

## **Nodes that Bond Podcast – Episode 4**

### **“Fences”**

**Portal sem Porteiras, Monteiro Lobato – São Paulo, Brazil.  
November, 2020.**

*A song plays and the Narrator, Luisa, starts to speak:*

“Welcome to another Nodes that Bond podcast. This is a trilogy in which we will tell you about the community internet network here in the neighborhood, the Portal sem Porteiras (Gateless gateway) or PSP.

In this first episode we'll talk about the occupation of space, whether physical or virtual, because despite being a very recent invention, the Internet follows the old structuring forms of capitalism, in which everything has a price and an owner, and to move around, we need permission.

To begin with, let's listen to the voices of women here in the Souzas neighborhood, interviewed by Simone Cavassi. They kindly donated a little of their time so that we can better understand the transformations of the territory from the point of view of those who lived and live here.

*Woman 1 (Ana):*

"To grow up in this neighborhood, to me, was wonderful. I could play on the streets, with my friends... so much that I grew up, had my kids, and decided to live here, only so they could also enjoy all this.

*Simone, interviewer, asks:*

"What was your favorite place when you were a kid?"

*Woman 2 (Ana Serrinha):*

"In the country, with my mother. Helping my mother to work, plant beans, plant corn".

*Simone*

"Were you playing?"

*Woman 2 (Ana Serrinha):*

"No, my mother wouldn't let us play, it was all time on the hoe working."

*Woman 3 (Cida):*

"Well, I grew up in this neighborhood until I was twelve. I played a lot, a lot of kids, my cousins, climbed trees, fell from guava trees, enjoyed a lot. Then at twelve I had to leave unfortunately to São José [*the nearest big city*] to work. My mother had her life, and I did not want to interfere and so I left home. I went to work in a family house and came back only after I was already 18. Then I was already a teenager, mature, old and all, right?"

*Woman 4 (Katia):*

"Growing up in this neighborhood was incredible for me, it was a wonderful experience. I'm the daughter of a huge family, I'm an adopted daughter, I've had many siblings, twenty brothers and sisters. Growing up in a wonderful place like this, where you can play, there's not a worry about schedules, or problems that today would make me not let my kids play like I used to. But it was very good, to play and grow up here".

*Woman 2 (Ana Serrinha):*

"I like to take care of my plants! My little plants, cabbage... my backyard!"

*Woman 5 (Mukta):*

"My favorite place here in the neighborhood is my land, in my house. The house isn't ready yet, so it's not ideal, but the land is incredible. It's near the square, you can see the square from here, but it's high, facing the mountain, and there's toucans and little birds, the sunset is beautiful and there's sun all day long... It's not such a big piece of land, but it's our size".

*Woman 1 (Ana):*

"I lived in several places, more into the woods, without energy, which was very precarious, off the road with difficult access ... Then, when I got married, I moved to my house, near the soccer field, on the corner that goes up there to Aconchego Inn, I lived there for nine years, and then moved to the house that is where the Luisas live today, and lived there for another seven years. So only there, on that street, I lived sixteen years".

*Woman 4 (Katia):*

"My favorite place when I was a kid was a little waterfall there is in Pandavas. Who lives here in the region knows what Pandavas is [*the neighborhood school situated in a beautiful forest area*]. It was such a nice place! I liked to steal carambola from my neighbor, to ride horses [*laughs*]..."

*Narrator - Luisa*

"While we were doing this podcast, we started to question ourselves about the enclosure of the common fields, and how this happened (and still happens) in Brazil. For this reflection, it is impossible not to remember the indigenous peoples who occupied this territory before the arrival of the Portuguese, who in turn violently imposed the practice of dividing and sharing the land, putting up fences and walls, and listing their owners. Land divided first into hereditary captaincies and then into merchandise.

So we decided to call a friend who has been with the indigenous people for a long time and who, learning from this conviviality, accepted to help us translate this other conception of territory that has a lot to teach us. It is Marina Villarinho who talks to you now.

