Behavioral community psychology in the Amazon rainforest: Suggestions for when behavior analysts meet alterity

Felipe Bulzico da Silva¹,²,³ · Guilherme Bergo Leugi⁴,⁵,⁶

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Abstract
The present paper aimed to discuss and interpret methodological issues and contributions arising mainly from professional field work conducted by a behavior analyst working as a behavioral community psychologist in the Amazon rainforest, in northern Brazil. We looked at such a professional’s day-to-day circumstances and challenges within a semi-isolated Indigenous community, and systematized impressions and implications for practice with diverse verbal communities and social groups. We believe that looking at experience with those specific social contexts enables us to critically examine behavior analysis community practice more generally. We provided examples of said practices and examined their explicit and more subtle consequences. In light of that, we discussed features of a collaborative methodological stance while working in the field that we wish to foster and encourage. We conclude by pointing out advantages of more in-depth and intensive relational methods for behavior analysts in community practice.

Keywords   Intensive methods · Collaborative methods · Behavior analysis · Community psychology · Alterity · Cultural practices

Felipe Bulzico da Silva
silva.b.felipe@gmail.com

¹ Post-Graduate Doctoral Program in Developmental and Learning Psychology from the Universidade Estadual Paulista “Júlio de Mesquita Filho” (UNESP), Avenida Eng. Luiz Edmundo Carrijo Coube, 14-01, Vargem Limpa, Bauru, SP CEP: 17033-360, Brazil

² Group of Studies and Research in Cultural Designs (GEPEDEC/UNESP-Bauru), Bauru, Brazil

³ Fundação Nacional do Índio (FUNAI), Bauru, Brazil

⁴ Department of Psychology, Federal University of Triângulo Mineiro (UFTM), Rua Vigário Carlos, 100, sala 525, Nossa Senhora da Abadia, Uberaba, MG CEP: 38025-350, Brazil

⁵ Behavioral and Social Contextual Analysis Studies on Culture, Technology, Organizations and Society (CACCTOS, UFTM), and the Behavior Analysis Laboratory (LAC, UFTM), Uberaba, Brazil

⁶ Social Contextual Analysis of Human Behaviour Research Group, University of South Australia (UniSA), Adelaide, Australia
The present paper aims to discuss and interpret methodological issues and contributions arising mainly from a behavior analyst professional experience working in the field as a behavioral community psychologist in the Amazon rainforest region in northern Brazil. We will discuss practices of the Suruwaha, a group of approximately 156 people whose language belongs to the Arawan linguistic family.

Behavioral community psychology (BCP) emerged in the early 1970s as an interdisciplinary field of research and practice, based primarily on intersections between applied behavior analysis and community psychology, and aiming to address societal problems (e.g., Jason et al., 2021; Watson-Thompson et al., 2021). Since its beginning, behavior analysts have been working with a wide variety of communities, both local and global (Fawcett, 2021). In this paper, as we will be dealing with a semi-isolated Indigenous community, some clarifications are needed.

Since January 2018, the first author has been working in the Brazilian national indigenist foundation – Fundação Nacional do Índio (FUNAI) – whose main declared purpose consists of protecting and promoting the rights of indigenous communities. The author worked at a decentralized unit within that institution called Frente de Proteção Etnoambiental Madeira-Purus (Madeira-Purus Ethno-environmental Protection Front: FPE-MadPur). Within such unit, actions are directed specifically toward isolated or semi-isolated indigenous communities in the Madeira and Purus rivers area, southeast Amazonas state, Brazil.

The Suruwaha are considered by FUNAI as a semi-isolated community. There are three criteria that define a community as semi-isolated: such communities maintain their social traditions, customs, language, and cosmological views relatively intact; their knowledge about societies external to their community is scarce; their members have low immunological memory for relatively common diseases in other societies, such as malaria, flu, and (more recently) Covid-19. Semi-isolated indigenous communities maintain relationships with external people, mainly government and other institutions officials.

As part of his professional responsibilities with FUNAI, up until completing the present paper, the first author visited Suruwaha territories eight times, each visit lasting 20 days on average. During the rainy season, it would take roughly two days to get to Suruwaha territory, whereas another three days of transit would be added when professionals went over in the dry season.

Effective BCP requires a deep understanding of the collaborating community’s values, history, and culture. Therefore, the methodological stance in BCP depicted in the present paper only makes sense within context, so we will first present a broad view of Indigenous peoples in Brazil, focusing on semi-isolated communities, such as the Suruwaha. After that, we will briefly describe the historical context of contact between Suruwaha and other Brazilian populations and institutions in the 1980s, but mainly with a non-governmental organization. We will also offer a summary of enduring relations that the Suruwaha have been maintaining since with external people. Then, we will underline the methodological shortcomings that may arise from trying to transpose methods and conceptual tools, without significant adaptation or contextualization, from controlled environments to complex community settings, where control is not possible or necessarily desirable. Finally, we will provide examples of innovative and engaged practices we wish to foster, and we
will conclude by pointing out advantages of more in-depth, intensive, and contextual methods. All examples examined in the present paper come from either historical records and literature (with due reference) or the first author’s field work and notes; therefore, data sharing is not applicable to this article as no datasets were generated or analyzed during the current study.

