contexts. In fact, by projecting an idea of “the indigenous” to regions like Sub-Saharan Africa or the Andes we may fail to deal with ethical questions raised by local problems, while our expectations of how indigenous communities have to behave may give rise to serious misunderstandings [9]. Reflections based on experiences in other places are now available in English, some in tune with North American perspectives [10], others more radical [3,11]. But it is still the perspective of societies subjected to British settler colonialism that is shaping our views on the meaning of being indigenous and of the ethical problems derived from archaeological engagements with non-Western communities.

Bad natives

Let me start by exemplifying the ethical issues that I will explore here through three vignettes, based on my experiences working in different indigenous contexts, all affected by modernity and global capitalism.

Brazil

Kamayrua is an Awá¹. He lives in the Amazonian rainforest of north east Brazil. He is a member of an endangered indigenous group, one of the last hunter-gatherer communities of South America. He has the misfortune of living in one of the margins of the Amazon, which is being eaten away by illegal loggers and cattle ranchers. Like many Awá, he has seen close relatives and friends die at the hands of invaders or killed by the spread of diseases to which they lack adequate defenses. Kamayrua has a hunchback, but this has not prevented him from being an extremely effective hunter. He employs a bow and arrows. He refuses shotguns, that other members of his group now use, and also rejects other Western things, such as clothes. He goes around naked in the village and in his hunting trips. From time to time, he and the other Awá men in the village participate in a ritual to connect with the ancestors. They enter a hut made with palms and sing and dance until they go into trance. Then, they see their dead relatives, they speak to them. When Kamayrua tells me about his experiences in the *iwa*, the space of the ancestors, he does so matter-of-factly, as when he talks about a hunting trip.

I had known Kamayrua since 2005 and grew fond of him. My last memory of the Awá in 2008 is of him, waving goodbye from the riverside, while our motorboat was leaving, and saying *iyul* "come back!". A few months later, I was told that the Awá captured an invader of his lands. Apparently a poor *caboclo*, a peasant, who was opening a small plot in the forest that belongs legally and historically to the Awá. They brought him to the village, tied him to a post and beat him severely. I was told that Kamayrua was crazy with rage. I had seen him furious before due to the invasions. He was the one who killed the peasant.

Equatorial Guinea

Between 2009 and 2012 I conducted excavations in an Iron Age site in the small island of Corisco, off the coast of Equatorial Guinea in Central Africa. There I met Mr. Hernández, in whose house my team and I were lodged. He was a Benga, a small and disenfranchised indigenous minority living in Corisco. The Benga suffered persecution during the post-colonial dictatorship of Macías in the 1970s. Many died and most escaped to nearby Gabon. After the fall of Macías, Hernández's son, Fernando, became a minister with the new dictator, Teodoro Obiang. Fernando was an enlightened man and, with the discovery of large oil reserves in the country, he strove to make the wealth useful for the country. He did not have the chance: he was killed under orders of President Teodoro Obiang. Mr. Hernández, however, is a member of the parliament in Obiang's government today. He baptized one of his motorboats with the dictator's name. He is very rich and travels frequently to Spain, the former colonial metropolis. Most of his Benga kinsfolk, however, are utterly destitute. They lack a doctor and most of the time a teacher, but this does not prevent Mr. Hernández from exploiting them, charging exorbitant prices in the only shop in the island, which he owns.

The Benga are not new to economic exploitation. They arrived at the coast during the late 18th century to participate in the Atlantic trade, which they embraced eagerly, along with European customs and material culture. Until the 1850s, they sold slaves to Europeans, and until well into the 20th century they had slaves themselves, whom they abused badly. They are a good example of a society created through the colonial encounter. By the early nineteenth century they had abandoned all their traditional material culture and they were only consuming Western goods. But still today, they gather to see the Mekuyu come out of the sea and engage in a furious dance. This is no show for tourists (there are none). Where I see a masked person, they see a spirit going wild.

Spain

Paula is my neighbor in a small village in Galicia, in northwest Spain. I started doing archaeology of the contemporary past in this area. Paula is a charming old lady and a hard worker. She comes from a family of very poor peasants. Like other Galician peasants, they spoke Galician, believed in ancestral spirits and the evil eye, owned a sturdy house of stone, a couple of cows and a tiny plot of land, which they tilled with a wooden plow. This was not enough to feed the entire family. She and all her brothers had to emigrate. Some went to the United States and others to Madrid. She was successful in Madrid, bought several premises and now lives off the rents. When she made enough money, she returned to her village, demolished her eighteenth-century stone house and built a concrete building in its place, which is used only a week a year. Like other neighbors, she has introduced eucalyptus plantations to replace the old-growth oak forests, voted for a hydroelectric power plant to be installed in a river that is under protection for its ecological value, and used the revenues given by the plant to asphalt an old medieval road, which no car has ever used.

Despite the provocative title of the section, my three stories are not an indictment against traditional, indigenous or non-Western communities. They deal with people who do not comply with prevailing images of the indigenous and that pose uncomfortable ethical questions, in particular, regarding how we imagine difference and collaboration. It is to these that I now turn.

¹ All names have been changed to preserve the anonymity of the people.

Imagining the Other

Postcolonial archaeologies tend to depict indigenous or subaltern communities as rather homogeneous (internally and across different cultures) and with little conflict, except with mainstream or colonial society. In particular, they are imagined as free of conflictual relations with nature, with the past and with each other. The absence of conflict is related to the notion of continuity, which is crucial in indigenous contexts. Indigenous and postcolonial archaeologies have worked hard to prove the historical continuity of native societies [12]. Such continuity has been systematically negated by colonial powers as a mechanism to deprive these peoples of their lands, resources and even of their past. The same mechanism has been used in North America, in Argentina – where the existence of indigenous groups has been denied by the State and white settler society [13] – and in the Mediterranean, where contemporary Greeks or Egyptians have been regarded as essentially unconnected to their past, meaning that the true heirs of ancient civilizations were the citizens of northern Europe [14].

