

Creating from natural materials: Huni Kuin material culture

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Abstract

This article is part of a research about cooperative design with sustainable materials. The research on the indigenous design is based on a visit to a village of the huni kuin tribe in the Amazon and analyzes it in terms of Design methods and processes, materials and cooperation. The village is in an isolated place, difficult to reach, and many of their traditional practices have been preserved. What can these ancient practices teach us? What principles are present in their production that are similar to academic ideas about sustainable design? And what challenges do they face nowadays in their material production, with the progressive arrival of industrial goods? The article analyses the processes of pottery, house building and basketry, all traditionally done collectively using only materials and tools from the local forest.

Keywords: indigenous, material culture, natural materials, handicraft, Brazilian Amazon, conviviality, permaculture, pottery, sustainable design, ethnic design, bioarchitecture, basketry.

Introduction

This paper presents Julia Silva's research at the Huni Kuin village, that took place during her PhD research, that was advised by Jackeline Farbiarz. The village is located in the Amazon, where she stayed for four weeks. On this visit, she tried to learn about the indigenous material culture and to understand how it could be related to concepts that the authors had been working with. The PhD research was about sustainability and community solutions in material culture.

Material culture is a term originally from archaeology that refers to the part of the physical world that is appropriated by culture (Gaspar, 2000) – nature that is transformed into human artifacts. In modern society, we experience a physical world filtered by the design process, a completely transformed nature, according to Petroski (Petroski, 2007). In this research, we observe a non-industrialized material culture.

The research was based in two laboratories from PUC-Rio – LINC-Design (*Laboratório Linguagem, Interção e Construção de Sentidos*) – a laboratory that researches language, interactions and meaning in Design, always with a focus on interpersonal relations. And LILD (*Laboratório de Investigação em Livre Desenho*), that researches Design with natural raw materials, such as bamboo, clay and natural fibers. This paper is based on some concepts and authors that are present in the research of these labs.

Methodology

This is a qualitative interpretive research based on a field research.

The research is based on observation and ethnographic research, which enabled the researcher to learn

about the work done in the field – the Lago Lindo Indian village. The ethnographic research aims to learn from the members of a cultural group to understand the ways in which cultural knowledge, norms and values influence experiences. Thus, we conclude with the following reflection on ethnographic research, as corresponding to:

[...] the exercise of interpretation of social life, the observation of sociabilities, the understanding of organizing and classification systems, seizing values and belief systems, seeking the reasonings and meanings, in order to go beyond factual empirical description, in the pursuit of the "other's" point of view in its terms (Dauster, 2004, p. 202-203).

We are aware, however, of the problems arising from the limited time of observation, but we base our research on Dauster's reflection on the limits of institutional/academic research:

'But what are the problems?' Limits of different kinds are imposed either by considering the short time or the very challenges of apprehending and interpreting ethnographic data. The limits are set as for a long experience and as for the in-depth diving that is expected of qualitative research work. [...] These constraints, in part, are perhaps compensated by a floating observation, a permanent state of awareness in which the team (advisor, students - research group) sets out to capture significant data in the context of a relationship of alterity [...] Institutional research practices, due to their characteristics of bringing together the three levels of orientation in the same academic space and time, enable intense and fruitful exchanges among participants (Dauster, 2004, p. 203).

This field research brings together the areas of anthropology and design. For Ingold (2013), architecture, design, arts and anthropology are areas that observe, describe and propose, having an active approach in the environment. Both design and anthropology have creative proposals and are exploratory and specialized forms of observational engagement (Anastassakis, 2014). With this approach, we can create a thorough dialogue with different ways of life, observing and describing the vernacular design and creating based on this exchange.

The field research was based on observation, participation in some activities and also on unstructured interviews. These interviews enable us to listen to what the people have to say about their material culture. Since the interviews were done with Indians, who did not have Portuguese as their mother language, the researcher established the topics to be addressed, but adapted the questions. She asked questions about their work preferably while they were working in order to facilitate communication.

This research is also based on some specific literature about indigenous people in Brazil and related to theoretical references in the fields of Design and Social Sciences. The research relates the data observed in the field with some concepts of Design and Social Sciences that we present along the paper – concepts related to Design methodology, community solutions and sustainability.

We believe institutional knowledge should not be seen as the standard and that we should always be open to learn from knowledges of different origins. This research observes non-industrial material culture, that has completely different standards, methods and ways of transmitting knowledge.

Objectives

We aim to understand what is the relation of the Huni Kuin material culture with concepts from the Design field. What can the material culture of an Indian village in the Amazon teach us about Design methodology, community solutions and Design with natural, raw materials? The debate in the field of Design can be enriched by this observation, since the indigenous people have been having a sustainable material culture for centuries.

Field research in an indigenous village

The idea of visiting a huni kuin tribe was to visit an environment outside the university that traditionally works with some of the techniques and values that are considered nowadays when we speak of sustainable Design – the use of renewable local materials, light structures and buildings done by the members of the community themselves, with a knowledge that is passed on informally – but without a formally structured methodology or knowledge.

We understand that Brazilian traditional material culture is extremely rich and comes from a deep knowledge of local nature and of building light structures that can be quickly accomplished – a lot of knowledge that can be useful in current researches and practices. The researcher José Francisco Sarmiento Nogueira questioned in his Masters dissertation why Brazilian pre-industrial material culture is not considered Design and is not properly valued:

[...] the questions that are brought by this work are: why is Design kept distant in the study of the material culture of Brazil's illiterate cultures? Or from the several ethnicities that compose this country. Why not consider these peoples' processes of building artifacts as a result of design? (Nogueira, 2005, p. 15).