*Marina Villarinho*

"Indigenous peoples, or rather, native peoples, hundreds of years, ago lived on a huge land, without fences or gates, walking all over the place, without the slightest idea that there could be property on the land. For the indigenous people, what bound them to that land was the care that they and their ancestors, for many and many generations, dedicated to the places they frequented;

It happened that one day these people were surprised by a people who had a very different understanding of how to live and care for a place. They had long been accustomed to walls and fences that determined that a piece of land was someone's possession.

And if it was 500 years ago that this meeting took place, these two points of view still exist today. To better explain these two points of view, I wanted to try an exercise of fabulation here:

I ask you to imagine one of those science fiction movies where the Earth is invaded by a race of aliens. Well, in this film these aliens pass as humans to dominate the earth precisely because the resources of their planet of origin have already been exhausted.

Imagine that this dominated planet, or the new world, became known by the invaders by the name of: Brazil. It's obvious then who the aliens are in this story; I don't think we need spoilers. But the indigenous peoples, those who inhabited this planet, they were many... And among them, some were allies, others were enemies, each one with their language, their customs and beliefs, or their way of living. And without even imagining that there could be such a different way to live on earth, the indigenous peoples for a long time experienced ways of living that were quite nomadic, stopping here and there, where the relationships flourished, or where the places mixed with their experiences.

In this film of ours, when the invasion happened, the aliens were crazy about gold and precious stones. But coming here they found much more! They found a plentiful and abundant land, sheltered by the indigenous people who were here. No wonder, the aliens called this invasion a discovery, and without authorization, they began to take these resources as their own. They often destroyed what they found to, among other things, plant sugar cane to feed those who remained in their old world of origin.

Now... imagine you that this story is based on real facts. The indigenous people and their lands were invaded by an alien race disguised as white humans - who forever became known as Europeans. Worse! At this point in the film, and with a certain wrapping in our stomachs we realize that the European aliens won: they came to stay, imposing on everyone, human and non-human, their way of life, which is also a way of killing.

Back to our film, the Europeans who arrived in spaceships disguised as caravels, became fenced in the fields that were previously accessed by everyone here. Besides, they started to call whatever was inside their fence, their property. Clever, the European aliens, knew how to blend in: they married the some of the indigenous people and also enslaved them, passing on this predatory form of life.

Suddenly, we even ask ourselves: are we them?

The invaders called their heirs Brazilians, who in turn continued to invent, since 1500, new fences. Fences are sometimes made of barbed wire, sometimes drawn on a document. Those that sometimes we spend our whole lives trying to buy...

But what ways of being in the world were those so different from the European aliens? Forms that we Brazilians know today as the only and correct way to be in the world? Being part of this way of seeing the world, it seems as if these other forms of living on earth have been abandoned... But did the indigenous people really give up their point of view? Did they really allow this story to end like this? They did not! That's what they taught me and what I came here to tell you...

*[an indigenous music begins to play]*

I think it's time to leave this film based on real facts aside, and turn to look at our region. And I leave a question: who before the invasion inhabited the space we live in today, the valley of Paraíba?

If Sítio do Picapau Amarelo [*a farm in our town about which one of the most famous children's books writers in Brazil wrote about in his stories. His name was Monteiro Lobato, and our town is named after him*] takes advantage of the official history, in our researches we found records about some of those who already lived here, the Puri people. Records that we will now share with you."

*Catarine Dell'Aquila*

"Melissa Ferreira Ramos in her work 'Re-existence and Indigenous resurgente: Diaspora and Transformations of the Puri People' tell us:

'The Puris have occupied part of the Southeast of Brazil, in the region that goes from the Paraíba Valley that passes through Rio de Janeiro and São Paulo, to the area of Rio Pomba, in the Southeast of Minas Gerais.

In the colonization process, sesmarias were created to be sold all over Brazil, making their supposed "owners" open paths in the forests, kill, enslave or negotiate in unjust ways with the Indians who inhabited those lands and made an effort to populate those places. Indigenous lands were diminishing and villages were increasing. The siege around the Indigenous people grew until they were trapped. Contact with the Puris became inevitable, generating many conflicts, deaths and resistance. For the Europeans, the Indigenous people invaded their farms. For the Indigenous people, it was the Luso-Brazilians who invaded their hunting grounds.

