Feeding the earth: composting and compost in an indigenous garden in Rio de Janeiro

Camila Bevilaqua Afonso
Arthur Pereira Imbassahy

Museu Nacional, Programa de Pós-graduação em Antropologia Social,
Universidade Federal do Rio de Janeiro, RJ, Brasil

Abstract

This article examines compost as a theoretical concept taken from the practice of composting, which can be used to think about social processes. Compost is presented according to the practice of *feeding the earth*, by Niara do Sol and her colleagues at the *Dja Guata Porã* garden, located at the *Aldeia Vertical* [Vertical Village] in Rio de Janeiro. After introducing the garden and describing the composting processes carried out there, we argue that the theoretical figure of compost indicates a practice of mixing between heterogeneous elements that enables us to understand the plural sociability that exists in this garden space. This concept is also very fruitful for reflecting on relationships that differ from an ideal of purity.
Keywords: Compost, composting, Indigenous people in cities, landscape, urban gardens, multi-species.

e20905
http://doi.org/10.1590/1809-43412023v20d905

Alimentar a terra:
a compostagem e o composto em uma horta indígena no Rio de Janeiro

Resumo

O presente artigo trata o composto como um conceito teórico retirado da prática da compostagem, conceito este que também pode ser utilizado para pensar processos sociais. O composto é apresentado segundo a prática de *alimentar a terra* realizada por Niara do Sol e seus colegas na Horta Dja Guata Porã, situada na Aldeia Vertical, no Rio de Janeiro. A partir da apresentação da horta e da descrição dos processos de compostagem ali realizados, argumentamos que a figura do composto aponta para uma prática da mistura entre elementos heterogêneos que permite pensar a socialidade plural existente nesse espaço, sendo também um conceito teórico muito produtivo para entender relações que diferem de um ideal de pureza.
Palavras-chave: Composto, compostagem, indígenas na cidade, paisagem, hortas urbanas, multiespécies.

Feeding the earth: composting and compost in an indigenous garden in Rio de Janeiro

Camila Bevilaqua Afonso and *Arthur Pereira Imbassahy*

Introduction

In this article, we argue that more than merely being a place for community planting, *the garden is a way of thinking about relationships*. Plants, food, medicine, bodies, relationships, autonomy, money and, above all, vitality for the land and the human and non-human participants involved are produced from this engagement. Through composting, situationally and non-deterministically, food remains that could be ignored as waste enters a process of care and transformation, with the potential to restore fertility to the land and generate a more fruitful future.

In the first section, we present a garden called *Dja Guata Porã*, located in the centre of Rio de Janeiro and largely composed of indigenous people of different ethnicities. In this garden, we observed a focus on the transmission of knowledge through practice, in which care and intimacy with the compost, the land, the plants, the people and other beings involved is a fundamental factor in its success. Rather than seeking abstract knowledge through cataloguing species, for example, the garden participants prefer to stick to specific situations, paying attention to the needs of each being and emphasising the interconnections between the health of the land, the garden and the human and non-human beings present there.

Next, we focus more specifically on the practice of composting, since it is a process that provides us with the basis for the elaboration of a theory of compost. In composting, a correlation exists between giving nourishment to the earth and producing future food. More than a cycle, it is a transformation process that requires constant care, attention and intimacy with each specific compost. Composting highlights a fertility that is not produced through the harmonic synthesis of pure elements, but rather through the decomposition and reuse of heterogeneous elements, by diverse beings in squalid contexts. In composting, favourable conditions depend on the transformation of organic matter by a multitude of beings, from bacteria and fungi to earthworms, insects and humans, without achieving a complete convergence, but rather collaboration between them.

In the last part of the article, we perform a bibliographic review of the theoretical discussions around the concept of compost, which emerges from the practice of composting. We propose that this theoretical formulation assists us in understanding not only the functioning of the garden and composting, but also the plural modes of sociality that exist therein. Here, the theoretical discussion approaches that of 'compost politics' (Abrahamsson & Bertoni, 2014), in which the authors propose the existence of a mutualist aggregation between different beings and activities in composting, producing specific results for each of those involved without necessarily meaning identification between the parties involved. We also rely on proposals for attention to the multi-specific landscape, focused on the relationships between humans, other species, microorganisms, and the environment. In this approach, the landscape is generated by the collaboration between humans and non-humans, in a continuous process that requires the collective activity of different beings with different purposes (Tsing, 2005), something that we observed to be fundamental, in general, for both the functioning of the composter and the garden.

In all cases, there is an underlying opposition to the metaphysics of purity, which assumes stable definitions and a certain state of cleanliness, moral or bodily, as if it were possible to maintain separation between different beings, while avoiding any kind of contamination. On the one hand, there is a modern presumption of purifying the world, as Bruno Latour (1993) discusses, but also, more specifically, an ideal that aims to detach individuals from an entanglement of relationships. Thus, concerning the metaphysics of purity, Shotwell (2016) highlights the assumption that problems in the production and consumption of food can be solved through individual choices, regardless of the collective, or that it is possible to determine which species are native or not, thus eliminating foreign species, as discussed by Mastanak *et al*. (2014) on the concept of native and the pursuit of social and botanical purity.

In the case of the *Dja Guata Porã* garden, we observe a diversity of plants and processes that are not intended to be exclusively native or traditional, even though they are carried out by people who identify as indigenous. This is an encounter between different plant species and indigenous persons of different ethnicities, with different origins, who embrace this collective entanglement rather than deny it. We propose the vitality of the theoretical category of compost to assist in understanding this multiple sociality mode, which aims to produce vitality in the future through relationships and practices carried out in the present.

A garden called *Dja Guata Porã*

The garden known as *Dja Guata Porã* is being developed on one side of a housing complex, next to a building inhabited almost entirely by indigenous people, which the residents call *Aldeia Vertical* [Vertical Village]. Constructed in 2014 by the housing plan *Minha Casa, Minha Vida* (MCMV) [My House, My Life], the complex has 53 apartment blocks and is located on Frei Caneca Street, in the centre of Rio de Janeiro, on land where the Frei Caneca Penitentiary Complex once stood, which was the first prison in Brazil and was demolished in 2010. The garden occupies the space between the back of the buildings, extending for about 25 m (80 ft) in length by 5 m (16 ft) in width, between the housing complex and a large stone wall built in the colonial era, which is 10 m (33 ft) in height, and has been maintained as historical heritage following the demolition of the prison. In a small space, restricted by rules determined by MCMV and its manager, the Caixa Econômica bank, the garden is unrestricted in terms of its potential for constructing new types of relationships.

The project team is led by Dauá Puri, Elvira Alves Sateré Mawé and Niara do Sol; the latter is the daughter of Fulni-ô and Cariri parents and is the space's creator. The team also includes apprentices – the main ones are Jonas and Escovino –, as well as several students and visitors who participate in activities and occasionally work as volunteers. In addition to the *Dja Guata Porã* garden, also known as the *Aldeia Vertical* garden, the collective also cares for plants at the Frei Caneca Family Clinic and at the *Horta Carioca* [Carioca Garden] in Morro do São Carlos. These form a network that interconnects with other partnerships that have developed over time, through which exchanges and the propagation of seeds, seedlings, and knowledge take place.