Archaeologists have the moral obligation of recognizing the right of indigenous communities to their past, but this is not as simple as it looks. I am not going to examine here the problem of descent, which has been the object of much ethical debate in archaeology [15]. I am more interested in the ethical consequences derived from the implications of perceived continuity. It is often assumed, at least implicitly, that if indigenous communities had respectful relations with nature and the past before the advent of colonialism, they still ought to have them now, if there is continuity between precolonial, colonial and postcolonial times. Doubtless, many indigenous groups are still the best guarantors of ecological sustainability in wide areas of the Earth, from Brazil to Indonesia. It is enough to look at the satellite images of Brazil to see how the *terras indígenas* are green islands of forest surrounded by the devastation of agribusinesses and logging. Yet, the concept of “indigenous”, which has become extremely popular in archaeology, conceals an extremely diverse situation and downplays the impact of capitalist colonialism, which has modified, often substantially, the relations between human and non-human beings, also among indigenous groups. We forget that in some native communities there are groups or individuals that actively participate in predatory economies, and that some groups that can be considered indigenous, non-Western or traditional do not necessarily have a harmonious relation with nature.

The first problem is illustrated by people like Paula, in one of my vignettes. Galician peasants related to nature in a way that differed markedly from the destructive attitude of capitalism. They had a relationship of intimacy with the land, the animals and the trees. The introduction of modernity in the region has led to a radical rearrangement of values and practices in the countryside and most former peasants have now embraced the logic of fast, individual profit, totally disregarding its long term impact on the environment. Outside Europe, this is also happening among some indigenous communities. The Tenetehara are a good case in point. They are in many ways an admirable group, who have survived on the colonial frontier since the seventeenth century, strenuously fighting for their independence and today also in the defense of their neighbors, the Awá. But at the same time, they have also been collaborating, in previous decades, with illegal loggers and drug traffickers to obtain economic benefits through the unsustainable exploitation of their reservations [16]. Also, while most indigenous communities in Brazil have fought fiercely against the dispossession of their lands by dams or mining, a few have actually sided with capitalist development, like the Waimiri-Atroari [17]. As the situation of indigenous communities all over the world becomes more difficult due to the pressures of global capitalism, population growth and climate change, it can be expected that they will be more open to collaborate with predatory enterprises, be they private or State-sponsored.

Archaeologists know well that harmonious relations with nature have not always been the norm. Peasant communities, in particular, often live at the edge of ecological sustainability and their relation with nature is very different from that of hunter-gatherers or slash-and-burn agriculturalists [18]. Sedentary, intensive agriculture, which often developed in the context of the emergence of hierarchical societies and the State [19] produces strong modifications in ecosystems. In the case of Europe, only the limits to population growth imposed by famine, war or high rates of infant mortality prevented environmental crises before the eighteenth century [20]. We could perhaps say that intensive agriculturalists incorporated into State organizations, such as the Galicians I have mentioned, do not count as “indigenous”, but then to be coherent we would have to say that the Aymara in the Andes or the Ifugao of Philippines are also not indigenous, which does not make much sense. Thus, although it is true that non-Western communities have had a more sustainable relation with nature than capitalism, which knows no limits to the devastation of societies and ecosystems for profit [21], we cannot depict non-capitalist attitudes towards nature as always inherently harmonious: it is important to identify different attitudes among a diversity of groups. In particular, the difference between peasant and other societies is crucial [18]. This may not be important in North America or Australia, where sedentary, intensive agriculturalists are at best a minority within a minority, but it is in South America, Africa and South East Asia. Intensive agriculturalists, in fact, have often developed relations of domination over hunter-gatherers and horticulturalists living in their periphery. This, for example, is what happened with the Benga of one of my vignettes, and the people in the mainland that they actively contributed to enslave and sell to European traders. And even in South America, while the Brazilian *caboclos*, such as the one killed by Kamayrua, cannot be considered “indigenous” (they are mixed-race), they are a traditional, subaltern group which in many ways has a relationship to nature that is closer to indigenous communities than to mainstream capitalist society. Should they live in Canada, they would probably be considered among the First Nations, like the Métis.

The idea of continuity is particularly emphasized, and for very good reasons, in relation to the past. Yet, the fact that such continuity exists empirically or is held as valuable for the identity of the group does not mean that it is respected in practice or

at least in a way that is compatible with Western notions of heritage. As it happens with nature, not all indigenous or non-Western communities revere their past or at least the past's materiality. They might consider archaeological remains as historically unrelated to the community, prefer not to interact with them [22], or simply not feel a strong attachment to the material traces of their ancestors, which does not mean that they do not respect their memory: it is simply that relations are not necessarily articulated through things [23]. The Benga, again, did not show the slightest interest in the Iron Age cemetery that my colleagues and I were excavating on their island, even if several of the cultural practices that we documented at the archaeological site were identical to those that had been carried out by them until very recently (or still today). Similarly, my Galician neighbours, like Paula, show no remorse when they annihilate every material trace of the peasant past from the land. And they do not feel less Galician for that. Note that, from an anthropological perspective, I can understand why they do that. It is not my intention here to criticize them; the critique should be of the mentality of progress that has been imposed upon them. Instead, my aim is to show the inadequacy of depicting indigenous or traditional communities as inherently protective of their ancestral past.