The way of life of the villages was still very different from that of the indigenous people. The Puris had difficulty in accepting this new life... many were dying from diseases and epidemics that they caught through contact with the settlers, others refused to live in this confinement.

The Brazilian government even created a Puri Village in Queluz, district of Lorena [*in the state of São Paulo*], in 1801.

The Puris were not easily convinced to go to the village, but they were being killed and were targets of constant wars, and on top of that, there was now the difficulty to find food from deforestation, caused by colonial politics. In Queluz, they persisted in maintaining their cultural practices and constantly went back to the forests, since according to their culture, they were nomads and did not agree to settle in a single place.

Those villages were considered extinct by the heirs of the invaders during the 19th century, on the grounds that there were no more Indigenous people there, only caboclos or Indigenous people mixed and already civilized, disregarding those who were refugees, hidden or silenced by society..."

*[the music you listen here is not from the Puris, but from the Guaranis. It was recorded from a choral of children, the Guaranis Mbyá and Nhandeva, who live in the territories we now call São Paulo and Rio de Janeiro].*

*Marina Villarinho*

"Aline Rochedo, descendant of the Puri, in the book 'Boacé Uchô – The history is on the earth', tells us her version. According to her, the history of the Puri people is a history that is being built. In

her words, Aline says:

"We are listening to the elders of our family and recognizing ourselves, walking the path of our ancestors".

Among the various stories that Aline collected, we chose that of Ms. Carminha, a Puri woman: "My great grandmother, was caught and taken to a farm down there, in the area of 'Fumaça', where she was raped. My grandfather was born white, light-eyed and the son of an "Indian". He was born in the middle of the bamboozal, he did not speak the language of white people. The Puri did not accept to be enslaved and the whites came and took possession of what was of my ancestors'. The white people arrived and took over. The Puris from 'Fumaça' went to the lower mountains and other places in the region. At that time many 'Indians' were enslaved. Nobody talked much about this story. And this is very sad. Even in schools, they don't talk about it..."

To fight this sadness that Dona Carminha feels, Aline decided to put on paper some of the teachings that she learned from her elders. Among these learnings, Aline explains that, for the Puri people, the territory means a place of belonging, of memory, of history. A place where social relations take place, and what I consider most important: where collective bonds of solidarity are generated."

Woman 4 (*Katia*):

"Yes, I lived somewhere else, I got married very early. And I went to live in the city, and what I missed most there was the people. People's big tongues! Watching us pass by, taking care of my life! Because it is a people who gossips about our lives, but it is also a people who are very supportive, it is a people who are opened to help at any time. It's what I've missed the most, the human warmth, which there is nowhere else".

Woman 3 (*Cida*):

"The place I liked the most when I was a child was where today is the court, formerly it was a soccer field. There was a ravine where it used to be filled with people sitting and watching the game... there were people from São Benedito, Monteiro, Souzas [different neighborhoods from our town], it was very nice, there were people selling ice cream, there was so much going on".

*Simone*

How many houses have you lived in this neighborhood, which was the coolest one and do you own the house you live in today?

Woman 2 (*Ana Serrinha*):

"No, I don't own it, I pay rent, and I have a shack but it's too old and everything is broken and I have no conditions to improve it. And the place I liked the most was João Dias' [*a rented house of a person named João*]"

Woman 6 (*Sirleide*):

"The kermesses, the parties we had on the street, where everyone had fun, all this is needed here for the community, because the people here are well connected to the place. So there should be something to distract them, like the street parties, which was very good. I watched a lot, I participated, there's the Festival da Mandioca [*The Cassava Party*]... there's a lot of things that are needed".

*Narrator -Marcela:*

"You can see that these stories reveal an issue. The occupations of space vary with time and with places that before could and now can no longer be visited. Let's talk about what is sad and obvious: the accesses haven't stopped being interdicted. Behind these memories, the enclosure perseveres. Children no longer play in waterfalls because there are few of those who keep their gates open. Who enters and leaves depend on the permission of those who have possession of the land.