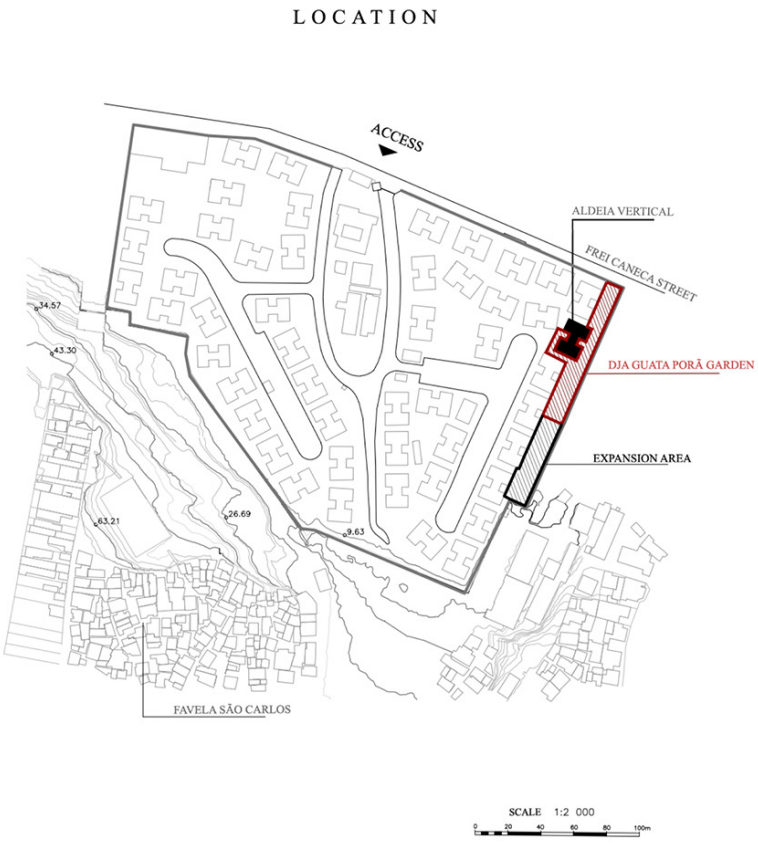
The fieldwork on which this research is based first began at the *Horta Carioca* in Morro do São Carlos, in 2016. The following year, we followed the occurrence of the *Horta na Praça Mauá* [Mauá Square Garden] and later, in 2018, the development of the garden at *Aldeia Vertical*. The origins of the *Aldeia Vertical* garden date back to 2017, when some participants involved in the *Horta Carioca* in Morro do São Carlos, including Dauá Puri, Niara do Sol and Iracema Pankararu, were invited to participate in the *Dja Guata Porã* exposition, held at the *Museu de Arte do Rio* (MAR) [Rio Art Museum] for one year. Iracema had a stall to sell handicrafts with other indigenous people, Dauá participated in the exposition on the Puri people, and Niara was responsible for the *Estação da Natureza* [Nature Exhibit], which consisted of a garden inside crates on display in the flowerbeds of Praça Mauá. The exposition garden consisted of almost 200 crates, with a wide variety of species.

Niara is proud of the project, since in addition to having received institutional support to organise it, many people passed by the square every day and were interested in the plants. This enabled Niara to strengthen two pillars of her garden project: planting and teaching.

As the exposition came to a close, the *Estação da Natureza* had to be dismantled, leaving the question of what to do with all those crates of plants. Apparently, the most obvious choice was to take all the material to the MVMC complex. Fortunately, and perhaps due to the institutional support of the MAR, or Niara's persistence, the *Aldeia Vertical* managed to obtain permission, which had previously been denied, to plant all the seedlings at the back of the apartment blocks. In addition, MAR arranged the freight that took the crates to *Aldeia Vertical*, and thus the new garden began. Niara kept the name *Dja Guata Porã*, which in Guarani means 'walk well and walk together', as a tribute to the exposition.

The idea for this new garden was to turn it into a nursery for seedlings. Thus, the objective was not just to plant, like they had at the *Horta Carioca*, nor just to teach people how to plant or handle plants, like at the garden in the *Estação da Natureza*, but to also make seedlings available to people who intended to grow their own garden. Thus, the garden called *Dja Guata Porã* works as a mother garden that enables the expansion of other similar initiatives. This article focuses on this garden in particular, even though the project actually consists not only of a garden, but also a network and a seedling nursery that is intended to be a catalyst for transformations, providing other people with the opportunity to learn how to plant so that they can start their own gardens.

Figure 1. Map showing the location of the Frei Caneca Minha Casa Minha Vida complex, Aldeia Vertical and the Dja Guata Porã garden.



Source: elaborated by Priscila Martins

Dja Guata Porã is a kind of garden[1] that evokes the origins of the term, in which the existence of both edible and medicinal plants is reconciled, together with ornamental plants. Ornamental plants are used to attract collaborators, both human (visitors) and non-human (pollinators). Among these, some species are cultivated for their properties – attracting insects, butterflies and animal pollinators – and others because they produce flowers and attract people from the surroundings, 'calling' them to walk around and take pictures in the area. Over time, an aesthetic concern began to be developed in the garden, such that, *by way of* people's fascination with flowers, which can serve as a lure, the garden attracts the attention of those who were not yet aware of the work carried out there. However, in a markedly different manner to the colonial botanical endeavour (Groove, 1995), whose interest in species was encyclopaedic, that is, cataloguing and compiling them, the interest of the *Aldeia Vertical* garden is practical, such that what is of interest to its creators *is the use of these plants*, rather than their classifications.

In the *Aldeia Vertical* garden, knowledge occurs through observation within a specific context in which a practice is *required* – and never randomly taught. Learning occurs more through observation than through verbal instructions, such that questions are frowned upon. This learning takes place through repetition, with the aim of perfecting the practice that must be put into motion. Thus, learning should begin with practice and lead to practice, in which knowledge is not acquired for curiosity or just theoretically.

Niara tries to conduct the pedagogical space of the garden in a manner consistent with the vision that emphasises the specificity of each being and the importance of knowledge being practical, both in its acquisition and in its subsequent application. Therefore, she emphasises that knowing the plants through their use, treatment, and origin is more important than cataloguing them or consolidating this knowledge through writing. During attempts to identify and list all the plants present in the garden, we encountered difficulties and a lack of interest from Niara and the other participants for this type of initiative. These difficulties included fear and lack of consensus concerning the name of each plant, which were not found in isolated beds, but were always mixed with others, but mainly due to the fact that the plants are in movement.

In a short period of time, new plants arrived and others were transplanted to different beds. When asked about this, Niara made us aware that plants changed places not only there, but in all the gardens. This is done not only to prevent soil depletion, but also because each plant has its own needs, which requires daily work and constant care in cleaning, replanting, harvesting, transplanting and composting to keep the garden healthy. Deep down, this knowledge removed from its practice space loses much of its potency and becomes something different from the learning proposed by Niara, since work in the garden is not based on *a collection of botanical information, but on a posture towards plants, the soil, the environment and treatments for human diseases*.

Botanical curiosity and the various practices related to biodiversity were certainly already present among the Amerindian peoples long before colonisation; however, based on *their own diverse logics*. It is important to think about the infrastructure of the garden and how it is created based on certain relationships between humans and plants, and how such relationships can favour different beings, as Myers (2017) points out. In the case of the *Aldeia Vertical* garden, its design is thought out *together with the plants*, which, according to Niara, have *the autonomy to choose where they will be placed*. Moreover, according to Niara, plants *speak* – and she listens to them. The logic at work in the garden is closer to the science of the concrete, which proceeds more through the sensible qualities of beings and objects than through the abstract logic of formal properties (Lévi-Strauss, 1962), wherein the latter would seek to classify, consolidate and design the garden *a priori*.

1 'The Latin termed *hortus gardinus* denominated a space for growing fruit trees, vegetables, greens and flowers, close to homes. The etymon is present in the English garden and in the German *Garten*.' DA SILVA, Deonísio. 2014. *De Onde Vêm as Palavras*. Rio de Janeiro: Lexikon.

Unlike vegetable gardens that are designed and then planted, in which each species has a bed or a previously delimited space, the *Aldeia Vertical* garden is conspicuous for the multiplicity of plants that share the same space and for its modularity. The plants are mixed together, and many of them are planted in crates, which enables spatial rearrangement whenever necessary. During a visit by architecture students to the garden, Lévi-Strauss' opposition between the bricoleur and the engineer reappears transformed. The students made proposals to spatially reorganise the garden: instead of mixing plants, they proposed designing beds for different species and concentrating the crates in certain areas to increase the circulation space in the garden.

Niara replied that they thought like architects, while she thought like an indigenous woman. The choice of where the plants are located, according to Niara, was not hers or the architects, but of the plants themselves. They should only be rearranged by paying attention to their practical needs, for example, whether or not they like certain lighting conditions or sharing the soil with other species. Moreover, Niara tells the students that it was difficult for them to understand, but when planting a seed, she would talk to the seed to find out where the future plant would like to be. Therefore, it was not up to Niara to decide arbitrarily, because if she chose a place that the plant did not want to be, the seedling would simply not grow. On this occasion, Niara reminded the students that everything they thought she had already experienced in practice, and that abstractly drawing a garden or vegetable garden that has not yet been planted is one thing, but what she does is quite another, since the plants already exist before the drawing is made[2].