Sometimes, the destruction of the past or indifference toward it is motivated by capitalist reasons. The critique of greedy imperialist archaeologists looting Indian graves which they see only as repositories of information is sadly very true. But this does not mean that some indigenous groups or individuals have not ended up alienating their own past for profit. Their relationship to the past, in these cases, is not radically different from the average member of mainstream society. Consider a recent case in California: The Federated Indians of Graton Rancheria did not have any trouble allowing a sacred ancestral site on their territory that was several thousand years old to be completely destroyed in order to build luxury houses that were selling at one million dollars each. The artefacts could be dug up by archaeologists but then they were not allowed to study or conduct any analysis on them. They were reburied in an undisclosed location, with the justification that "the idea that cultural artefacts belongs to the public is a colonial view" [24]². It is surprising that razing a sacred site to the ground for housing development is not perceived as colonial. Here we see a tactic that is unfortunately not uncommon: some individuals want to play two cards that are ethically, but not legally, incompatible. They want to play at the same time the card of indigeneity, refusing (with all legitimacy) archaeological access to the remains as incommensurable with ancestral beliefs, and the card of unsustainable capitalism, collaborating with far more troubling agents of imperialism (developers, mining corporations) than are archaeologists. This is not something limited to non-Western contexts. In the case of Galicia, again, local communities reclaim their ancestral communal rights, which have been passed on from the Middle Ages, as a way of opposing external forces. But they have often used these rights to trump ecological legislation and open their lands to predatory capitalist undertakings. This kind of situation creates new ethical challenges that archaeologists are forced to address and for which extant deontological codes may not have the answers.

Archaeologists also tend not to speak much about sociopolitical conflict within indigenous groups. It seems as if the only possible conflict would be between indigenous and mainstream societies. Yet, intra- and interethnic conflict – usually aggravated or caused by the State, colonialism, capitalism or all of them at the same time – is a reality for many indigenous groups in the world. The history of the Benga people of one of my vignettes cannot be separated from that of the Fang and other indigenous groups they sold to the Europeans or used as slaves during the nineteenth and early twentieth century. But now this same Fang have all the power in postcolonial Equatorial Guinea and marginalize the Benga and other minority groups, particularly the Bubi, who were the object of an ethnic cleansing campaign by the Fang during the 1970s. These kinds of conflicts, however, are rarely portrayed in the literature. For example, a recent and otherwise highly interesting research project among the Mursi of the Omo Valley in Ethiopia [25] does not deal with the terrible conflicts in which the local community is immersed, including intense interethnic violence that in some cases has led to massacres of neighboring groups [26]. Traditional violence has been exacerbated by the pressures of modernity and the availability of automatic weapons, which have disrupted traditional patterns of conflict and conflict resolution. In communities affected by large infrastructural works, conflicts between those who support them and those who refuse them are common [17].

Another indication of social tension is represented by the figure of indigenous leaders. Who talks for the community? This is a thorny issue in places like Brazil, where the *lideranças indígenas* have taken a prominent role. They have been crucial in defending the community's rights in public fora and before national and international institutions. However, the very idea of the *liderança* (leader) is alien to the egalitarian ethos of many indigenous groups, though not all. Among the Wayuu of Colombia and Venezuela, conflicts are common between innovative leaders and traditional chiefs. The former are usually bilingual and are accepted as interlocutors by mainstream society. They encourage change and the adoption of Western technologies. The latter are monolingual and enjoy greater prestige within the group [27].

Archaeologists concerned with conducting ethical research in collaboration with indigenous communities should devote time to analyzing power relations within the community before taking for granted the cohesive and representative role of leaders. In fact, such leaders have been artificially created in some cases by NGOs, missionaries or even the State (as with the indigenous peoples with whom I have worked in Ethiopia and Equatorial Guinea), bypassing traditional institutions and individuals with an important social capital within the community. In Equatorial Guinea, the Benga, like other peoples in the country, have so-called *jefes tradicionales* ("traditional chiefs"), but these are actually not traditional at all. They were an invention of the Spanish colonial authorities during the twentieth century. Thus, the apparently ethical behaviour, which involves accepting the decisions of local authorities, may not be necessarily virtuous.

² I thank Felipe Criado-Boado for the reference.

As I have pointed out, conflict is always described as between the local group and external agents. This is not exclusive of indigenous archaeologies, but of community archaeology more generally. Communities are usually presented as systematically resisting the State, capitalism and colonialism and their respective ideologies [28]. There are, however, several cases of indigenous or subaltern communities siding with those in power. The Benga, who eagerly participated with the Europeans in the slave trade, are a good case in point, but one can think also of the French and Indian War (1754-1763). This collaboration has often meant buying into the ideology of State, capitalism and modernity. During the last century, some minorities allied themselves with imperialist powers to fight against political movements that define themselves as emancipatory or anti-colonial. This happened in Southeast Asia in the 1960s. The US trained and armed indigenous communities (generically known as “Montagnards”) to fight communist guerrillas [29], a collaboration that was often against the will of the local populations. The Aikewara in Brazil were forced to work for the army in the counterinsurgency war, but their suffering has never been recognized by any of the parties involved in the conflict [30]. Meanwhile, in the Nigerian-Cameroonian borderland, indigenous minorities have been supporting the terrorist group Boko Haram in its bloody jihad [31]. Such collaborations are understandable in historical terms, as indigenous groups see in them a way of defending themselves against those states that have traditionally dispossessed them. Yet, indigenous groups collaborating with the CIA or jihadists is not something about which archaeologists seem ready to discuss. Interestingly, the counterinsurgency manual of the US Army continues to emphasize “the need to expand and employ native forces that must be visibly involved in prosecuting the counterinsurgency to the fullest measure possible” [32, p.48]. We can see this as the US Army doing community work with indigenous people, which should lead us to wonder to what point some of our alleged indigenous archaeology is not in fact replicating practices of political cooptation that have been well tested by imperial forces for centuries. Indeed, military manuals also use the language of collaboration, working for the good of local communities, learning from indigenous knowledge, promoting indigenous initiative, etc.