The same happens in the digital space, in the cyber space, in the internet. You don't pay for each site you enter for example, but you pay a toll so that the data you are exchanging can pass through someone's land. Or someone's cable. Or someone's satellite...

And this internet that we talk so much about and that is so present in our lives, what do we know about its history? We called Tânia, our 'digital potato' to tell us about how the internet was born".

*Tânia Mara:*

"How was the internet born? I was here researching on the internet how the internet was born, that's funny, right? It's like asking a child, 'hey, how were you born?'. The most modern, the one we're used to, the 'www', was an invention from the 90s. Yet, it all comes from much earlier. It comes from the 60's. What is this word 'internet'? Net is not from cable TV and Inter does not come from the soccer team [joke referencing to a television company called NET and soccer team called INTER] - it comes from "InterNetworking". 'Networking' means 'make connection' in English, and 'Inter' is about exchange. In the 60's there were already computers and they were used for research and so on. And this knowledge was only inside the computer. Suppose you took a picture on your cell phone and your cell phone is not connected to the internet – you won't be able to get the picture to be anywhere else. For the photo to come out of your cell phone it has to connect to something, be it a wifi, be it a data plan from the operator... And at that time, on the separate computers, to pass anything that was created in one computer to another, they had to use something extra. At that time that something was a very big disk to record. Not like the music discs but... similar!"

*Narrator Marcela:*

"Nowadays, it is really hard to imagine the usefulness of a computer without internet and it seems that its grace is exactly there, but the computer was really more of a machine like other machines, which optimize our daily tasks, and by optimizing it, they end up giving space to new demands that were previously unimaginable. Among this old possibilities of using the computer we can highlight: the ability for it to be programmed to solve huge equations, and, of course, transform a lot of paper into a disk, a diskette, a dial..."

*Tânia Mara:*

"Paul Baran, in the 60's, began to devise ways to build a network that could connect computers, where the information that was in one could be sent to another and vice versa, and we could reproduce the same information in more than one computer, and still do it remotely, that is, from a distance. When you open Facebook, you are not on the Facebook computer, you are not going on their machine itself. From your cell phone or your computer you can get these informations that are on computers far away. Yes, Facebook is inside a computer. Just like Google, Instagram, TikTok, anything else we use on our phone. In the end, much of what we consume is in another computer".

*Narrator – Marcela:*

"So... the cloud doesn't exist! The cloud symbol appeared in the first place because, at the beginning of telephony and computer connections, it was complicated to explain and design the network that connected everything... then, they would design clouds. But... the cloud doesn't actually exist. All information depends on physical structures to exist. The Internet is incredible, but it's not magic, and it needs a physical infrastructure not only to be stored and saved, but also to travel, in small packages, through those huge fiber optic cables under the ocean".

*Tânia:*

"Anyway, in the 60's, the research team wanted to be able to exchange all that information... In a physics laboratory in the UK, they researched how to transfer the data from one side to the other - which is called in computer language as a 'package transfer'. We might picture the internet as if it were a big post office. In it, each computer would be a residence, with its own address, which we call 'IP address'. This connection can make these 'package exchanges' happen between one computer and another. In other words, in the end, our photo, music, meme, or whatever we consume, in the language of the computer is called 'data' - different from the six-sided dice [*joke referencing to the portuguese word, here both dice and data are the same word, 'dado'*] - and this data is sent through the networks in this package transfer".

*Narrator - Marcela:*

"When we talk about data we're talking about 0 and 1, that is, all the photos, all the texts, all the music, all the programs that run on your computer are, in the background, in essence, 0 and 1. Imagine a TV, that looking closely you can see a lot of little squares, very tiny, it's as if each square was 0 or 1. The set of these 0 and 1 in a certain combination, looked from afar, forms an image.

Let's remember that was a temporary setting, but it reminds us of the binary world view of the creators of computers. In macro or microcosms, the basis of life of computer and files is the same..."

*Tânia:*

At that same time in the 1960s, other projects were being developed elsewhere simultaneously, and all those knowledge centers were formulating new ideas and wanted to share them. So they were developing their own intranets..."