There are certain species in the *Aldeia Vertical* garden that are planted in rows and that fulfil specific functions, for example *ora-pro-nóbis* (Barbados gooseberry), a vine with thorns that rests on a bamboo fence and divides the internal flower beds, close to the housing complex, from the external flower beds, where there is a path that traverses the garden parallel to the large stone wall. However, this separation favours modularity and multiplicity, since it prevents the smaller plants in the internal beds from being disturbed or removed by those who pass through the external path of the garden. When the architecture students proposed freeing up more space in these external flowerbeds, Niara emphasised that she prefers less free space precisely so that she can better control circulation and avoid empty land so that passers-by and the MCMV residents do not throw rubbish there.

Thus, there is a logic behind the (dis)organisation of space: a vegetal logic.

> I have a slightly different planting method to other people. For example, in order to plant this plant—which you're stepping on, and destroying—that's called St. John's Wort, I need to know what it's for, what its purpose is, how it's supposed to be used. So, nothing that has been planted here is planted without rhyme or reason. Everything planted here we know about and then I explain it to people who come to take courses, who come to study. (Naira, interviewed by Martins, 2021)

This differentiated logic in planting, Niara's logic, is guided by the potential utility of plants and designed to meet the various needs of numerous species, not just human needs.

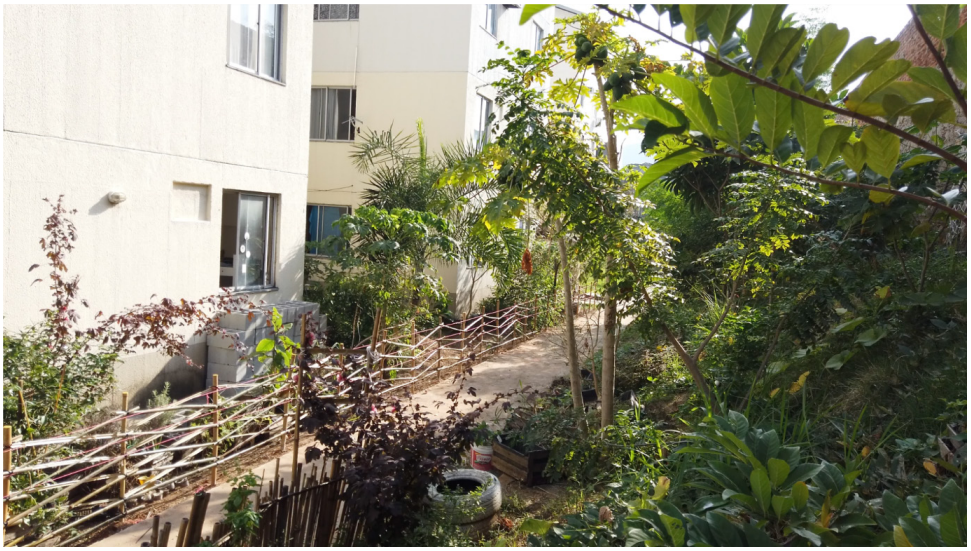
On the other hand, the space is purposefully organised to make circulation more difficult in some sections to hide certain species and protect the plants. This is done to prevent both the plants and the garden from being accessed incorrectly. The fact that it is aimed at teaching and propagating seedlings does not mean that this transmission can be achieved in any manner. The plants are arranged in space according to their own will, as interpreted by Niara, but also to ensure they function in accordance with the project's pedagogical guidelines.

2 Even in gardens that are exhaustively planned *a priori*, like Aterro do Flamengo (Flamengo Park, in Rio de Janeiro), there is a high degree of unpredictability as to which plants will adapt or not. The botanist in charge, Luiz Emygdio de Mello Filho, who advised Burle Marx on the implementation of the project, says that they planted many trees from the Atlantic Forest that did not adapt, while certain Amazonian trees, such as the Abricó de Macaco (Cannonball tree), adapted incredibly well. Asked about this, he said 'there is no logic in botany', and that is why it is good. (Mello Filho, 2001)

Cultivated in an opening in the land, in a space between concrete buildings and a ten-meter wall, the garden began behind the *Aldeia Vertical* apartment block and slowly expanded, occupying the space at the back of many other buildings in the housing estate. In the midst of 50 four-storey apartment blocks, where there are few non-concrete spaces, the garden stands out from its arid surroundings, with dense planting beds and tall trees, a broad diversity of plants, flowers, insects and birds. As Dauá emphasises in an interview for Martins (2021):

> When I arrived here, this building was in very bad state. Sleeping here was really bad. And now, it's not: I lie down and look, look at the birds. It's wonderful. But if we didn't have the hand of an Indian woman, our doctor, planting and doing this work, we wouldn't have this well-being. So, the forest is here. You can do it. [...] Many things have changed; people began to see it and started planting in their homes, improving the entrance to their place, having access to a little indigenous medicine. So, it's changed a lot, and it'll keep changing. Because it's contagious. And it has to be contagious. indigenous culture is meant to be contagious and dominate the planet. Let everyone get back to planting, taking care of the earth and taking care of themselves.

Figure 2. The *Dja Guata Porã* garden on one side of the *Aldeia Vertical*.



Source: Authors' archives

Composting as practice and compost as theory

An example of Amerindian production in the environment is the *terra preta de* Índio [*lit.* indigenous black earth], encountered in several locations of historical indigenous settlements and is considered to be of high productivity, showing that indigenous technologies effected changes in the forest. *Terra preta* is an anthropic, fertile, productive soil created around indigenous settlements. The formation of *terra preta* is demonstrably a consequence of human occupation of the territory, and not its cause, although it is not possible to determine whether or not it is the result of an intentional process. One hypothesis is that this soil is formed by a type of organic waste management similar to composting (Neves et al., 2003).

Several archaeological studies show that there was greater occupation and interference in the landscape of the Amazon than previously imagined, emphasising that the region, known for its biodiversity, is an anthropogenic space (Clement et al., 2015; Balée, 2013). Hence the importance of understanding that this biodiversity was created by the action of these Amerindian populations, and not in spite of them. Authors like Clement et al. (2015) call the process of human interference that leads to increased biodiversity in the forest 'landscape domestication'.

At the *Aldeia Vertical* garden, composting is what makes the garden viable, it is an important practice for cultivation, which here assumes centrality as a concept that helps in understanding the productive mixing among heterogeneous elements. This is because the concept of composting enables us to reflect on the uniqueness of encounters, process adjustments and work in the present time, with the intention to produce fertility in the future. Niara explains that she actually calls it feeding the earth:

> People here call it composting. In my house, I learned that it was to improve the earth. To make the earth stronger, to give food to the earth (...). And the objective here is for this garden to be a mixture of what we learn in the city and a little of the things we learned from our family. People want to go back to the past, they're sorry for having spoiled the planet. The earth, the water. We have to start acting, trying to, helping the earth, because when you plant, here, for example... where we planted pigeon pea, when it's next year, at the same time, if you get here the energy will be totally different. It is so with the earth. The earth is happier. I felt like crying because the earth was sad. When you squeeze her, you feel that she has no life, that there's no smell. And when you squeeze her, and that smell comes out, that makes your mouth water, it means she's having a good life.

In addition to a soil fertility practice, composting brings us conceptual reflections that we explore later. Composting is the controlled decomposition of plant and/or animal waste whose purpose is to obtain organic fertilizer (CEPAGRO, 2017). In more detail, composting is the process of reusing organic plant remains, which, decomposed by worms and microorganisms, create a fertilizer that can be used for plants. This results in leachate, or liquid fertilizer, and humus, composed of decomposed organic matter that leaves the soil full of nutrients. Composting can be done in gardens, directly on the land or in apartments, in structures set up for this purpose.

In the *Aldeia Vertical* garden, composting takes place in holes made directly in the ground, close to the wall, where the organic remains from the kitchen of the participants and other residents from the building are placed and covered with earth, they leave the organic waste with Niara so that she can take it to that composter. Over time, these residues decompose and produce humus, used to fertilise the plants in the garden. As it decomposes, this material feeds and renews the earth, which is not very nutritious after years of neglect. Composting is the concrete possibility of inhabiting the ruins (Tsing, 2015), and also an alternative to the use of industrial fertilizers, which cause serious environmental impacts.

Similarly, philosopher Kim Q. Hall (2014) defends compost as an alternative language to purity, arguing that working with what might be seen as *dirt* can eventually make the world more liveable. Composting is completely based on interdependence, in which waste becomes the source of extract for that which will be new food growth. Thus, it is by working on what would previously be discarded that more sustainable options for the future are created. The author suggests that, through attention to eating practices, it is possible to think about the modes in which different bodies relate and how they are constituted. Thus, for Hall, eating practices are spaces for negotiating meanings with regard to community and identity.