Imagining collaboration

The way alterity is imagined or constructed, at least discursively, explains the forms of collaboration that are espoused. This is based on three forms of perceived compatibility: ontological, ethical and sociopolitical. Regarding ontology, the postcolonial humanities tend to have a restricted notion of Otherness. With some exceptions [33], difference is understood in cultural, not ontological terms. This is the difference that is incorporated by Dipesh Chakrabarty [34], for example, in his studies of Indian modernity, in which spirits play a role alongside bourgeois institutions or industrial economy. But this is not a radical difference. For this we have to look among the Adivasis, the indigenous minorities of India [35], not among the urban dwellers that are the object of Chakrabarty’s research. Radical difference is not easy to find in much indigenous archaeology, if only because it is assumed that it is possible to enter into a mutually intelligible dialogue between archaeologists and indigenous groups, that we share the same world but only differ in the concepts we use to describe it. Yet, as Wylie [36, p.66] has written, negotiation “should begin with a recognition of difference, not the presumption that difference obscures an underlying (rational, universal) framework that is neutral with respect to diverse cultural values”. Indigenous scholars encourage archaeologists to incorporate indigenous notions [37], but it is one thing to use a concept and another to internalize a cosmology.

Thus, I can understand that when Kamayrua enters the *takaya*, the hut made with palms, he believes that he enters the *iwá* and talks with the spirits of ancestors. I have learned from the Awá that different worlds can coexist in the same space, that of the spirits and those of the living. But I understand that this can happen for them and for other indigenous peoples, not that this can actually happen (that if I enter the *takaya* I will be able to talk to my ancestors). Neither can an Awá incorporate my disenchanted vision of the world without radically altering who she is. Nor can we reach a middle ground. We can talk about spirits together (and we do!), but in the last instance we inhabit different realities. And it is great that it remains like that. Recent research on alternative ontologies [33,38] should make us aware of the existence of incommensurable worlds. Although some elements might be compatible, in the last instance, one is animist or naturalist [33]. It is impossible to accept elements from both ontologies at the same time. In sum, we should be ready to collaborate in ways that do not imply the production of hybrid knowledge, at least in those contexts (in Sub-Saharan Africa or South America) where ontological difference is still common. Trying to reach a middle-ground may unwittingly incur in epistemic imperialism and cooptation.

Regarding ethical compatibility, many archaeologists and heritage managers assume that the moral knowledge of the non-Western communities with which they work are comparable with those upheld by researchers. But this is often not the case. The collision between incompatible ethics is evident, for example, in the case of indigenous justice, which is becoming more widely accepted by the State in countries like Bolivia, Ecuador or Brazil. There are, however, numerous reports of executions, tortures or draconian punishments carried out in the context of alleged traditional justice. The punishment imposed by Kamayrua to his captive in my story above also repels our sensibility, even if we can understand it in its context. The contrary also happens: horrendous crimes that would be punished in the Western world with long terms in prison are solved with very lenient fines among many indigenous groups. Against retributive justice in the West, which has an important punitive element, many traditional societies resort to forms of restorative justice, which insist on reconciliation. We have much to learn from other ways of administering justice, but we should not idealize them [39].

To accept other ethics is not necessarily easier than to accept that a palm hut is a vehicle to talk to the spirits. I return to my own experience: when I was doing fieldwork in Corisco, in Equatorial Guinea, a young Benga committed several crimes,

³ I thank Márcia Hattori for this reference.

including the rape of a teenager. Mr. Hernández, whom I mentioned in my introductory story, was called on to deliver justice. The punishment consisted in forcing the youngster to clear the bush around Mr. Hernández's house for a few hours. It is difficult to say whether this was properly the administration of indigenous law. It is necessary to ponder the devastating effects in traditional Benga ethics of their involvement in the slave trade and the abuses committed by the colony (including the banalization of sexual abuse and exploitation). But then we can ask: how much of indigenous is there in indigenous justice? Other thorny ethical issues with which archaeologists may be forced to deal include infanticide or clitoridectomy. Working with societies other than our own means entering a terrain fraught with uncomfortable situations, which are not always explicitly acknowledged in the literature.

Finally, collaboration, as it is usually carried out, also means working with the fiction of equality, that is, the idea that the people with whom we work are our peers. While this is true in theory, it is not always so in practice. In the places where I work in Africa, differences are not only extreme in ontological or ethical grounds, they are also extreme in terms of economy and power. In fact, archaeologists working in poor countries are always in a situation of extreme asymmetry with the people with whom they work. Therefore, it seems that the principles of community archaeology that may be useful in the so-called developed countries are not necessarily so in these other contexts. They may even paper over strong disparities in power and agency. It is still archaeologists from North America, Europe or Australia who go to work in rural areas of Africa, South America or South Asia, and not the other way round. Colonialism may no longer exist, but it is still the old metropolises that send researchers to the former colonies (I myself have worked in Equatorial Guinea, a Spanish province until 1968). In most cases, the best situation one can think of is that the indigenous group takes the initiative to demand our collaboration to study their past (not ours). Yet, this is not symmetrical enough to allow us to say that colonialism is something of the past and that our relations are approaching equality. They are better, but far from equal and fair. Even if the Awá, for instance, had the opportunity to study me in Spain, it would still not be a symmetrical situation if they were not using their own forms of knowledge. And even in that case it could be argued that the systematic study of the Other is a culturally-specific invention, alien to most traditional cultures in the world, and associated to State formations (very often empires). The problem, as Terry Eagleton has noted, is not the open dialogue of differences, which is desirable; the problem is believing that such a dialogue "could ever be adequately conducted in a class-divided society, where what counts as an acceptable interest in the first place is determined by the ruling power" [40, p.175]. To pretend that we are conducting an honest, open dialogue with an indigenous group that is economically impoverished, socially marginalized and politically disenfranchised can hardly be presented as ethically sound work, no matter how good may be our intentions. But then, as Alejandro Haber [11, p.102] has noted, "Colonialism does not need to exclude good intentions or good practice; on the contrary, it is more often than not that the colonial border is driven by good intentions of helping others".