**Brazilian indigenous peoples**

According to the last census, carried out in 2010, there are 305 indigenous ethnic groups and 274 spoken languages in Brazil (Instituto Brasileiro de Geografia e Estatística, 2010). Each of those groups have idiosyncratic historical contexts of contact with white people. In addition, groups are not restricted to one region in Brazil. It is important to note that Indigenous groups are living in different and particular contexts.

It is relevant to note that some Indigenous groups, particularly the ones living in northeast Brazil, have been in systematic contact with white people since colonization in the sixteenth century. Others, especially those living in the central west region, have established systematic contacts only after the second half of the twentieth century. Nevertheless, most Indigenous groups, including some of the northern ones, have been systematically and/or intermittently in contact with colonizers at some point.

The 305 remaining Indigenous groups have been struggling against different types of neocolonial forces. Ribeiro (1970/2000) analyzed three of those forces advancing on Indigenous peoples territories in Brazil: first, the so-called extractive force whose main commodity was seringa (*Hevea brasiliensis*). Second, the pastoral force based on cattle production. Finally, the agricultural force, which was based on intensive agriculture and was associated with the arrival of European immigrants to southern and southeastern Brazil in the beginning of the twentieth century. Each of these forces required specific defensive strategies and tactics by Indigenous peoples.

Ribeiro (1970/2000) analyzed the relationship between Indigenous peoples and colonizing forces in the first half of the twentieth century. Such forces have changed slightly since. In the Amazon rainforest, the seringa industry, which once condemned many Indigenous and non-indigenous peoples to slavery and misery, is mostly ruined in many areas. In its place, with overwhelming strength, there are: garimpos (both industrial and small scale gold extraction); logging companies (some international); and soybean plantations. There are also several evangelical missionaries in the area. In a nutshell, the colonizing or “civilizing” forces that bring so much harm to Indigenous peoples are precisely what Skinner (1988) called the three States: government, capital, and religion.

Other factors to consider are the cultural ethnic differences between the 305 Indigenous groups, their own histories and traditions. Each group has their own ways of organizing themselves socially and politically; their own language, customs, traditions, and points of view. They are, in sum, inherently different from each other and any reflection on Indigenous ethnic groups must consider their diversity.
For a few of the languages in the region, it is possible to establish common origins and similarities. According to Melatti (1983/2007), Indigenous peoples whose languages are sufficiently similar to each other presumably have had the same origin or have established connections in the past, so they generally present social and cultural similarities. It is not our goal here to describe the Brazilian indigenous linguistic families. It is sufficient to clarify that some of those linguistic families are found in various Brazilian states and even in other countries and that others are restricted to specific regions. That is the case with the Arawan linguistic family. The languages that make up this family are those spoken by the Indigenous peoples Jamamadi, Banawa, Deni, Paumari, Jarawara, Hi-Merimá, Kulina, and Suruwaha, all of them Indigenous groups who live in the Purus River region, southeast Amazonas.

Experiences examined in this paper relate to the Suruwaha community, so we will next provide some general and succinct information on their historical context of contact and culture according to what is documented by anthropologists and ethnographers.

**Historical context of contact with Suruwaha**

At present, Suruwaha are a single community of approximately 156 people. It is not easy to define what a community is, and different authors operate with different definitions of the concept. In the case of Suruwaha, it is possible to assume that they are part of a community either by a geographical criterion, as they live isolated from other populations, or a social criterion, as they say they all descend from the Sara-madi, have a beautiful language (ati tijuwa) – in contrast with other populations, whose languages are confusing (ati danyzyru) – and recognize themselves as jadawa (a term we will explain later).

The Suruwaha descend, as argued by Aparicio (2013a) and Huber (2012), from different subgroups. Although those subgroups used to speak dialects of the same language and shared the same cosmological views, each of them had their own territory until the beginnings of the twentieth century.

Suruwaha people reported the existence of 11 subgroups: Masanidawa, Sarukwadawa, Jukihidawa, Adamidawa, Kurubidawa, Tybydawa, Tabusurudawa, Mahidawa, Idiahindawa, Nakanidawawa, and Zamadawa. We will talk briefly about three main subgroups.

**Masanidawa**, the most populous, originally lived near the Piranha River, east of where they currently live. Waba, a Suruwaha man, told the author that the Masanidawa left their original location after being attacked by another Indigenous group, Juma. If we consider genealogical data, it is possible to assume that

1 Huber (2012) mention two subgroups, the Zama Kaxuhudawa and the Sarahadawa, and Aparicio (2013a) mention another two, the Dawihadawa and the Anizakawa, about which the first author never heard of in his field experiences. The hypothesis here made is that the names of some of the subgroups were elaborated during the relationships between them as a form to identify their regions or as a form to reconstruct their histories when they all gathered. In this sense, Jukihidawa literally means people of the Jukihi River; Masanidawa means people of the east; Mahidawa means people of the Mahi River; Idiahindawa means people of the other side of the river; Adamidawa means people of the hills and so on.
this probably occurred in the 1900s. Afterward, Maranidawa people migrated to Riozinho (“little river”), a region much closer to where the Suruwaha malocas (huts or dwellings) are now. Nevertheless, another Suruwaha, Baxiwywy, reported: “in the Taminiaru river (a Lower Riozinho tributary), while Maranidawa were performing a Kazabu (a kind of hunt), they were butchered by a man called Wakuwaku.” Again, according to genealogical data, it is possible to pinpoint this second massacre in the 1920s or 1930s. Fleeing after such event, Maranidawa went into the territory of another Suruwaha subgroup, the Jukihidawa.