In the case of the *Aldeia Vertical* garden, it is also possible to use the figure of compost to consider the trajectories and practices present therein that contrast with perspectives of purity, which we address in the next section, but also in the relationship between the garden, food and health. It is important to point out that the strengthening of bodies based on the benefits offered by the garden does not happen simply through the consumption of plants, but rather through the entire context of bodily and relational involvement with the space. The fact that the *Aldeia Vertical* garden is dedicated to medicinal purposes is central to understanding how it works. These relationships form a dense entanglement of interconnections that generate vitality. In this context, illness is thought of as a weakening of relationships both between humans and between plants and food (Langwick, 2018).

For Niara, taking care of the earth and taking care of her own health are interconnected attitudes, and she tries to teach this to the children who visit the garden. Thus, according to Niara,

> [It is] for them [children] to begin creating what we call love for the earth, you love the earth, knowing how you have to treat the earth so that she is always healthy, because that's one way for you to be healthy, distributing what we call universal love, love for all living thing—and plants are alive.

More than merely a source of medicinal properties and supplies, the garden translates a form of care on the part of those who conceived it and the bodily engagement of these people with the garden, which simultaneously accompanies numerous transformations concerning the space and the people. There is what Langwick (2018) calls vegetal politics, the objective of which is to support life—whether human or non-human—and what anthropologists Abrahamsson and Bertoni (2014) call *compost politics*. Based on a similar project involving medicinal gardens in Tanzania, Langwick (2018) points out that composting is more than a type of material waste management, it also involves ethical and social factors. For the author, making compost is about cultivating a successive relationship, in which part of the products from the garden return to the soil, making it fertile for new crops, thus establishing a continuous relationship with the vitality of the garden.

Abrahamsson and Bertoni (2014) propose a reflection based on the practice of composting and formulate what they call *compost politics*: 'Compost politics is neither assimilation through identity nor the dream of harmony but rather a mutual domestication of multiple and different activities' (Abrahamsson & Bertoni, 2014:134). For them, composting draws attention to forms of conviviality that are not pleasant or pure, and that can be carried out in different ways—in the soil or in a system of boxes set up for this purpose. Thus, assembling the composter as a system capable of working for this purpose involves not only *putting the parts together*, but also knowing how to separate what needs to be kept apart. Composting is therefore a specific aggregation of beings and mutualistic relationships that leads to the decomposition and reuse of organic material.

Although there is a general process for decomposing vegetables, which involves discarded organic material, earthworms and microorganisms, setting up the composting system is only the first step in a constant process. However, as those who compost know, several common problems can occur when using a composter during the coexistence and transformation process, and there is no general rule that can solve them. An example of this is earthworms, which can escape from the space where composting takes place.

Thus, as the authors indicate, no composting guide is able to provide definitive solutions to problems that may arise, but a guide can suggest possibilities and use stories from previous experiences to solve them. After all, there are numerous variables that affect the balance of a compost, and only through observation and experimentation can each specific compost be maintained. Thus, composting is a constant maintenance process, in which the balance is never completely stable. There is no better guidance for making compost than understanding the experience of other practitioners and creating intimacy with your own specific compost, learning to manage its elements and understanding how they combine.

The composter is affected by the types of food placed in it, by the health of the earthworms and other microorganisms, and by the climatic conditions outside it. To guarantee its proper functioning, it is necessary to make constant adjustments and pay attention to what is going on inside it. Composting is a continuous process of rearrangements and care that seeks to achieve favourable conditions for all the participants to transform together.

Abrahamsson and Bertoni (2014) draw attention to the fact that no manual can explain exactly how to proceed in each case, it is limited to indicating measures that have previously worked in similar situations, but that need to be tested in each specific situation. This is because each compost aggregate is unique and depends on the elements it contains, and on the environment where the process is taking place.

For the proper functioning of this aggregate, multi-specific attention is required, in addition to learning to communicate with earthworms whose language is that of food (Abrahamsson & Bertoni, 2014). The authors draw attention to the fact that the relationship with earthworms is not exactly one of control, and propose that the concept of mastery developed by Fausto (2008) for the Amerindian context can be used to consider composting as an interspecific relationship that involves both control and care, without distinguishing between these categories: 'But our bin is not in Amazonia: what transporting this category of mastery to our bins does for us is to do away with the assumed distinction between control and care' (Abrahamsson & Bertoni, 2014:141).

Fausto underscores this category of mastery as a differential within an Amerindian literature that tends to focus on the horizontality of Amazonian relations. In the category of mastery, according to Fausto (2008), there is an asymmetry between owner and what or who is owned, since the owner is in charge of all the needs of their creatures, and this relationship is not solely one *of control*, but also *of care* – that occurs not only between humans and their pets, but also between the cosmological owners of all other beings in the Amerindian ontology, which implies the ritualisation of hunting and gathering with respect to these owners of animals and plants[3].

The fact that human discarded food waste is turned into a compost used to create new food leads many people to evoke the idea of a circular system, which Abrahamsson and Bertoni oppose. They argue that composting should not be seen as a perfect cycle, since many transformations occur – and these, in turn, involve adjustments that need to be made throughout the process. Therefore, the operation of composting happens not only through human action, but also the action of all the other beings involved.

> The image of a 'cycle,' however, is misleading. In fact, it is too unitary and does not account for non-convergences, differences, and imperfect encounters. If it is true that you can use the compost to grow new vegetables, it is also true that a number of transformations go on in composting, and nothing 'comes back,' nothing is 'the same.' Eating, feeding and composting are transformative and always involve changes, that, although small, require specific solutions to specific problems. (Abrahamsson & Bertoni, 2014:138)

The practice of composting is a multispecific, slow, singular and practice-centred relationship. Contrary to harmonious ideas of coexistence, it is centred on relations of decomposition and reuse, which take place in squalid contexts. Compost politics works with impurities and muddy borders, and there are no general rules to describe it. The production of future fertility from current wastes only occurs through practice and care, to the extent that you understand how it is possible to make a specific aggregate of entities productive: 'Since it is concerned with the tinkering and caring that maintaining the bin involves, the kind of knowing that emerges from vermicomposting advice is a *knowing in practice*' (Abrahamsson & Bertoni, 2014:141).

This same sense of knowing through practice also applies to knowledge concerning the garden, which, as Niara highlights, cannot be reduced to a list of procedures, plant names or indications for their use, since it is much more than that. It is based on an entire mode of attentiveness, relationship and care with plants and within a holistic view of what *treatments and cures* are. This is the reason why ambivalent desires arise in the *Aldeia Vertical* garden: the difficulty in reconciling Niara's desire to publicise her project the right way and at the same time respect the forms of teaching of that space, and not to reduce it to an 'encyclopaedic' knowledge. In contrast, the garden can be seen as a space for plants and people displaced in the urban landscape, such that, what takes place in the garden is *compost politics* as opposed to *the metaphysics of purity*, which provides for stable definitions, whether for people, plants or processes.

3 The thinking on crops and wild plants can be understood from the perspective of Amerindian cosmology (Viveiros de Castro, 2002), in which agency is distributed among different beings, in a context where the very nature of things varies, which the author calls multinaturalism. Hence, certain authors point to ethnographic cases in which human cultivations are often understood as child-raising relationships, as discussed by Lima (2017) and Oliveira (2006). Similarly, in Jamamadi cosmology, plant species usually take prominence, even in relation to animals, as the protagonists of shamanic and perspectivist narratives (Shiratori, 2018).

There is a parallel between the development of the garden and setting up and operating an organic composting system. The *Aldeia Vertical* garden is a project composed of various knowledge collections and the trajectory of encounters among its participants and collaborators. Furthermore, by always gesturing towards practice, it manages to escape conceptual frameworks, rejecting abstract forms that reduce the garden to static terms. It is important to hear accounts and learn from other experiences, but each composting system, and consequently each garden, is unique and can only function properly if you pay attention to its own functioning and if there are hands-on experiments involving constant adjustments (Abrahamsson & Bertoni, 2014).

Just like gardens, no compost is the same as another, and each one can only be understood through the attentiveness and experience of those who dedicate themselves to it. Thus, composting is a constant process and not an end product that mixes up all the differences and eliminates them. Certain by-products of composting, in turn, enable the production of new elements that will again integrate the aggregate – this occurs in a continuous process, but, at the same time, always in transformation. The compost is produced from specific encounters and only through attention to these singularities is it possible to produce a fertile state.

Figure 3. Niara do Sol in the garden.