*Narrator – Marcela:*

"Speaking of intranet, did you know that PSP is also an intranet? But here, we like to call it a 'local network'. In other words, if you're connected to one of the wifi points on PSP, you can access our server, a computer, which is located inside the headquarters of the Portal sem Porteiras, filled with information, music, movies, which you can access without having to pay for Claro or Vivo [*Brazilian cell phone companies*]."

*Tânia:*

"In France there was the Cyclades, in the USA there was the Merit Network, and in the UK, Donald Davies was studying transfers of the packages at the NPL. In 69, in the United States, a project started by ARPA came along. ARPA had a connection with these other networks outside the United States and wanted to do this knowledge exchange. And not only this exchange of knowledge with

these other external networks, but also internally. ARPA wanted to have its own network. If any university center, any knowledge center was destroyed, that information would be lost. If they built a network where the information could be shared among the computers that were connected to that network, it would be less of a problem if a university was attacked, if a military center was attacked, because the information would be distributed on the other computers of the network. But if the United States had only its own way of transferring packets, it would not be able to connect with those other networks that were happening in other laboratories and knowledge centers around the world. So they accepted and adopted that idea of transferring data as proposed by Mr. Davies' physics lab, they came to an agreement and decided to use a protocol.

If each computer spoke its language, they would not be able to communicate. Then, there would be no Internet, they would not be able to exchange information. It's like us, humans, for example. Me speaking Portuguese, here now. Another person speaking Spanish. Another person speaking Mandarin. Another person speaking English. All together, we won't understand each other very well. We may understand each other through a sign, an agreement... but this has to be established, there has to be some kind of protocol. Something like putting your hand near your mouth is a sign of hunger. Regardless of the language, it is agreed that this symbol means hunger.

In the case of the computer, these protocols were defined, which made it possible to do this exchange of information between one computer and another. And then in 74, besides accepting the transfer of packages, they also entered into an agreement on how to define the computer's name, direction, and address. In the same way that the post office needs a zip code to be able to send a correspondence to a residence, each computer has its identification on the network, the IP address.

So in 74, these two big agreements were signed - the IP address and the DNS. Today, for example, when we access a Google search, we don't have to write down the IP address. If you type 'Google.com', your computer can already find this information on the network. And this is what we call a domain. Facebook.com' is another domain. If you search the internet now for the Facebook IP address, a numerical sequence will appear. If you type this number in your browser, the Facebook page will appear. That is, your computer and cell phone can access a web page through these two types of address, either through the name or through the IP address".

*Narrator – Marcela:*

"In short, what makes the existence of the Internet possible are the protocols, that is, an agreement to use a common language between computers, IP, a number so that each computer can receive and send information, and DNS, another protocol that makes it possible to transform those numbers - which is how the computer thinks and communicates - into unique names intelligible to humans, not machines".

*Tânia:*

"In the 1980's, this network, this infrastructure that had a boom in the United States, ended up being used primarily by universities and government institutions. Some private institutions had access to it, but it was not opened to civilians, to anyone who wanted to have their virtual store... ordinary people did not have access to the internet. In 1995, the NSF project, which was this network of universities, ended and opened the gateway for commercial use.

In other words, 95 was when the boom of the internet started. Before, in 1990, Berners-Lee invented the 'WWW', which facilitated access to addresses - 'World Wide Web', that is what 'WWW' means, and it would be a unique name to be used worldwide. So, at that time, it was



defined that one page would have the same name anywhere in the whole world. It was also at this time that the links were created. That blue line that if you click, it takes you to another page.

The link brought an easier way of navigating between pages, to find a page worldwide. The opening for commercial use brought a boom to the internet. Besides, in the 90's, they managed to make a list of what was on the internet. Imagine, until then, one didn't know what was on the internet, there wasn't a Google or something. Google works exactly like this. If your room is a mess, you still have some idea where things are. So you have a mental index of where to find something, no matter how chaotic it is, you need a comb, go there and find it.