The second main subgroup about which contemporary Suruwaha talk about is the Sarukwadawa. Their traditional territory was the Haxiniawa River, north of Suruwaha’s current area. Sarukwadawa, like Maranidawa, emigrated to the territory of the Jukihidawa as a result of massacres and diseases. According to Suruwaha men Kwakwai and Aji, Awakiria was the man responsible for leading Sarukwadawa into the new territory, which may have occurred in the 1900s, considering that Awakiria was four generations apart from Aniumaru, a 70-year-old Suruwaha.

Finally, the third main subgroup talked about by Suruwaha are the Jukihidawa. Their traditional territory, the Jukihi River, corresponds to where the Suruwaha community live nowadays. In fact, all remaining subgroups, at different historical moments until the 1930s, gathered at Jukihidawa territory after fleeing from massacres and diseases forming one single community (Huber, 2012).

It is worth noting that, even before such diaspora, subgroups kept relations with each other: marriages, material exchanges, and even sorcery accusations were common among them (Aparicio, 2013a; Huber, 2012). Some subgroups also kept relations with other Indigenous groups and/or jara – a Suruwaha term that can be roughly translated as “white people.”

Such scenario shows that various Suruwaha subgroups constituted a network of interrelations. As pointed out by Aparicio (2013a), the network was multi-centered, that is, the most human/closest in the social field consisted of members of the -dawa subgroup to which an individual belonged; members of other -dawa subgroups were potential affines; and, finally, the enemies, potentially dangerous people, were members of other indigenous groups and the jara. This sort of multi-centered network is captured by the Suruwaha language through the distinction between jadawa and waduna.

Jadawa means “real people” and Suruwaha individuals use it when referring to themselves – independently of the -dawa subgroup. On the other hand, waduna means foreign. However, according to Viveiros de Castro (1998): “the amerindian words that used to be translated as human being and that compose those ethnocentric auto denominations do not denote humanity as a natural species, but the social condition of a person” (p. 124).

In the early twentieth century, as pointed out by Barros (1934), sorva (Couma Macaroca) industry advanced on the territories of the various subgroups. Massacres and diseases, especially malaria and flu, completely destroyed the network. The remaining people fled away from the sorva industry, to the Jukihidawa territory.
From the 1930s to the 1970s, Suruwaha lived in isolation as a single community, as a form of survival. Nevertheless, in the meantime, the sorva industry kept advancing and, in the 1970s, it was bordering the Suruwaha territory once more. Suruwaha people were used to repelling invasion attempts and invaders. However, in the 1970s, the situation became unsustainable. A catholic non-governmental organization, Conselho Indigenista Missionário (CIMI, Missionary Indigenist Council), knowing of the situation, acted on two different fronts: first, CIMI carried out an awareness-raising action with sorva workers and residents of the surrounding area, in the sense that they should respect the Suruwaha territory and not try to contact them. Second, CIMI themselves tried to establish contact with the Suruwaha on May 8, 1980 (Kroemer, 1989).

From a Suruwaha point of view, they contacted CIMI’s team and decided to break up the isolation. Since then, Suruwaha people have been in systematic contact with jara representing institutions or organizations. The number of institutions and organizations working with Suruwaha people since 1980 has decreased and, since 2008, only two remained: FUNAI and the official State institution for indigenous health, Secretaria de Saúde Indígena (SESAI, Indigenous Health Secretariat). FUNAI’s recognition of Suruwaha territory was completed in 1988. In the late 1980s and early 1990s, the sorva industry receded, so Suruwaha territory is free(er) from some of the colonizing forces still active in the country, maintaining a great measure of its biodiversity. FUNAI, which maintains an office in the area, ensures Suruwaha territorial protection.

**Suruwaha culture**

Suruwaha culture has been depicted in ethnographical and ethnological literatures (cf. Aparicio, 2011, 2013a, 2013b, 2014, 2015a, 2015b, 2015c, 2015d; Fank & Porta, 1996a, 1996b, 1996c; Huber, 2011, 2012). In this section, we will succinctly describe aspects that are relevant to the first author’s field work experience.

Suruwaha live in huts they call uda (also malocas, in Portuguese). Uda or malocas are cone shaped and some can measure up to 30 meters in diameter by 15 meters in height, housing between 80 and 120 people. They are made exclusively of round

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2 There are a small number of Brazilian Indigenous peoples currently living in isolation, all of them in the Amazonian rainforest. They are deemed isolated by FUNAI because they do not have systematic contact with people external to their own collectivity. Since the 1980s, the State official indigenist policy aimed at isolated Indigenous peoples is not to contact them for two reasons: first, contact almost always brings disastrous consequences for the indigenous people, as historical examples abound in Brazil and other parts of the world. Second, Indigenous people who do not want to contact must have their will respected. FUNAI’s specialist teams ensure territorial protection by searching for traces that isolated Indigenous people leave behind in the forest, tracing territories they walk through. However, the term isolated is not an accurate description. Common sense might suggest that isolated people have never established contact with people external to their collectivity and especially with white people. However, all the so-called isolated Indigenous people have had experiences with white people which, in most cases, resulted in massacres or disease spreading. Isolation might be, therefore, a form of survival. They are not isolated; they are protecting themselves.
wood beams, liana, *paxiúba* (*Socratea exorrhiza*) splints, *envira*, and the roof is made of *caranai* (*Lepidocaryum tenue*) straw. Each *maloca* has its owner (*anidawa*) – ownership does not mean proprietary, but refers to taking the initiative to do something. Therefore, a *maloca* owner is the man who built it, like a *zawada* (another type of *Suruwaha* hunt) owner is the man who organized it.