Source: Authors' archives

Compost against the metaphysics of purity

It is possible to trace a relation between ideals of botanical purity and ethnic purity. Much as there is an idealisation of botanical purity, in which each species has a specific place, there is also an expectation of ethnic purity linked to spatiality. Thus, indigenous people are seen as displaced in the city by a common sense that assumes that their place is in the forest (distant in space) or in the pre-colonial past (distant in time). indigenous city-dwellers are also often seen as 'mixed' in relation to those who are 'purer', who have had less contact with white culture. Each of these are mistaken ideas, which postulate the fixity and passivity of indigenous culture, and according to which there is no possibility for displacements and transformations, as occurs in other cultures (Sahlins, 1997).

In the *Aldeia Vertical*, residents commonly use the categories *aldeados*/*desaldeados* (Bevilaqua, 2017). These are situational categories, wherein *aldeado* refers to someone who comes from a village, even if they do not reside there, while *dealdeado* refers to those who do not come from a village. *Desaldeados* may represent a different experience of Indigeneity, but not one that is *lesser* or *greater*. In this sense, it is important to remember that spatial displacements certainly form part of the trajectory of most residents at *Aldeia Vertical*, but it is a mistake to assume the existence of a unidirectional movement—from the villages to the city (Bevilaqua, 2017). This mistaken assumption, that displacement always occurs toward the city, accompanies the idea of a loss of indigenous culture through contact with white culture. In both cases, movement is always towards a white, urban reality; urbanisation accompanies progressive acculturation.

However, in addition to starting from a static concept of culture, this logic ignores the experience of numerous participants in urban indigenous movements born in cities, who seek to return to the villages and reclaim their culture. In many cases the movement is the reverse of that initially assumed, involving complex movements to and from villages. It is important to be attentive to these different migrations, seeking to understand their specificities, without relying on abstract assumptions that paralyse the movement.

The trajectories and biographies of the people who compose the *Aldeia Vertical* and the garden indicate the importance of thinking through other theoretical paradigms than those of miscegenation or pure identity[4]. Niara, for example, was raised by indigenous parents and grandparents though in a mostly white town, where she went to school with white children and had to take lessons in etiquette. Niara says that she had to learn the manners of white people very well in order not to suffer discrimination. She always indicates what she learned from her parents and what she learned from white people. These learnings take place in parallel, and she is able to alternate between these forms of white and indigenous sociality without implying that they are confounded. This dual operation, however, does not involve a mixture nor does it make Niara any less indigenous.

In the *Aldeia Vertical* garden, the collection of plants also possesses diverse origins that can hardly be summarised by the category 'native plants', rather it is a veritable cornucopia of species brought from different places—the ancestrality therein was not only inherited, but actively produced and designed for the future. Niara's familial knowledge is not a fixed, closed framework, but rather an open form of doing and teaching, which always enable the incorporation of new knowledge, new practices, new plants, and new treatments.

Many of the objectives of the *Aldeia Vertical* garden are illustrated by the artichoke, since when they were eventually cultivated in the garden, they became the subject of didactic conversations. In many ways, the artichoke seems to sum up multiple meanings of the garden, as Niara explains:

4 The relation between the *Aldeia Vertical*, indigenous people in the city and anti-miscegenation theories have previously been discussed elsewhere (Bevilaqua, 2017). While anti-miscegenation emerges as an antidote to the ideology of miscegenation, emphasising the relations between Indigenous and white people from an Indigenous point of view (or the Black-Indigenous relation, in the case of counter-miscegenation (Goldman, 2015)), composite theories arise in opposition to ethnic or botanical ideals of purity, assisting our understanding of multi-ethnic and multi-species contexts.

> (Some people say:) Oh, but Indians don't use artichoke. Indians from Brazil! But there are Indians elsewhere who use it. And artichoke treats the liver. But people who have access to artichokes here in the city only include those who have very high purchasing power, because one artichoke costs 20 reais [US$ 4-5]. One! And it's a tiny tree that provides one portion. So, if you show people the purpose of planting artichoke, it's not just because of the beauty of the tiny tree, it tells people that they can plant them in their backyard and have something that treats the liver, which at the same time is a sophisticated delicacy, one that my neighbour, who earns one minimum wage and owns a piece of land, can have. And what [does that mean] to her, do you know? She receives a visitor and serves them an artichoke? She's serving food that is treating her visitor. So, these are the things that we want people, the city hall, the state, to understand that this is what we're doing.

It is worth adding that the artichoke serves as an example to illustrate the most varied intentions of the people who take care of the garden: knowledge of new foods, self-care – which comes from knowing the plants' properties – and the autonomy of being able to plant them. It is difficult to *consolidate* this knowledge in writing, much like *cataloguing* the plants and treatments, since everything is always in motion, adapting to each specific situation. The artichoke also exemplifies this multiplicity with regard to different plant naming systems:

> It's funny that you start planting and discover a series of things. There was a gentleman here last week, so we came here and when we walked over there, he said: 'You planted the St. Benedict plants.' And I replied, 'What do you mean?' Then he said: 'this is from St. Benedict. The artichoke.'

To counter the idea of defined origins, the garden has the logic of composts, aggregates of plants, people and beings of diverse origins. The complexity of the debate can be perceived in other accounts by Niara, who denies the idea of the precise origins of each species and casts doubt on whether such a thing can be proven due to the number of displacements suffered by all plants. Along these lines, she complains about the idea – the common sense – that indigenous people only exist in the Amazon, frequently using the concept of *native* to affirm that they were *the first peoples from everywhere in the world* –, meaning that all the knowledge she has acquired was originally indigenous –, as well as to denote the healing system she teaches and practices, which she calls *native symbols*.

For many of its participants, the *Aldeia Vertical* garden is a way to get involved with their ancestrality and to understand themselves as indigenous, providing connections that are often unexpected. Dauá, an important figure in the Puri resurgence movement, evokes the image of 'dormant seeds that sprout again', to articulate this hidden ancestrality and an indigenous identity that is reclaimed. One day, when students were visiting the garden, Dauá sat down with the students and began to tell the story of his family and how he researched his indigenous origins in the interior of the States of Rio de Janeiro and Minas Gerais as an adult.

As Dauá spoke, one of the students began asking him questions, asking for details, such as the exact names and cities where each person lived. The young woman seemed especially interested in the subject and asked Dauá what his father's name was. When she heard his reply, the young woman burst into tears and said that that was her family too.

Very moved, she and Dauá embraced. Everyone in the room also became emotional while watching the encounter. The young woman said that she never really understood the history of her family, and that when she met Niara, she thought that she had a very similar way of being to that of her grandmother. From that moment on, the young woman began to gather facts and ask Dauá more questions to understand exactly what the connection was between them. Dauá spoke about her family genealogy, recollecting her uncles and grandparents. And though the student was very moved, Dauá remained calm the whole time, and calmed her down. He did not seem at all surprised to have accidentally found one of his family in the middle of a group visiting the garden. Dauá then talked to her about going together to visit the town where their family lived.

Another example of the potential of encounters that take place in the garden is the story of Jonas and Escovino, two friends who began to frequent the garden at the same time and who became involved to the point that, at a certain moment they became the main helpers. In addition to caring for and organising the garden, over time, Jonas became more involved in learning about the medicinal qualities of the plants, learning from Niara about her treatments and accompanying her on appointments. In contrast, Escovino adopted the more practical side, getting to know all the plants well and using seedlings from the nursery to create his own garden in Marechal Hermes, the neighbourhood where he lives and where he mainly sought to engage the elderly residents.

Both lived in the West Zone of Rio de Janeiro and met Niara at an event that brought together different religious groups. Niara was one of the representatives of indigenous religions and Jonas and Escovino were present because they have links to Umbanda. When they met Niara, they became interested in her work at the garden and began to frequent the place. Jonas ended up moving to *Aldeia Vertical* and initially moved in with Dauá and Niara, and then into his own apartment at the MCMV. During this experience, he began to look into his family's indigenous ancestry, a path he continues to follow.