Discussion: towards an ethics of difference

Homi Bhabha [41], referring to the problem with the disturbing colonial copy, the hybrid, uses the famous phrase "almost the same but not quite". The problem with postcolonial and indigenous archaeologies may be the opposite: the Other that we imagine can end up being "almost different but not quite". If in the case described by Bhabha the irruption of difference within the copy is the subversive, uncanny element, in the case of postcolonial and indigenous archaeologies what we find all too often is a tamed difference with a limited capacity for true subversion. It is important to remember that what gives the copy its political edge is its disturbing element, the fact that it cannot be wholly appropriated by power and its attempts at creating hegemonic representations. If incomplete sameness is uncanny, incomplete difference is soothing. It does not put the system into crisis, and may even legitimize it.

From the fifteenth century to the 1960s, non-Western peoples have been constructed in opposition to the West [42]: brutal, savage, corrupt, decadent, irrational, primitive, infantile, etc. The Other (Indian, Native American, Asiatic or African) was imagined in negative terms and excluded from the realm of true humanity, represented by European civilization – indeed, the only civilization worth the name [43]. This discourse has been systematically challenged since the 1970s, in the wake of postcolonial and decolonial thinkers. The postcolonial critique has now been largely assimilated in academia and in institutions, and also in archaeology [44], although we have to be cautious for at least two reasons: on the one hand, because practitioners, bureaucrats and politicians often pay lip service to postcolonial sensibilities but then do not behave in a postcolonial way in their practice. On the other hand, while it is true that, at least formally, the critique of colonialism has been accepted in theory in many places, from Canada to Argentina, there are other countries where there is still a long way to go, both in Europe and elsewhere. In countries like France or Spain the impact of postcolonial discourse is still minimal and issues like repatriation and the decolonization of science are only now beginning to be publicly discussed [45-47]. The same can be said of other countries with an imperial past, such as Japan, in relation to its own indigenous populations, such as the Ainu and Ryukyuan people, and the countries that suffered the Japanese imperial expansion during the twentieth century, like China and Korea. In this paper, however, I have tried to go a little bit further. Even when we assimilate the postcolonial critique, my question is: are we free from the danger of misrepresenting the Other and our relationship with them?

My impression is that this is not yet the case. We still misrepresent the Other, only in more subtle forms. We do not live in the age of empire, but this does not mean that we are not living under a regime of coloniality [48]. To this new form adopted by coloniality belongs a new epistemology, which is not the crude, racist and classist science of the nineteenth century, but the discourse of multiculturalism [3], which is partially incorporated into archaeology through the idea of multivocality [49,50]. The

old discourse of colonialism needed the Other as inferior: the Other could be improved to become an obedient worker, but not more. For that, the Other could be deprived of their own past and culture, of which they had no need. Archaeology and anthropology were key in this process. The discourse of multiculturalism, which is part of the ideological apparatus of neoliberalism, has very different purposes. It has to create a docile Other that can be consumed [51]. Indigenous peoples do not have to play the role of the servant or the slave anymore – we have “acculturated barbarians” or “detrified” peoples: the workers of China, Bangladesh or Latin America. Neoliberalism needs the indigenous peoples to become attractive merchandise. For this, everything that is dissonant (ontologically or ethically) has to be removed from sight. An Other is needed that is picturesque enough, but not menacing – as Kamayrua is, an Other who can be furious and even kill other subalterns. In sum, neoliberalism requires indigenous peoples who may talk, but not shout, who may contradict us, but only to a point. They may reclaim pots and bones, but they cannot oppose an oil pipeline in their territory. The Standing Rock Sioux are also bad natives [52].

Archaeology should be ready to fully accept difference: this means accepting the possibility of ontological difference, one that is radically incommensurable with Western patterns of thought and practice, but also the rich variability of indigenous societies the world over. There is not a single indigenous society and there are no general recipes for interaction with indigenous groups. Thus, collaboration may be the best form of interaction in former British settler colonies or with indigenous groups that have been largely incorporated into the worldview and the practices of mainstream society (through education and participation in the political and economic system), as happens in Brazil, Chile or Argentina.

Yet in other contexts, collaboration might not be solution. The keyword here should be non-action rather than collaboration. Non-action (different from inaction, in so far as non-action is active and conscious) might mean not to involve others in our research projects or force them (wittingly or unwittingly) to speak the language of heritage or archaeology. Collaboration sometimes includes an element of imposition, at least when it has not been demanded by our hosts. Non-action means to allow indigenous peoples to have their own account of the past without external, unrequested interference, no matter how well-intentioned. This does not mean that we have to refrain from conducting research among them, as is at times posited (either collaboration or no research at all). It is important to remember the form of excessive hospitality that characterizes many non-Western societies and that contrasts with the extremely restricted model of Western modernity [53]. Many of our anxieties about how to behave ethically as archaeologists with indigenous groups stem from a moral imagination that has a limited sense of hospitality and that works with the *quid pro quo* model of capitalism: we have to give something immediately in exchange from what we take and of similar value. True hospitality means opening up to the Other fully, without judgement, without interest, without expectation of immediate return.