Although *malocas* have no internal or external partitions, distribution of people inside a *maloca* is not random. Nuclear families, that is, the couple, their children (*hawini miadi*), and their *attuna* (single women who have already gone through menarche), occupy the outer circle. The space occupied by each nuclear family is a *kahu*. In the middle, at the top, the *wasi* (men after the rituals in which they started wearing *sukwady* – a type of loincloth –, but who are not yet married) tie their hammocks.

There are nine *malocas* in good condition for housing. Since the first author started his field work, he has never seen all *Suruwaha* living together in one *maloca*. However, during “summer” (locally, the period between July and December, when there is less rain, not actual summer), when rivers are reduced in volume, *Suruwaha* tend to live more closely, in two or three *malocas*. Inversely, during “winter” (locally, the period between January and June, when rains are frequent, not actual winter), when rivers increase in volume, they tend to be more spread out. Families and *wasi* move between *malocas* from time to time.

During summer, *Suruwaha* engage in the practice of swidden. Cutting down and burning vegetation are activities restricted to men. *Suruwaha* men clear their respective areas with axes obtained from personal exchanges with *jara*\(^3\). Planting is carried out by both men and women, but harvesting is an exclusively feminine activity. *Suruwaha* prepare relatively large areas for planting, which is different from other Arawan people. *Suruwaha* plant *pupunha* (*Bactris gasipaes*), *cará* (*Dioscorea spp.*), *batata doce* (*Ipomoea batatas*), some varieties of banana, pineapples, *urucum* (*Bixa orellana*), *timbó* (*Deguelia utilis*), *flecheira* (*Gynerium sagittatum*), *cana* (*Saccharum sp.*), among others.

Also in summer, *Suruwaha* usually carry out large fishing trips. They use *timbó*, a poisonous plant that makes fish choke. They put *timbó* in the water and block the downstream. Fish start to swim downstream fleeing from *timbó*. Some of them cannot swim faster than the time it takes for *timbó* to work and choke while swimming through. Others, albeit faster, end up being shot by spears. Fish that did not choke on *timbó* nor were shot by spears find their way blocked. Fishing is a reason for joy among the *Suruwaha* families and mobilizes their social life.

Winter is the time for great hunts. There are two main kinds of *Suruwaha* hunts: the *zawada* and the *kazabu*. In the first one, only men participate. They go to distant

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\(^3\) In fact, there are a number of objects that *Suruwaha*, both women and men, acquire by means of personal exchanges with members of FUNAI and SESAI: axes, machetes, fishing lines, hooks, knives, lighters, clothes, knife sharpening files, tweezers, beads, and so on. In return, *jara* usually ask for *rapé* (*kumadi* in *Suruwaha* language), a powder like snuff, made from crushed tobacco (*Nicotiana tabacum*) leaf and the *pupui* (*Theobroma subincanum*) bark ashes. However, there are some difficulties arising from such exchanges, since *jara* cannot afford all the tools *Suruwaha* might need. The policy regarding those exchanges is within FUNAI’s purview and will not be addressed in detail here.
areas and hunt between 10 to 20 days. Men hunt large animals – e.g. tapirs, deer, peccaries – using bows and arrows. For smaller tree-dwelling animals – e.g. monkeys – they use blowguns and smaller arrows. Usually, great hunts precede sukwdady rituals for young men.

The second kind of hunt mobilizes Suruwaha families. Like the zawada, each kazabu hunt has its own anidawa. They hunt far from their dwellings, but usually the trip lasts fewer days than zawada. All hunting weapons, arrows, blowguns, and bows, are made by men. The most coveted game meat is tapir. Men who shot many tapirs throughout their lives are considered by the others as mahuny agy and become prestigious. Women make various ceramics and weave hammocks for both men and themselves. Suruwaha also collect fruit in the forest throughout the year. Engaging in swidden, hunting, fishing, and collecting fruit, they provide for all their nutritional needs.

It would be outside the scope of this article to provide a detailed framework about the Suruwaha cosmological views (cf. Aparicio, 2014, 2015b). Nevertheless, it is relevant to note that, like many other Amazonian Indigenous peoples (cf. Villas Boas & Villas Boas, 1973/1974; Viveiros de Castro, 1998), Suruwaha do not think of human beings as special in their place in nature. Seeing human beings as special could be thought of as a typically western view, traceable back to the ancient Greeks, who used to see human beings as detached from the rest of nature, even if part of it, since only human beings were able to speak articulately.

With a similar rationale, Skinner (1974) has argued that differentiation between human beings and other animals relies – in terms of their behavioral repertoire – on the fact that, in the former, the vocal musculature evolved in a way that could be placed under operant control. Consequently, said evolution allowed the third kind of selection by consequences, enabling verbal communities to establish new practices on a cultural level. Culture would then be something restricted to human beings. Such restriction would make little sense within the Suruwaha perspective.