This role played by gardens – reclaiming and creating relationships – was also perceived by researcher Laura Hall (2015) when she recalls the experience of being in her mother's garden:

> My mother's garden is both the garden around the home where my Haudenosaunee-French mother raised my brothers and me, but it can also be considered in a wider sense—the garden as a creation within Creation—evoking not only cultural lineage but territorial histories and stories that can serve to renew fractured cultural and ecological connectivity. (Hall, 2015:283)

The garden thus emerges as a space for renewing connections, a place where new spaces are created in the elaboration of Indigeneity, functioning, as Laura Hall puts it, as a way of reclaiming these fragmented connections – both cultural and ecological. In this case, discussing fragmentation is not a delegitimisation, but rather a recognition of the existence of different contexts. Perhaps it is important to think of these fragments as Strathern (1988) uses the concept, recollecting that fragments do not assume a whole. It is the assumption of a totality, or, in this instance, of a pristine Indigeneity, which leads to the potential delegitimisation of people who are outside the imagined ideal. Therefore, recognising Indigeneity as fragmented intergenerational efforts is important to avoid reducing the indigenous movement to static, outdated ideas.

To be able to live the experience of the garden and understand the way its participants think and act requires us to abandon ideas of purity and embrace the complexity that exists in specific encounters and trajectories, without relapsing into broad reductionisms. The *Aldeia Vertical* garden is based strongly on local, native knowledge, which is not intended to be 'traditional', since they are open to using various 'external' resources that can assist in the treatments offered.

Understanding the idea of compost is also possible through that considered to be its opposite, which the philosopher Alexis Shotwell (2016) calls the *metaphysics of purity*, present in numerous modern discourses. For her, in many of these discourses there is a claim to purity, hence the search for a kind of cleanliness—of bodies, land, food and even history. The author also argues that it is necessary to think in terms of complicity and situational commitment, since there are no choices or actions disconnected from a larger context and that it is not possible, for example, to be exempt in relation to global processes of food and energy production. In this sense, she criticises the fact that collective ethical concerns are transformed into issues of individual consumption.

The idea of a purified body is reminiscent of a Garden of Eden—an image of a less morally complicated time sold in different products and lifestyles. Therefore, according to the author, it is important to remember that to live is to be involved with the lives of many other beings in entanglements that, in turn, always imply complicity,

making it impossible to reach an unattainable state of purity, whether bodily or moral: 'We're complicit, implicated, tied in to things we abjure. This is a kind of impurity implied in the sense of "compromised living" that involves making concessions' (2016:7).

The discourses analysed by Alexis Shotwell are not those with a presumption of modernity, which reject hybridisms, but rather criticisms of modernity. The author not only shows the error of this search for purity, but also considers it inefficient and demobilising in terms of fighting real problems:

> A central argument of this book is, of course, that personal purity is simultaneously inadequate, impossible, *and* politically dangerous for shared projects of living on earth. While personal purity may be a winnable aim in some ethical situations, it is impossible in situations such as energy use, climate change, and eating. (2016:107)

One case analysed in her book refers precisely to food choices. For the philosopher, eating is necessarily an act of choosing how to relate to the surrounding world, which also leads us to the question of the co-constitution of bodies, which are always intertwined with other beings. As she says, it is impossible not to eat and it is impossible not to make choices when eating, and it is also necessary to deal with the by-products of food, the energy used for transportation and the waste generated.

With regard to food production and consumption, Kim Hall (2014) also argues against assumptions of purity in individual choice when it comes to food. The author argues that it is an illusion to imagine that there are 'pure foods' or that good food is just natural, free from artificial ingredients and subject to individual control, as if it were not involved in a network of relationships. According to her, 'real food security requires food justice, not the illusion of self-sufficiency'.

Returning to the *Dja Guatá Porã* garden, even though there is an approximation with environmentalist practices, the issue of organic, natural or vegan discourses is viewed with scepticism by Niara and other participants in the garden. A number of times the dangers of certain plants are highlighted, indicating that 'just because something's natural, doesn't mean it's not harmful'. In many conversations about healthy eating, Niara, Jonas and other garden participants find vegetarianism and veganism funny, and when the term comes up, everyone there laughs at the idea of 'organic' food and asks *what foods are not organic*[5].

In the metaphysics of compost, proposed by Kim Hall in opposition to a metaphysics of purity, food is understood not only as a substance that is eaten, but as a focus of relationships (Heldke *apud* Hall, 2014). According to the author, the metaphysics of compost enable you to consider relationships as a network 'not all of which can be repaired through "good" choices and not all of which can be known or assumed in advance' (2014, p. 190).

This approach to food as a focus of relationships is highlighted in a number of studies on Amerindian peoples (Vilaça, 1992; Costa, 2013). In these ethnographies, food can be both the focus of differences between beings and the producer of similar relationships and bodies through commensality. These questions appear when Niara talks about her relationship with the birds in the garden: 'There are two papaya trees here. One is for the birds, the other is ours.' or 'This is chia. You know? The birds made a deal with me: that I eat the leaves and they eat the seeds.' In other cases, food is a matter of dispute:

5 In the *Aldeia Vertical* garden constant variation occurs between two concepts of culture, as conceptualised by Manuela Carneiro da Cunha. According to the anthropologist, culture without quotation marks refers to 'internalised schemes that organise people's perception and actions' (2009:313). In contrast, 'culture' with quotation marks is the representation that a group forms of itself in an interethnic context, a reflexive metalanguage, principally in situations where patrimonialisation, traditional knowledges and collective property are negotiated. We observed that the *Aldeia Vertical* garden is organised according to culture, following teachings passed down by different generations, while also incorporating new elements whenever necessary. In moments that require an explanation for collaborators and outsiders, however, 'culture' comes into play, when the organisers need to mobilise concepts to try to clarify how the space functions and engage the participants around a common imagination.

> The birds don't understand why, no matter how much I talk and explain: they don't understand. They think I can only eat the leaves, and the seeds are theirs. So far, they haven't left any seeds for me, they eat them all, like a blackberry bush. They don't understand that I need to eat one of those berries, they're rude. They could say: 'Let's leave a little bit for her, she planted it, especially since she's already planted another patch over there.'

As we emerge from composting, we propose that the concept of compost implies both a mode of relationship, in the sense defended by Hall, that is, as an agency of heterogeneous elements 'that is constantly being transformed by these relationships' (Deleuze *apud* Hall, 2014), but also implies a constant process of attention to ongoing transformations, potentially transforming waste into food for the earth, microorganisms, fungi and earthworms, and later for plants, animals and humans.

From another perspective, Tsing (2015) works with the concept of *contaminated diversity* to discuss fragmented and complex ethnic identities. Contamination is the idea that all encounters change worlds in common, the paths and trajectories of those involved. The idea of contamination seeks to counter the imagination of purity and self-contained identities. Tsing says that *survival* requires collaboration and that *living together* entails contamination. And, as seen, the word *collaboration* is defined as *living together*, and not necessarily as a concept of harmony and cooperation. Tsing argues that 'contaminated diversity' is the most common form of ethnic identity, but that, politically, it is a more difficult concept to work with than reducing people to identity categories.

The idea of collaboration was used by Jonas, one of Niara's apprentices, one day when presenting the garden to visitors:

> From the least loved to the most loved: rats of n qualities and sizes have turned up. Snails. The worker bees of the Workers' Party. Butterflies, I think they don't work, but they beautify the environment. There is also a breeding site here for low-flying birds... youngsters, right? Hawks... and us humans.

Together with non-humans, humans enter the list of space producers and users, and some of the non-humans are considered to be as legitimate producers and users as the humans in the space. The rats and snails, which do not contribute to the growth of the garden, are fought, while others (pollinators, birds, etc.) form part of the construction of the garden space and can enjoy it alongside the humans.

As already observed, the birds are important characters, and are mentioned by Niara and Dauá in different accounts as elements that indicate the transformation of the previous landscape, which occurred following the implementation of the garden. This is because the fact of seeing and hearing birds indicates that that space now has more life, it is less arid. In this sense, the birds are indicators that there is a fruitful, green environment with plants, trees, flowers and seeds.

At another time, Niara justified the presence of a certain plant, the shrimp plant, due to its usefulness—not for humans, but for hummingbirds:

> Over there is that shrimp plant. Why is this shrimp plant there and another that I planted up front? Because it's the food that hummingbirds like the most. We had a hummingbird that stayed here with us for ten days. They get sick and the birds come looking for us at the window to be treated.

In the case of the garden, whether a plant is native or exotic is not the criterion that defines whether it is planted. However, it is worth noting that the very conceptualisation of 'native' has raised several questions in the field of botany, with emphasis on criticisms of the so-called metaphysics of purity. Recently, in the United States, movements in favour of native vegetation have been associated with xenophobic anti-immigration movements, when identifying invasive plants as illegal immigrants. This fact led scientists to discuss the very concept of 'native', both in the social sciences and in the field of botany, a debate that is reviewed by Mastanak et al (2014). The authors argue that 'planting and displanting humans and plants are elements of the same

multispecies colonial endeavor' (Mastanak et al., 2014:363). Rejecting, on the one hand, the total relativism of botanical cosmopolitanism and, on the other, an ideal of the purity of nativism, the authors suggest that cases should always be analysed in their ecological and historical context. Validating the importance of the debate on native species as a discursive field, they also indicate that humans can be seen as a species that disturbs the ecological balance of the planet, particularly in the context of the Anthropocene.