Abiding by the terms of the communities among whom we work does not necessarily mean that we have to build a past together. They construct their past, we construct ours. It is nice if they coincide at times, but we do not need to produce a single, hybrid narrative. With our memory work we address different audiences and have different political and epistemic aims. We are open to each other, of course, to learning from others and we, archaeologists are the ones who have the most to learn. But this does not mean that we will produce a mixed account of the past. I take inspiration here from the work of the Aymara-mestizo scholar Silvia Rivera Cusicanqui [54]. She proposes the Aymara concept of *ch'ixi* as an alternative to hybridity, which is the preferred term of postcolonial thinkers. *Ch'ixi* refers to a color that is the product of juxtaposition of points or stains. Grey, from this perspective, is the “mixture of white and black, which are confused in perception without ever mixing completely”. The colors remain always separate – almost like Ben-Day dots. Hybridity, argues Rivera Cusicanqui, believes that two realities can be blended thoroughly in a completely new third, capable of merging in a harmonious way. *Ch'ixi*, instead, presupposes “the coexistence in parallel or several cultural differences that do not merge into one, but antagonize and complement each other. Each one reproduces itself from the depth of the past and relates to others in a contentious way”. Contention and autonomy of the parts are the two concepts that we should retain in our archaeological practice with indigenous communities. The ontological and ethical impossibility of bringing the two together is not only because of cultural difference. It also has to do with the damage provoked by imperialism and capitalism to indigenous peoples and non-Western societies more generally. The space in between the dots is also the fissure created by capitalist imperialism.

Conclusion

In this article I have explored two complex issues in indigenous and postcolonial archaeologies that entail important ethical questions: difference and collaboration. I have argued that neither indigenous nor postcolonial archaeologies take alterity seriously into account, in part because it has accepted the logic of multiculturalism that is ready to accept a limited measure of difference, while it eludes crucial issues of power and agency – including the enduring effects of colonialism and capitalism in transforming indigenous societies. I have expressed my skepticism towards the possibility of conducting hybrid archaeologies, in which Western and non-Western viewpoints coalesce, as well as toward the actual radicalism of leaving indigenous peoples to take the initiative of carrying out archaeological research. I fear that this might be forms of veiled epistemic imperialism. My skepticism, however, has more to do with any attempt at universalizing such practices or at presenting them as the model for emancipatory politics in non-Western contexts. Those are ways of doing archaeology that may work in some places and have a strong political potential, but they cannot be simply extrapolated everywhere. Indigenous archaeology was born in countries that experienced *terra nullius* colonialism and the large scale invasion of white settlers: this is the case in Canada, the United States and Australia, but also more recently in Brazil and Argentina, where

indigenous archaeologies are also developing vigorously. I have argued in this article that it would be a mistake to extrapolate the situations in those countries to regions where genocidal colonialism did not triumph: in the Andes, Sub-Saharan Africa and large parts of Asia, for instance.

I have proposed four concepts to expand the ethical debate in indigenous and postcolonial archaeology: non-action, hospitality, *ch'ixi* and discomfort. Non-action refers to relinquishing the desire to initiate collaboration, when this collaboration may imply epistemic or other forms of imposition; hospitality means abandoning the idea of the immediate return, it enacts a different temporality of the gift, not marked by the concept of immediate exchange, the *quid-pro-quo*; *ch'ixi* replaces the notion of a harmonious mixture typical of popular conceptions of hybridism by the idea of autonomy and fissure, the first resulting from ontological difference, the second from the damage caused by capitalism, modernity and empire. Finally, discomfort should always be present in our relations with society: ethical debate thrives in the context of difficult, even intractable challenges. Indigenous and postcolonial archaeologies have become a bit too comfortable addressing questions where there is wide agreement, at least officially (repatriation, encouragement of indigenous initiative, respect to local rules and values, advocacy) [55]. If we want to expand the debate and test the limits of our discipline, we have to be ready to tackle more complex situations, where the line that divides good and evil is not so clear-cut or where the moral imagination of the archaeologist clashes with that of others.

Remerciements

Une version antérieure de ce texte a été présentée lors du séminaire "Patrimoine et postcolonialisme critique" au Musée historique national de Stockholm (23 octobre 2013), organisé par Anna Kallén, Johan Hegardt et Fredrik Svanberg. Cette présentation a ensuite servi de base à un article publié dans la revue de la Société d'archéologie brésilienne sous le titre "Malos nativos. Una crítica de las arqueologías indígenas y poscoloniales". *Revista de Arqueología*. 2014;27(2):47-63. Le présent article est une version élaborée et étendue de ce travail. L'auteur tient à remercier les éditeurs du numéro, les organisateurs de la conférence Archeoéthique à Paris en mai 2018 et Randall McGuire et Lindsay Montgomery pour leurs critiques constructives qui ont contribué à améliorer le journal. Toute erreur reste la mienne.

Conflits d'intérêts

Aucun à déclarer

Responsabilités des évaluateurs externes

Les recommandations des évaluateurs externes sont prises en considération de façon sérieuse par les éditeurs et les auteurs dans la préparation des manuscrits pour publication. Toutefois, être nommé comme évaluateurs n'indique pas nécessairement l'approbation de ce manuscrit. Les éditeurs de la [Revue canadienne de bioéthique](#) assument la responsabilité entière de l'acceptation finale et de la publication d'un article.