Suruwaha view, as pointed out by Aparicio (2014), is that all animals were human beings a long time ago (in a mythical era). With time, humans were transformed into monkeys, deer, tapirs, jaguars and so on. Therefore, we, human beings, see apes as apes, jaguars as jaguars, deer as deer, etc. Jaguars see themselves as human beings, and what we see as deer is seen by them, let us say, as white-lipped pigs. Jaguars see us as, for example, tapirs and so on. The same applies to the other animals. Consequently, every living being – not animals only – has its own point of view, seeing itself as human and other living beings according to its own perspective. In this sense, culture is not something restricted to humans – humans in the western sense, to be sure. Such phenomenon is roughly what has been conceptualized under the term Perspectivism (Viveiros de Castro, 1998).

Adopting the stance of Perspectivism (Viveiros de Castro, 1998) specifically for Suruwaha, as reported by Aparicio (2015b), there are four main profiles of supernatural beings: Kurimia, Karuji, Uhwamy, and Zamakusa. The Kurimia are singing spirits, as the principal form of communication between them and the Suruwaha iniuwa (shaman) is singing.

In this sense, the first author witnessed an encounter between Kwakwai, a Suruwaha man recognized by others as iniuwa, and a Kurimia. It was late night,
and the author was sleeping in a maloca with other Suruwaha people. Suddenly, he woke up to iniuwa chants. Kwakwai spent the whole night walking from the maloca to a nearby stream and vice-versa, singing and sniffing kumadi. Some Suruwaha in the maloca kept telling Kwakwai to get to know more about the Kurimia. A few days later, the chants that iniuwa had received from Kurimia became part of the singing repertory of the Suruwaha. In fact, singing is an important aspect of Suruwaha life: they sing in the forest pathways to keep snakes away; they sing in sukwady rituals; they sing while the swiddens are burning; and so on. Moreover, Suruwaha are interested in chants from other cultures. Knowing that the first author has some musical skills, he would be constantly asked to play guitar and sing. Through the chants iniuwa bring, it is possible to know a little about the perspective of other living beings. Iniuwa are able to journey into the perspective of others, which is seen as potentially dangerous for themselves and Suruwaha in general.

Karuji, as pointed out by Aparicio (2015b), are somewhat the anima of the living beings. Karuji is also a term used to refer to the social vitality of a person, their ability to mobilize social life: a man who makes great malocas, organizes successful fishing trips or hunts, is considered as in possession of a strong karuji (Aparicio, 2015b). Uhwamy and Zamakusa are spirits that, differently from Kurimia, have non-human traces. They are a sort of monster. Uhwamy wonder at night and are feared most by Suruwaha when they are in the forest. Zamakusa, on the other hand, are known as the spirits that harass and rape women (Aparicio, 2015b). As Aparicio (2015b) argued, Suruwaha believe that children born with physical abnormalities or, in other words, with non-human characteristics, result from rapes performed by Zamakusa.

It is worthwhile making one final observation about Suruwaha culture, mainly considering readers who might not be used to diverse and decolonial points of view and epistemologies. Suruwaha, like any other group of people, have a culture that is constantly changing. Changes are brought about by modifying relations within the group but also by interacting (and interpreting such interactions) with other cultures and/or institutions.

To make this point clear, we will provide a conversation excerpt between Ania and the first author. The subject of the conversation is Suruwaha creation myths. Through communicating a myth, Ania tried to make the author understand what he heard about the world – cities and their localizations – in his relationships with people who had worked with him. While telling this myth, Ania was drawing on the sand about the things talked about:

“Ajimarihi was walking in the forest. He took a fruit, blew on it and threw it. The fruit turned into a person. Ajimarihi said: “speak!” The person started to speak in a beautiful language (ati tijuwa). He was a Masanidawa. So Ajimarihi took another fruit, blew on it and threw it. The fruit turned into another person. Ajimarihi: “speak!” and the person spoke beautifully. He was a Suruwaha. Ajimarihi made the same again, and again, and again… First, other Indigenous groups appeared. At the beginning, all land belonged to Indigenous people. Ajimarihi took another fruit, blew on it and threw it. The fruit turned into a person. “Speak!”, said Ajimarihi. The person was the first jara. So Ajimarihi
gave him hammer, machetes, knife sharpening files and sent him away. That jara was from the people of São Paulo (São Paulo madi). Then, making the same again and again, other jara groups appeared: the people of Brasília (Brasília madi), the people of Rio de Janeiro (Rio de Janeiro madi), the people of Porto Velho (Porto Velho madi), and here (Ania scratched in the sand)... Here is the ocean (bami amadini)... On the other side Ajimarihi sent the Europeans (europeu madi)...” (Ania to the first author, October, 2021)

It is worthwhile commenting briefly on what Ania said. First, he changed the order of appearance of people in the story. In all variations of this myth documented in the literature (for example: Aparicio, 2013a; Huber, 2012), Saramadi, a people which Suruwaha claim to descend from, were the last ones to appear. In Ania’s version, Suruwaha succeeded Masanidawa – not Saramadi – and the Masanidawa were the first ones to appear.