As an alternative to the dilemmas of the Anthropocene, Haraway (2016) speaks of the need to overcome the idea of an individual delimited and separated from an external environment, both in biology and philosophy. To achieve this, she proposes the idea of compost as a means to form unexpected collaborations and combinations. Here, again, Strathern's idea that *relationships exist prior to individuals* is essential (1988). When thinking of the Chthulucene – the name that Haraway gives to the Anthropocene – the author resorts to the concept of the *banality of evil*, used by Arendt when speaking about the Eichmann trial. According to her, what characterises the banality of evil is the lack of thought concerning relationships.

In this case, it is not necessarily active cruel intent that leads to the perpetration of monstrosities, but rather thoughtlessness with regard to the implication of yourself with other beings and a levity in regard to the consequences of actions. It is interesting to note that Eichmann could not attain compost thinking, in the sense of making something present that was not there, of thinking beyond himself and taking responsibility for his part in a larger aggregate which he was part of and acted in.

> Here was someone who could not be a wayfarer, could not entangle, could not track the lines of living and dying, could not cultivate response-ability, could not make present to itself what it is doing, could not live in consequences or with consequence, *could not compost*. Function mattered, duty mattered, but the world did not matter for Eichmann. (Haraway, 2016:36; emphasis added)

Blindness in relation to everyone's involvement in an entanglement of relationships prevents awareness of the impacts of the Chthulucene. As an alternative to this way of thinking and not getting involved, Haraway draws attention to processes of *becoming-with*, in which reciprocal relationships of complicity exist. From the author's perspective, in order to stay with the problem you need to make new relatives, and, in this case, making relatives means creating non-human relationships — hence the slogan 'Make Kin Not Babies!' (Haraway, 2016): 'Staying with the trouble requires making oddkin; that is, we require each other in unexpected collaborations and combinations, in hot compost piles. We become-with each other or not at all' (Haraway, 2016:4).

Compost reappears here as a figure that represents this aggregate of relationships: a mixed, heterogeneous pile with great creative power. And despite being a project to build future potential from past forms, compost must always be a process carried out in the present and is always, by definition, a specific aggregate and cannot be generalised. Each input generates a different product, and attention to specificities is the only possible tool to *becoming-with*.

The *Aldeia Vertical* – a multi-ethnic village inhabited by indigenous peoples of different ethnicities – can also be thought of relative to compost politics, as a heterogeneous aggregate of people and cultures with different life trajectories, as mentioned above. In this context, the garden emerges as a fertile space for indigenous culture through the aggregation of diverse elements.

Niara and Dauá have plural trajectories. Niara was rigorously taught by her older relatives regarding indigenous healing practices, while also attending school for white children. In contrast, Dauá never received such stimuli from his family, so he was the one who had to *go after* his history, once he became an adult, seeking to regain knowledge that would otherwise have been lost. Now he can bring that to other people.

The idea that Niara's entire lived experience in the city does not diminish her indigeneity was clearly expressed on the day when she was talking about her helpers while we were maintaining the garden. She said that they needed to expand their knowledge, but that they were reticent. Niara reaffirmed that 'leaving their

worlds' and getting to know new things would be good for Jonas and Escovino and would not cause them to lose their identity—this while drawing a comparison with herself, who as 'an indigenous woman, does everything she does, and has not lost her essence'. Thus, encounters with otherness do not lead to a displacement of previous learning or family history.

Reflecting on spaces for the propagation of indigenous cultures—breaking away from the idea of static knowledge—, one alternative comes from Ingold's (2010) definition of learning contexts. The author proposes that we think of knowledge not as a collection of information, but as training our attention. He underscores that attention is not acquired passively, but relearned by each person in their interaction with the environment. Thus, what each culture provides are activities and contexts in which this specific attention can be formed from practice and guided rediscovery, enabling a new generation to bond with the previous generation.

Indigenous villages may be the context where these learnings more commonly occur, while in the city although not impossible, it requires a lot of study and tenacity, as shown by Niara and Dauá. These two seek to create spaces and narratives in the city that enable this type of attention training, and the *Aldeia Vertical* garden emerges as an attempt to create a learning context that can train people to pay attention to plants—the same way that Niara learned with her grandfather.

It is not without friction among the different collaborators that the garden environment is constructed as a learning space. As indicated above, *collaboration* does not mean *agreement* and some situations discussed here, like the birds, demonstrate this friction among project collaborators.

Conclusion

The *Aldeia Vertical* garden is a unique project. In its space of acting, it seeks to operate under a different concept of producing worlds, forming a more inclusive and sustainable landscape for both humans and non-humans. There seems to be a common point between garden practices and multi-species theories with respect to living with non-humans and the consequences of human actions in their environment.

Regarding the effects of human action on the environment, the garden organisers and participants constantly express their concern and criticism. However, to us, their prognosis does not seem to be catastrophic, maintaining their focus on the problems of the present and on the type of education that can resolve these issues, avoiding fatalistic predictions for the future. Based on local actions, garden participants believe it is possible to combat these problems and contribute to the success of a broader recovery movement – even though this is not easy, as we have explained here. At the *Aldeia Vertical* garden, they believe in building a more multiple, more indigenous future.

In many senses – and in the terms of Bruno Latour (2017) –, the *garden* seems to be an attempt to construct a shared world; a risky diplomatic initiative, proposed by *people who do not claim to be modern* and who do not seek *to purify the world*. This is an initiative that aims to translate knowledge and disseminate them, with a view to solving the problems of so-called modernity. In this sense, the *Aldeia Vertical* garden carries out vigorous work, that of drawing people's attention to the landscape[6], as well as caring for the earth and bodies – all of this in an environment that is the victim of much neglect on the part of public powers.

6 In the case of the Piro people (Gow, 1991), the production of landscape and kinship is also intertwined. 'The production of kinship involves a historical process of transforming the forest landscape to make swiddens and villages where the new generations are raised. The production of relatives occurs through the care taken to raise children. This work is carried out in the production of subsistence, food, the swidden, fishing in the river, tasks divided between the husband and wife. It is the memory of the care received in childhood that creates and maintains relationships between people who consider themselves true relatives inside the village.' (Bevilaqua, 2017).

For such an endeavour, the idea of compost – as a heterogeneous aggregate of things reused to generate renewed potentiality – is central. Each compost is different and can only be managed based on attention to a specific situation, even though it can be supported by observations of similar cases. The work in the garden seems to be in agreement with Tsing's practice, in that it is not despairing in the face of the destruction of the landscape, but uses the ruins and its residues, transforming them into a substrate with the power to restore its vitality. In fact, it is about *staying with the trouble* (Haraway, 2016), while creating a *compost politics* from vegetal logic.

The power of composting is also highlighted by Haraway, who applies both the concept of collaboration and the *figure of compost*—used recurrently as an image that emphasises interconnection and the possibilities of constructing new connections from scrapped materials.

> My partner Rusten Hogness suggested compost instead of posthuman(ism), as well as humusities instead of humanities, and I jumped into that wormy pile. Human as humus has potential, if we could chop and shred human as Homo, the detumescing project of a self-making and planet-destroying CEO. (Haraway, 2016:32)

Composting, as a practice carried out in the garden, also allowed us to analyse the importance of its singularities with regard to the vegetal and human trajectories developed there. Thus, the *Aldeia Vertical* garden operates through compost politics, constantly reaffirming the plural character of its human and non-human participants, without falling into the traps of the metaphysics of purity.

In this space, uniqueness is in evidence both among the plants and among the individuals. Each seedling of a vegetable and each person who engages therein is seen as a unique being, with their own history and trajectory. And the important thing is not their classification, but rather their knowledge of plants and their uses based on a close, intimate, unique relationship. Rejecting *purity*, the garden operates as *compost*. The beings there are constantly recognised for their complex and interdependent character, just as – and through composting – the mixture is seen as a power for the renovation of the garden.