Édition/Editors: Stanislav Birko & Aliya Afidal

Évaluation/Peer-Review: Randall McGuire & Lindsay M. Montgomery

Affiliations

· Institute of Heritage Sciences, Spanish National Research Council (Incipit-CSIC), Santiago de Compostela, Spain

Correspondance / Correspondence: Alfredo González-Ruibal, alfredo.gonzalez-ruibal@incipit.csic.es

Reçu/Received: 3 Jan 2019

Publié/Published: 27 Nov 2019

Les éditeurs suivent les recommandations et les procédures décrites dans le [Code of Conduct and Best Practice Guidelines for Journal Editors](#) de COPE. Plus précisément, ils travaillent pour s'assurer des plus hautes normes éthiques de la publication, y compris l'identification et la gestion des conflits d'intérêts (pour les éditeurs et pour les auteurs), la juste évaluation des manuscrits et la publication de manuscrits qui répondent aux normes d'excellence de la revue.

Acknowledgements

An earlier version of this paper was presented at the seminar "Heritage and Critical Postcolonialism" at the National Historical Museum of Stockholm (23 October 2013), organized by Anna Kallén, Johan Hegardt and Fredrik Svanberg. This presentation was then the basis for a paper published in the journal of the Society of Brazilian Archaeology as "Malos nativos. Una crítica de las arqueologías indígenas y poscoloniales". *Revista de Arqueología*. 2014;27(2):47-63. The present article is an elaborated and extended version of that work. The author would like to thank the editors of the issue, the organizers of the Archeoéthique conference in Paris in May 2018 and Randall McGuire and Lindsay Montgomery for their constructive criticism that helped improve the paper. Any errors remain my own.

Conflicts of Interest

None to declare

Peer-reviewer responsibilities

Reviewer evaluations are given serious consideration by the editors and authors in the preparation of manuscripts for publication. Nonetheless, being named as a reviewer does not necessarily denote approval of a manuscript; the editors of [Canadian Journal of Bioethics](#) take full responsibility for final acceptance and publication of an article.

The editors follow the recommendations and procedures outlined in the COPE [Code of Conduct and Best Practice Guidelines for Journal Editors](#). Specifically, the editors will work to ensure the highest ethical standards of publication, including: the identification and management of conflicts of interest (for editors and for authors), the fair evaluation of manuscripts, and the publication of manuscripts that meet the journal's standards of excellence.

References

1. McGhee R. [Aboriginalism and the problems of indigenous archaeology](#). *American Antiquity*. 2008;73(4):579-597.
2. Stump D. [On applied archaeology, indigenous knowledge, and the usable past](#). *Current Anthropology*. 2013;54(3):268-298.
3. Gnecco C. [Arqueología multicultural. Notas intempestivas](#). Complutum. 2012;23(2):93-102.
4. Chibber V. *Postcolonial Theory and the Specter of Capital*. London: Verso; 2014.
5. Orser CE. The politics of periodization. In: González-Ruibal, A, ed. *Reclaiming Archaeology: Beyond the Tropes of Modernity*. London: Routledge; 2013. p.145-154.
6. Bessire L, Bond D. [Ontological anthropology and the deferral of critique](#). *American Ethnologist*. 2014;41(3):440-456.
7. Dawdy SL. [The abject ruins of Marxism](#). *Cultural Dynamics*. 2018;30(1-2):119-121.
8. Atalay S, Clauss LR, McGuire RH, Welch JR, eds. *Transforming Archaeology: Activist Practices and Prospects*. London: Routledge; 2016.
9. Chirikure S, Pwiti G. [Community involvement in archaeology and cultural heritage management: An assessment from case studies in Southern Africa and elsewhere](#). *Current Anthropology*. 2008;49(3):467-485.
10. Schmidt PR. *Community-Based Heritage in Africa: Unveiling Local Research and Development Initiatives*. London: Routledge; 2017.
11. Haber A. Archaeology after archaeology. In: Haber A, Shepherd N, eds. *After Ethics*. New York: Springer; 2015. p.127-137.
12. Wilcox M. [Marketing conquest and the vanishing Indian: An indigenous response to Jared Diamond's Guns, germs, and steel and Collapse](#). *Journal of Social Archaeology*. 2010;10(1):92-117.
13. Curtón R, Lazzari A, Lazzari M. [Middle of nowhere: a place of war memories, commemoration, and aboriginal re-emergence \(La Pampa, Argentina\)](#). *World Archaeology*. 2003;35(1):61-78.
14. Anderson B. ['An alternative discourse': Local interpreters of antiquities in the Ottoman Empire](#). *Journal of Field Archaeology*. 2015;40(4):450-460.
15. Nilsson Stutz L. [Claims to the past. A critical view of the arguments driving repatriation of cultural heritage and their role in contemporary identity politics](#). *Journal of Intervention and Statebuilding*. 2013;7(2):170-195.
16. Varga ID. [A insustentável leveza do estado: devastação, genocídio, doenças e miséria nas fronteiras contemporâneas da Amazônia, no Maranhão](#). *Acta Amazonica*. 2008;38(1):85-100.
17. Baines SG. [Imagens de liderança indígena e o Programa Waimiri-Atroari: índios e usinas hidrelétricas na Amazônia](#). *Revista de Antropologia*. 2000;43(2):141-163.
18. Criado Boado F. [Límites y posibilidades de la arqueología del paisaje](#). SPAL. 1993;2:9-55.
19. Bauer A, Bhan M. *Climate Without Nature: A Critical Anthropology of the Anthropocene*. Cambridge: Cambridge University Press; 2018.
20. Le Roy Ladurie E. [L'histoire immobile](#). *Annales*. 1974;29(3):673-692.
21. Moore JW, ed. *Anthropocene or Capitalocene?: Nature, History, and the Crisis of Capitalism*. Oakland: PM Press; 2016.
22. Straight B, Lane PJ, Hilton, CE, Letua M. ['It was maendeleo that removed them': disturbing burials and reciprocal knowledge production in a context of collaborative archaeology](#). *Journal of the Royal Anthropological Institute*. 2015;21(2):391-418.
23. Mire S. [Preserving knowledge, not objects: A Somali perspective for heritage management and archaeological research](#). *African Archaeological Review*. 2007;24(3-4):49-71.
24. Fimrite P. [Indian artifact treasure trove paved over for Marin County homes: Archaeologists crushed that tribe declined to protect burial site](#). *SF Gate*. Apr 23, 2014.
25. Clack T, Brittain M. [Place-making, participative archaeologies and Mursi megaliths: some implications for aspects of pre-and proto-history in the Horn of Africa](#). *Journal of Eastern African Studies*. 2011;5(1):85-107.
26. Abbink J. [Violence and the crisis of conciliation: Suri, Dizi and the State in south-west Ethiopia](#). *Africa*. 2002;70(4):527-550.
27. Guerra Curvelo W. [Los conflictos interfamiliares Wayuu](#). *Frónesis*. 2006;13(1):40-56.
28. González-Ruibal A, Alonso González P, Criado-Boado F. [Against reactionary populism: towards a new public archaeology](#). *Antiquity*. 2018;92(362):507-515.
29. Ives CK. *US Special Forces and Counterinsurgency in Vietnam: Military Innovation and Institutional Failure, 1961-63*. London: Routledge; 2007.
30. Ponce García A. [Trayectoria de la\(s\) memoria\(s\) Aikewara: del evento de la Guerrilla de Araguaia a la Comisión de Amnistía en el actual contexto de revisión de la dictadura brasileña](#). MA Thesis; 2015.
31. MacEachern S. *Searching for Boko Haram: A History of Violence in Central Africa*. Oxford: Oxford University Press; 2018.
32. Cassidy RM. [The long small war: indigenous forces for counterinsurgency](#). *Parameters*. 2006;36(2):47-62.
33. Descola P. *Par-delà nature et culture*. Paris: Gallimard; 2005.
34. Chakrabarty D. *Provincializing Europe: Postcolonial Thought and Historical Difference*. Princeton University Press; 2009 [2000].
35. Bird-David N. ["Animism" revisited: personhood, environment, and relational epistemology](#). *Current Anthropology*. 1999; 40(S1): S67-S91.
36. Wylie A. The promise and perils of an ethic of stewardship. In: Meskell L, Pels P, eds. *Embedding Ethics*. London: Berg. 2005; p.47-68.