In the case of the internet, there wasn't a person in that position. Only who created a webpage knew where it was. And at that time, the tools that listed the contents that were available on the internet started to appear, and Google for example was born in 1998. So, it is still very young. Google ended up gaining so many users because they created a new way to make this listing. When you have an index of a book, for example, usually the chapters are ordered by pages there. Chapter one, chapter two... there is a linear order, and this sequence follows the sequence of the pages. In the case of the Internet, we do not have a page number. So to decide that one page should appear before the other? Then Google came up with 'relevance' That is, every web page that appears in the results has some relevance, there are reasons for it to appear first."

*Narrator – Marcela:*

"Hey, but wait a minute! That is where the danger really lies. Ok, so Google did a favor in organizing information from around the world, which you can put in a search engine and receive a lot of answers, organized by relevance. But... relevance for whom?

Despite the algorithmic efforts to make us human beings easily understandable by machines, the human cultural multiplicity is much greater than what machines can embrace, and if relevance is important, to leave in the hands of an artificial intelligence to decide what matters to us, is to reduce us to a cultural uniqueness and hierarchy as effective and destructive as were the European colonization. And for artificial intelligence, it is even easier to understand us when we become more and more equal."

*Tânia:*

"At Google, the first links are probably sponsored - the webpage paid Google to appear at the top. And the following ones come up because they use criteria within their websites that ends up making them listed at the beginning of the search. If you want to, you can search on the internet how to make your page appear first in Google results. In a way this impacts the businesses, because people will not look at the end of the search page for information, there are few people who do this. And I even recommend doing it, because you can access much more content than the first one that is being offered. If you limit yourself to only the first content that is being offered, you have a restriction of information you can get.

In the 90's a certain occupation of this cyberspace also happened. That territory was beginning to open up to the people who were not in the governmental sphere. At that time, there were few websites, and there weren't any apps, there wasn't a cell phone that connected to the internet. That was only in 1996, and back then, there were no packages of whats app for free, it was all very expensive and slow... It was in 2001 e-mails on cell phones started existing, and only by 2008 that actually popularized and people started being more connected through their phones than through computers.

Anyway... in the mid 90's, the content that was on the internet was produced by people. The web pages, or a virtual gallery, was created by someone who had an interest in something. Nowadays, that logic has already been reversed. Whoever is surfing the internet ended up becoming only a consumer of content. All right, we upload photos, texts, videos of Youtube, music on SoundCloud, there is content production. But any content you put on these platforms does not belong to you. It belongs to the platform. If Facebook decides to disappear from the earth, all your photos will disappear along with it! If you don't have a copy somewhere... even for Youtube, all this content that people produce and put on Youtube is Youtube's copyright in the end. If Youtube ended today, all the content on it ends as well. In other words, we left the role of creators of a Cyber space to become Cyber space consumers. The internet ended up becoming a great shopping mall where people enter, walk around, look to the sides, take a selfie... and go on. Different from before, where people had to create that space to circulate in. But, I guess the subject on the occupation of this space is a conversation for another time..."

*Narrator – Marcela:*

"While we celebrate the possibility of more and more people moving through this virtual space, having more access to information, getting to know more people, it is also like dancing carnival on a guarded street, taking drugs with predictable effects, and wearing costumes chosen by other people. It's as if all movements were induced and then monitored, but we still celebrate something.

The Internet is a two-way street, which allows us some freedom and some imprisonment. This is all because the infrastructure is commanded by corporations, those who own the roads, in search of profit. But that doesn't mean that we can't use it in other ways, taking advantage of technological advances in another way, not using unnecessary advances, turning outdated routers into a luxury that is only ours. And it's because we believe that the Internet has wasted its potential to serve the great monster of capital that the Portal without Porteiros exists.

We'll keep on trans-existing.  
I'll see you on our next episode!"

*Narrator – Luisa:*

"In this episode you heard the voices of Ana, Cida, Mukta, Sirleide, Katia and Ana Serrinha. Our interviewer was Simone Cavassi. Our guest was Marina Vilarinho and you also heard Catarine Del'Aquila's voice, telling us a little more about the Puri People. The teachings on technology are from Tânia Mara. The script, editing and narration is by Marcela Guerra and me, Luísa Bagope. See you next time!"