At a time when the level of consumption and waste production has been identified as having a major impact on the Earth, the idea that something considered waste can become a nutrient for the creation of new life is potent. Thus, we reinforce the image posited by Haraway: 'We are humus, not Homo, not anthropos; we are compost, not posthuman' (2016: 55).

Received: November 29, 2022
Approved: June 30, 2023

Translated by: Philip Sidney Pacheco Badiz

References

ABRAHAMSSON, Sebastian; BERTONI, Filippo. 2014. "Compost Politics: Experimenting with Togetherness in Vermicomposting". *Environmental Humanities*, 4(1): 125–148. https://www.environmentandsociety.org/mml/compost-politics-experimenting-togetherness-vermicomposting

BALÉE, William L. 2013. *Cultural forests of the Amazon: a historical ecology of people and their landscapes*. Tuscaloosa: University of Alabama Press.

BEVILAQUA, Camila. 2017. *A Aldeia Vertical e a Horta no Morro: trajetórias indígenas na cidade do Rio de Janeiro*. Master's dissertation in Social Anthropology, Museu Nacional, Universidade Federal do Rio de Janeiro – Rio de Janeiro.

CARNEIRO DA CUNHA, Manuela. 2009. "'Cultura' e cultura: conhecimentos tradicionais e direitos intelectuais". In: *Cultura com aspas e outros ensaios*. São Paulo: Cosac & Naify. p.313-373

CLEMENT, Charles R; DENEVAN, William M; HECKENBERGER, Michael J. *et al*. 2015. "The domestication of Amazonia before European conquest". *Proceedings of the Royal Society*, 282(1812): 20150813. https://royalsocietypublishing.org/doi/10.1098/rspb.2015.0813

CEPAGRO. 2017. *Compostagem doméstica, comunitária e institucional de resíduos orgânicos: manual de orientação*. Brasília: MMA. https://arquivos.ambiente.sp.gov.br/municipioverdeazul/2016/07/rs6-compostagem-manualorientacao_mma_2017-06-20.pdf

COSTA, Luiz. 2013. "Alimentação e comensalidade entre os Kanamari da Amazônia Ocidental". *Mana*, 19(3): 473-504.

DA SILVA, Deonísio. 2014. *De Onde Vêm as Palavras*. Rio de Janeiro: Lexikon.

FAUSTO, Carlos. 2008. "Donos demais: maestria e domínio na Amazônia". *Mana*, 14(2): 329-366. https://www.scielo.br/j/mana/a/tNKpjsQPtDrQbRhbztxkD3P/?lang=pt

GOLDMAN, Marcio. 2015. "'Quinhentos Anos de Contato': Por uma Teoria Etnográfica da (Contra) Mestiçagem". *Mana*, 21(3): 641-659.

GOW, Peter. 1991. *Of Mixed Blood: Kinship and History in Peruvian Amazonia*. Oxford: Clarendon Press.

GROOVE, Richard. 1995. *Green Imperialism: Colonial expansion, tropical island Edens and the origins of environmentalism, 1600-1860*. Cambridge: Press Syndicate of the University of Cambridge.

HALL, Kim Q. 2014. "Toward a Queer Crip Feminist Politics of Food". *PhiloSOPHIA*, 4(2): 177-196. https://www.academia.edu/7703970/Toward_a_Queer_Crip_Feminist_Politics_of_Food

HALL, Laura. 2015. "My Mother's Garden: Aesthetics, Indigenous Renewal, and Creativity". In: H. Davis and E. Turpin (ed.), *Art in the Anthropocene: Encounters Among Aesthetics, Politics, Environments and Epistemologies*. London: Open Humanities Press. pp. 283-293. http://www.openhumanitiespress.org/books/titles/art-in-the-anthropocene/

HARAWAY, Donna. 2016. *Staying with the Trouble: Making Kin in the Chthulucene*. Durham: Duke University Press.

INGOLD, Tim. 2010. *Bringing Things to Life: Creative Entanglements in a World of Materials*. Aberdeen: University of Aberdeen.

LANGWICK, Stacey. 2018. "A Politics of Habitability: Plants, Healing, and Sovereignty in a Toxic World". *Cultural Anthropology*, 33(3): 415-443. https://journal.culanth.org/index.php/ca/article/view/ca33.3.06/93

LATOUR, Bruno. 1993. *We Have Never Been Modern*. Cambridge: Harvard University Press.

LATOUR, Bruno. 2017. *Facing Gaia: Eight Lectures on the New Climatic Regime*. Malden, MA: Polity.

LÉVI-STRAUSS, Claude. 1962. *La pensée sauvage*. Paris: Plon.

LIMA, Ana Gabriela Morim de. 2017. "A Cultura da Batata-Doce: Cultivo, Parentesco e Ritual entre os Krahô". *Mana*, 23(2): 455-490.

MARTINS DE MELO, Priscila Freitas. 2021. *Uma horta urbana indígena: Ferramenta de pensamento arquitetônico.* Final graduation work, Faculdade de Arquitetura e Urbanismo da Universidade Federal do Rio de Janeiro - Rio de Janeiro.

MASTNAK, Tomaz; ELYACHAR, Julia; BOELLSTORFF, Tom. 2014. "Botanical-Decolonization: Rethinking Native Plants". *Environment and Planning D: Society and Space*, 32(2): 363–380. https://journals.sagepub.com/doi/10.1068/d13006p

MELLO FILHO, Luiz Emygdio. 2001. Pindorama filmes. Um Pé De Quê? Abricó de Macaco - *Couroupita guianensis*. YouTube. Available at: https://www.youtube.com/watch?v=HPdD7jJacYs

MYERS, Natasha. 2017. "From the Anthropocene to the Planthroposcene: Designing Gardens for Plant/People Involution". *History and Anthropology*, 28: 1-5. https://www.tandfonline.com/doi/abs/10.1080/02757206.2017.1289934

NEVES, Eduardo G. et al. 2003. "Historical and socio-cultural origins of Amazonian dark earth". In: J. Lehman et al. (org.), *Amazonian dark earths*. Dordrecht: Springer. pp. 29-50. https://link.springer.com/chapter/10.1007/1-4020-2597-1_3

OLIVEIRA, Joana Cabral de. 2006. *Classificações em cena: algumas formas de classificação das plantas cultivadas pelos Wajápi do Amapari (AP)*. Doctoral thesis. Universidade de São Paulo.

SAHLINS, Marshall. 1997. "O 'pessimismo sentimental' e a experiência etnográfica: por que a cultura não é um "objeto" em via de extinção (parte II)". *Mana*, 3(2): 103-150. https://www.scielo.br/j/mana/a/LNRkjYm6krSRbSfSFW49NLL/?lang=pt

SHIRATORI, Karen. 2018. *O olhar envenenado: da metafísica vegetal jamamadi (médio Purus, AM)*. Doctoral thesis. Museu Nacional/Universidade Federal do Rio de Janeiro.

SHOTWELL, Alexis. 2016. *Against purity: living ethically in compromised times*. Minneapolis: University of Minnesota Press.

STRATHERN, Marilyn. 1988. *The Gender of the Gift*. Berkley: University of California Press.

TSING, Anna Lowenhaupt. 2005. *Friction: an ethnography of global connection*. Princeton: Princeton University Press.

TSING, Anna Lowenhaupt. 2015. *The mushroom at the end of the world: On the possibility of life in capitalist ruins*. Princeton: Princeton University Press.

VILAÇA, Aparecida. 1992. *Comendo como gente*. Rio de Janeiro: ANPOCS & Editora da UFRJ.

VIVEIROS DE CASTRO, Eduardo. 2002. *A Inconstância da Alma Selvagem e Outros Ensaios de Antropologia*. São Paulo: Cosac & Naify.

Camila Bevilaqua Afonso
Master and PhD in Social Anthropology - National Museum PPGAS/UFRJ - Brazil
https://orcid.org/0000-0002-4772-9996
Email: mila.bevi@gmail.com

Arthur Pereira Imbassahy
Master in Social Anthropology - National Museum PPGAS/UFRJ - Brazil
https://orcid.org/0000-0003-4482-7520
Email: imbassahy@riseup.net

Dossier editors

Cristhian Caje
Federal University of Santa Catarina – UFSC, Brazil and
Vrije Universiteit Amsterdam – VU, Amsterdam.
https://orcid.org/0000-0002-8713-7872
Email: cristhiancaje@gmail.com

Barbara Maisonnave Arisi
Vrije Universiteit Amsterdam – VU, Amsterdam.
https://orcid.org/0000-0001-7560-9636
Email: barbara.arisi@gmail.com