37. Atalay S. [Indigenous archaeology as decolonizing practice](#). *The American Indian Quarterly*. 2006;30(3):280-310.
38. Alberti B, Fowles S, Holbraad M, Marshall Y, Witmore C. "Worlds otherwise": Archaeology, anthropology, and ontological difference. *Current Anthropology*. 2011;52(6):896-912.
39. Daly K. [Restorative justice: the real story](#). *Punishment & Society*. 2002;4(1):55-79.
40. Eagleton T. *Ideology. An Introduction*. London: Verso; 1993.
41. Bhabha HK. *The Location of Culture*. London: Routledge; 1994.
42. Said E. *Orientalism*. New York: Vintage Books; 2001 [1978].
43. Dussel E. [Eurocentrism and modernity \(Introduction to the Frankfurt Lectures\)](#). *Boundary 2*. 1993; 20(3):65-76.
44. Liebmann M, Rizvi, eds. *Archaeology and the Postcolonial Critique*. Lanham, MD: Altamira; 2008.
45. Farrujía de la Rosa A. *An Archaeology of the Margins: Colonialism, Amazighity and Heritage Management in the Canary Islands*. New York: Springer; 2013.
46. Ortiz García C. ["Antigüedades guanchinescas". Comercio y coleccionismo de restos arqueológicos canarios](#). *Culture & History Digital Journal*. 2016;5(2):e017.
47. Callaway E. [Repatriation of African artefacts from French museums will require huge research effort](#). *Nature*; 27 Nov 2018.
48. Quijano A. [Coloniality of power and Eurocentrism in Latin America](#). *International Sociology*. 2000;15(2):215-232.
49. Colwell-Chanthaphonh C, Ferguson TJ. [Memory pieces and footprints: multivocality and the meanings of ancient times and ancestral places among the Zuni and Hopi](#). *American Anthropologist*. 2006;108(1):148-162.
50. Atalay S. Multivocality and indigenous archaeologies. In: Habu J, Fawcett C, Matsunaga CM, eds. *Evaluating Multiple Narratives*. New York: Springer; 2008. p.29-44.
51. Gnecco C. [Caminos de la Arqueología: de la violencia epistémica a la relacionalidad](#). *Bol Mus Paraense Emílio Goeldi. Ciênc Hum*. 2009;4(1):15-26.
52. Whyte K. [The Dakota access pipeline, environmental injustice, and US colonialism](#). *Red Ink*. 2017;19(1).
53. Herrera A. 2015. Archaeology and development: ethics of a fateful relationship. In: Haber A, Shepherd N, eds. *After Ethics*. New York: Springer; 2015. p.39-53.
54. Rivera Cusicanqui S. [Ch'ixinakax utxiwa. Una reflexión sobre prácticas y discursos descolonizadores](#). *La Peste*; 11 May 2019.
55. González-Ruibal A. [Ethics of archaeology](#). *Annual Review of Anthropology*. 2018;47:345-360.