We hypothesize Ania’s version was adapted to the specific audience/context. Only Ania and the first author were present during the interaction depicted in the excerpt above, and the former was succinct in telling the myth. Moreover, a few days earlier, with both present in a group conversation about the -dawa subgroups and their original territories, the author presented the proposal of an ethno-mapping project. The project’s main objectives were to map, in collaboration with Suruwaha, their traditional and actual places of kazabu hunts, zawada hunts, fishing trips, and so on. In light of that, it is possible that Ania might have stressed out that “at the beginning, all land belonged to Indigenous people” and that the first peoples to appear were Indigenous peoples as a way of communicating the necessity to reevaluate the limits of their actual land, recognized by FUNAI in 1988 but much smaller than their territory actually is.

Methodological reflections for behavior analysts and pathways for establishing demands

In this section we will present some methodological reflections – in the form of suggestions – arising from field observations and specialized literature. We do not believe our suggestions are “universal,” since they are based on contextualizing methodologies and, therefore, we encourage the reader to assess their pertinence on a case-by-case basis.

First, if we want to engage with diverse communities, it is necessary to understand what the characteristics are of such diversity. In the Suruwaha case, we may consider them as living as a community that encompasses specific characteristics in terms of territory, culture, language, political and social contexts, to say the least.

Territorially, they live isolated from other human populations. Culturally, they share traditions, rituals, and values. They share an identity, illustrated by them descending from the Saramadi. And they share similar cosmological perspectives. Linguistically, they are part of a specific verbal community, their language is beautiful (ati tijuwa) and part of the Arawan linguistic family. Politically, Suruwaha are constantly dealing with threats to their livelihood in face of
neocolonialism and its fallout. Socially, perhaps the most distinguished feature is the fact that the Suruwaha community is a kin-based one. As defined by Guerin (2016, p. 64):

“Roughly put, kin-based families and communities are groups in which most people are related to one another as kin; they spend most of their time together or have the strongest relationships with each other, and they sometimes exclusively marry within the community, and resources are channeled through the community for most members”

The second step we consider useful in engaging with diverse communities is to broaden and deepen one’s knowledge of the history of the community in question. Each community has its own history – what Guerin (2016) calls the historical context. The goal here is not that of a mere description, however useful it might be, but to understand how such history influences the relations between the behavioral community psychologist and the people with whom he works. In the Suruwaha case, as the many populational displacements and livelihood disruptions due to colonization ensued, in recent years they used to obtain relevant resources from SESAI and FUNAI members working with them. The majority of verbal interactions between the Suruwaha and the first author, for example, were originally in the sense of asking for things.

Nowadays, some Suruwaha, mainly the younger ones, are somewhat fluent in Portuguese. Inversely, SESAI and FUNAI members working with them speak only a few words in Suruwaha. Consequently, the communication between both parties is not effective and there is plenty of miscommunication. When the first author began to understand the Suruwaha language, it was not infrequent that Suruwaha people asked him about the meaning of words they heard other FUNAI and SESAI officials using: what guilty means, for instance. Nevertheless, as Suruwaha obtain some crucial resources from jara, they learned words for said resources in Portuguese.

Verbal episodes regarding objects exchange were recorded by the first author in his early field trips while accompanying some Suruwaha men on a zawada hunt:

“While I was alone with them (the Suruwaha on the zawada), it was horrible because (1) I felt myself as someone who did not know how to do anything – I saw them going out in the forest gathering wood for the camps; to make jiraus (a wooden frame used for game and fish), and so on. In all this, they knew what stick to use, how to use it, how to hold a machete, how to make the cut and so on; (2) sometimes they have offered to exchange objects, which has bothered me a lot, since this is not the kind of relationship that I want to establish and maintain with them...”

(First author’s field notebooks, 09/07/2018, italics added.)

Although verbal interactions regarding the exchange of objects were initially uncomfortable, they were occasions to consider some aspects. The frequency with which Suruwaha used to keep conversations about object exchanges could
be interpreted as reflecting the quality the relationship with them. In this sense, variability was also important. If conversations about such exchanges became less frequent concomitantly with an increase in conversations about other topics of interest to both, this could be taken as a clue that the relationship was improving. In this sense, as we can deduct from Guerin et al. (2018), research and/or interventions with kin-based communities implies much more the construction of relationships between researchers/interveners and the people with whom they work than simply collecting data. By means of building trust with those with whom behavior analysts work, it is possible to establish work demands aligned with the interests of the community, as we will argue later.

Improving the relationship with those whom behavior analysts work with involves abandoning the stance of a service provider only, and aiming at becoming part of the verbal community, assuming more complex roles as the audience. To achieve this, the first author adopted three stances professionally. First, although it would be financially impossible to afford all Suruwaha demands regarding objects, efforts were made to at least partially meet them. We believe it would be good for the community if those tools were provided for institutionally, as policy, minimally compensating for the severe livelihood disruptions they faced historically. But such a policy is of FUNAI’s discretion and there are other complexities in considering this. As any successful verbal interactions, these requests happened more often but, on the other hand, this opened possibilities for a deeper connection between him and Suruwaha.

The second stance adopted involved reading up on ethnographical, anthropological, and linguistic materials regarding not only Suruwaha but also the other Arawan Indigenous peoples, as a way to get to know more about the Suruwaha culture and language. Studying those materials aimed at promoting adequate and effective rule-governed behavior (Skinner, 1974). Rule-governed behavior is always concise and imprecise if compared to behavior shaped directly by the contingencies of reinforcement (Skinner, 1974). In this sense, ethnographical accounts are concise descriptions of a culture in a given period. Similarly, referring specifically to linguistic materials, Baum (1994/2005) states that grammar is a rough description of certain kinds of verbal behavior.

Despite the inherent limitations of rule-governed behavior, ethnographical, anthropological, and linguistic materials were of fundamental value, especially during the first field trips. For instance, there is no systematic Suruwaha grammar material available. Nevertheless, there are materials on phonetics and unpublished fragments of Suruwaha grammar that the first author obtained with an anthropologist who had worked with Suruwaha for several years. Such materials allowed some grasp of the Suruwaha language, despite occasional differences between what materials describe and the way Suruwaha themselves talk in their daily life.

The stance of reading up on ethnographical, anthropological, and linguistic literatures while also reaching out to other professionals, from other disciplines, can be summarized as a stance of abandoning disciplinary centrism in favor of a more effective communication and a delivery of services that are meaningful for the people we work with (Kirby et al., 2022; Neuringer, 1991).
Finally, the third stance concerns proper engagement with Suruwaha community. In fact, engaging intensely with a kin-based community one is working with might be the most relevant stance to improve the relationships and map out demands aligned with the community’s interests (Guerin, 2016; Guerin et al., 2018). This means living daily with community members, observing extensively and registering what they do, what they say, who talks with whom, identifying kinship relationships, and social strategies in place. Most of all, perhaps, it involves being part of some of the contingencies present in the community, as participation. Contingencies “shaping and maintaining human behaviors are already there in people’s worlds,” so behavior analysts “need to go out into those worlds and systematically describe how these functional relations are structured, how they operate, and how changes occur in the structures (and hence in behaviors) over time” (Guerin, 2019, pp. 254–255).

Even with communities that are close to us and well known, we need to avoid “stereotyping” behaviors based on broad interpretations. “People’s actions and thoughts are always context-dependent so there are no absolutes and therefore all stereotypes are wrong and need checking in detail with the actual contexts of any individuals or groups” (Guerin, 2016, p. 23). With diverse communities that risk is even greater, but as we participate in a more “direct experience with the people involved; that often corrects stereotypes, as you see many more contexts leading to their behaviors” (Guerin, 2016, p. 23).

With respect to Suruwaha language, as Suruwaha are not literate nor have they demonstrated a wish to be so, a strategy adopted by the first author during his field works was to record – when allowed to do so – Suruwaha telling histories and other verbal interactions. Immersion in the verbal community provided a more thorough comprehension of verbal contingencies. Despite not being fully fluent in Suruwaha, the author can reasonably understand what people are talking about and hold conversations. Acquiring such skill had the consequence of diversifying conversation themes and improved the quality of interactions.

Regarding Suruwaha culture in general, part of the stance adopted involved producing thorough field notebooks. This meant, among other things, producing detailed descriptions of three kinds of relationships: those of Suruwaha among themselves; relationships between FUNAI and SESAI members and the Suruwaha; and, finally, relationships of FUNAI and SESAI members among themselves. Documenting of Suruwaha relationships among themselves focused initially on who used to walk with whom, what kind of relationships they kept with each other according to their kinship affinities, and so on. However, describing and documenting social contexts are not easy tasks to do, as argued by Leugi and Guerin (2016):

“the difficulty seems to arise first, in describing the social contexts or environments, and especially the relations between social actions and environment: social contexts are very fluid and change in complex ways, unlike the experimental environments used in behavior analysis research with both animals and humans. The second difficulty seems to arise from documenting the changes in social environments that would maintain – and indeed change – the social actions” (p. 76).
With time, the first author began to spend less time on writing down his field notes. By getting to better know the functioning of Suruwaha culture, he could filter the information and write down what was most relevant. The functional possibilities (cf. Guerin, 2016) he had come up with for some social behaviors observed could be discarded as less likely and replaced by others, more likely.

Finally, to conclude this section, we believe that by engaging intensively with Suruwaha, and getting to know more thorough improved language skills, the first author could deepen a connection with them by being able to converse about themes that were of interest to both parties. This is of special interest and importance while working with diverse kin-based communities.

The initial relationship building context was chanting together. Realizing that the first author took great interest in their chants, Suruwaha not only began to speak more thoroughly about them, but also taught the first author some chants and asked him to record them. A passage from the first author’s field notes makes this point clear:

In the evening, I was eating with Mawini and Juwawi. They started singing some Suruwaha chants. After dinner, we kept singing in the warehouse that leads to the port. They asked me to record their chanting, which I did, obtaining more than 30 minutes worth of Suruwaha chants… (The first author’s field notebooks, 03/09/2019).

Conversely, since the first author used to play guitar, they started asking him about the songs he played, to teach some chords and the like. This moved the focus of conversations away from object exchanges, for instance.

Deeper engagement with the Suruwaha led to a greater understanding of their language. In more recent field experiences, Suruwaha began to speak more frequently to the first author about the various -dawa subgroups, their respective territories, the process of recognition of the Suruwaha territory by FUNAI in 1988, the first contacts, and so on. With genuine interest in these subjects, they became more and more frequent in conversations.

One day, as a result of the deeper knowledge gained from all those conversations, the first author met with Suruwaha and proposed a project of ethno-mapping of their current and historical territories. In this sense, the goal would be to map out their current and historical malocas, their actual and historical places of zawada hunts, kazabu hunts, among other sites, by accompanying the Suruwaha to the relevant places and georeferencing them. Overall, this project could help reevaluate the borders of their current territory, since the Suruwaha themselves claim that the current border does not correspond to what their real territory should be. Even though the Suruwaha community embraced the project, there are other institutional and political complexities in such an endeavor. On top of that, defining the extent and borders of indigenous lands is a subject assigned institutionally to FUNAI.

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4 Aparicio and Huber (2010) made something similar. However, in their ethno-mapping effort, they restricted themselves to Suruwaha oral reports and mainly the historical ones, not going systematically to the places indicated by them or georeferenced them.
Concluding remarks

In light on all that, we propose that behavior analysts conduct their practices in culturally and ethnic diverse communities considering at least eight broader points.

We should consider and guide our actions through (1) principles of collaboration and consultation. Think of the BCP professional’s experience and how meanings for different practices changed over time the more he participated in social gatherings, enabling him to become more aware of issues concerning Suruwaha along the way.

There must be (2) respect and incorporation of diverse epistemologies in their practice (especially indigenous and from people living in the margins of society). Think of the Suruwaha idea that human beings are not particularly special in their place in nature, not by right or by “repertoire.” Such a point of view should inform any successful policy in the area regarding, say, livestock, territories, and forest preservation.

BCP professionals must (3) abandon the hubris of the expert in behavioral science and acknowledge that behavioral science will not likely produce successes if it is conducted without proper social contingencies that welcome such science. We have mapped out reliable principles of human behavior, but we also know that most of what governs any particular instance of human behavior is specific to a culture and history. People in the communities we work with are the experts in their own behavior (Guerin, 2016).

Ultimately, (4) people in the community have the last say in what they require or want from us. Balancing out power relations and institutionalized control is not an easy task, but this is a starting point.

Behavior analysts and BPC professionals (5) should not draw conclusions directly from “W.E.I.R.D.” research (Henrich et al., 2010) results in interventions planned and implemented in highly diverse communities. Whenever we think we might have an answer to a problem, it is always necessary to ask if we gathered enough information on the actual context of the communities we are talking about, or if we are drawing a broad generalization mainly from data produced within very different societies or communities.

One must be weary that (6) most of the negotiations we ought to do in order to offer services with meaning for diverse communities will take place between conflicting world views. Unless there are Suruwaha BCP professionals, which could soften some of the conflicts, but some would still remain as there is always intrinsic diversity between communities, groups and subgroups, and even individuals.

Clearly, such views are not only conflicting but the “W.E.I.R.D.” portion of the world historically had – and in many ways still has – (7) power over diverse communities and that is an issue that concerns our potential rejection as service providers. Ignoring this would only lead to reproducing colonial bias intrinsically in our actions, and consideration of such history would directly affect our success as BCP professionals, at the least. In addition, and more importantly, (8) such power over diverse communities also enables us to do actual harm if we neglect or overlook such social and cultural dynamics (e.g., Gingles, 2021).
Connecting those eight points to the fieldwork experiences of the first author in the *Suruwaha* community, there are some further points to make.

The first author approached the *Suruwaha* community as a FUNAI member. This is not irrelevant, as the first interactions observed in the field were “stereotyped” or historically determined – *Suruwaha* acted toward the first author in the same way as they were used to act toward all other FUNAI members. Moreover, if we consider that the *Suruwaha* might have learned, through their history of massacres and diseases, that *jara* are a very populous and powerful people, it is possible to assume that the first interactions were not between equals, unfortunately, nor between *Suruwaha* and a simple stranger, but between *Suruwaha* and a person belonging to a specific and institutionally more powerful people. As expected, historically determined power imbalances would have taken place in such initial interactions.

This implies that BCP professionals should not expect collaboration and consultation as a given when dealing with diverse communities. Even if, as a way of approaching a diverse community, a behavior analyst organizes a typical meeting in which he presents the research/intervention project to the community and the community formally accepts it. Even if such consultation protocols are followed, a truly decolonial and contextual stance should consider that institutional acceptance does not mean an effective collaboration. Effective collaboration and consulting probably emerge by trust and deep contextual understanding.

Finally, we believe that a new methodological stance is needed if we are to offer meaningful services for communities in which alterity reaches a certain level where we cannot connect immediately with peoples’ contexts anymore (i.e., we are entering markedly diverse and different verbal communities). We are not alone in this (cf. Sadavoy & Zube, 2021). Efforts to understand and provide meaningful services through collaboration with ethnically diverse groups demonstrate that “local context needs longer and more sustained observations instead of brief cross-sectional contacts; and second, that the development of interventions needs to be more local than general or theoretical” (Guerin & Guerin, 2007, p. 138).

We also believe that Behavior Analysis has the theoretical versatility and depth to come up with sensible, meaningful, and useful knowledge about the human experience in a broader sense than that which we have been usually restricted to. We believe a new methodological stance for community psychology in a radical behavioral perspective will have to consider innovative ways to be part of the “contingencies of others.” Especially, we believe that being part of the “contingencies of others” only makes sense in a broader framework of putting our tools to good use in fighting power imbalances and historical injustices (cf. Ibrahima & Mattaini, 2017; Pritchett et al., 2021).

**Declarations**

**Conflict of Interest** On behalf of all authors, the corresponding author states that there is no conflict of interest.
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