Brazilian indigenous cultures have much to teach us about their material culture, that are based on the local vegetation and land. Berta Ribeiro was an anthropologist who visited and wrote about the indigenous material culture and dwellings. According to Ribeiro (1987), the indigenous dwelling varies a lot in terms of shape and size of the building, but the basic materials do not vary much: the indigenous house is built entirely from plant materials.

The dwellings are light, easy to be built and reasonably durable. The buildings blend in the environment, starting with the raw material that is used, identical in colour and texture to the environment it is built on. However, the village as a whole, at the same time, joins in and contrasts with the environment, establishing an opposition culture/nature. The former, corresponding to the humanized places; the latter, to the natural and supernatural ones (Ribeiro, 1987, p. 92).

The indigenous relation of culture with nature, of human actions with the environment, is extremely interesting and has a knowledge that can be useful to university research. But, different from the university research environment, in the villages, the projects have no constant record, reflection and theoretical foundation. This visit had the intention of understanding a bit about the methodology of a traditional community that has been working for centuries with techniques deeply integrated in the natural and social environments.

This observation aimed to understand how some of the ideas we discussed are present in the Indian village, such as conviviality, integration with local nature. And we will try to understand how this material culture works when it is passed on in an intuitive and traditional way, and there is no institutionalized Design methodology and knowledge involved.

The Huni Kuin Village

The researcher had the opportunity to visit a huni kuin village, in Acre state in the Amazon and she thought it would be an interesting place to learn more about the indigenous material culture. The visit took place between June and July 2013.

The village that was visited is called *Lago Lindo* and it is by the Tarauacá River, in Jordão county, two hours away by boat from the town. Jordão is two hours away by airplane from Rio Branco, Acre's capital city. Or one week by boat, in the winter, that is the dry season. It is a place that is very isolated from any bigger urban center, even more if you take into account the cost of the trips – the gasoline there is twice as expensive as in most of Brazil. Jordão is a very small town, with a limited commerce. This isolation is, probably, responsible for the great conservation of many

aspects of the indigenous culture, such as the Hatxa Kuin language, that is the Huni Kuin people's mother language; Portuguese is the second language, that the Indians don't speak well, and they make mistakes that are typical for foreign speakers. Hatxa Kuin is part of the Pano linguistic family, and the people are part of the Casináuá ethnicity, that inhabits lands between Brazil and Peru. The material culture is also very conserved: the food is based on their plantations; the buildings are done almost exclusively with materials from the forest (with the exception of the nails); utensils and ornaments (baskets, pottery, wags, hammocks, headdresses, rattles, archery, among others).

The *Lago Lindo* village (Figure 1) has 13 families and had been established three years before. They say it is necessary to have at least 63 people to build a village, which is the approximately the population of this village. Lago Lindo is where the Huni Kuin people's Festival takes place. There is corn, cassava, yams, papaya, banana and peanut crops, which are crops that are common in the villages in the region. Fabiano Txana Bane and Bane Sales, two influential people in the village, have the intention of building a model of a sustainable village there, regarding the treatment of water and waste, the two main challenges of the indigenous villages in the region. They also have the intention of revaluing traditions of the indigenous material culture, such as pottery, basket weaving, handicrafts with seeds. The research's goal was not to go deep in the anthropological, sociological or historical aspects of the huni kuin people. The aim was understanding how the traditional material culture is developed and what people that extract most of their necessary resources from the forest where they live and who work collectively for what they need think of their actions.

The Indians were extremely receptive and invited Julia to stay there and follow the activities. Fabiano Txana Bane was going to build a house in the village and the researcher wanted to follow the building and talk to the Indians about the activities. When he told her about the building, it was arranged to start it the next day. But the beginning of the work was postponed. Because, on the arranged day, Txana Bane went to town, on the other day he decided to fish, and on the other day he worked on the crops. Then he decided to delegate the building to others, that would it later. So Julia couldn't follow the building of the house. From then on, noticed well how they do not

follow plannings; they always do what they feel like doing on that day, or the activity that someone else proposes on the moment.

Design methodology and the Huni Kuin way of working

It is interesting for us to discuss briefly the concepts of modern Design and methodology here, so we can think how it compares to the Huni Kuin work method.

As Design is related to many different areas of knowledge – history, geography, engineering, arts, etc., it has infinite possibilities, an absolute definition of what is good Design would be simplistic. Many modern authors believe that projects are constantly refuted. As Argan (1993, p. 4) states, "the project is a continuous act of designing, it is a constant critique over what exists, and suppose that there is something different and evidently better". The main idea is that of a continuous solution, we should progressively not think in terms of solution, but in terms of a change from one state to another.

Design can thus be seen as a look towards the future, an attempt to see what the future should be like. In this sense, we agree with Petroski (2007), who sees Design as a way of solving problems by looking forward. We think, however, that there always are many different ways of seeing the future and the creation of an object depends on how a designer imagines future should be like. There is not, then, a single solution, but many different paths that designers and users that have common mindsets will create together.

We see that, both in the Design field as a whole, and in each individual projects, designers that are designing are constantly moving, always analysing and criticizing what exists and trying to overcome it. With each Project, there is the intention of creating a better future. But the limitations and errors of the Project are seen only afterwards. So then a new project is done, attempting to design something better. But what is better, says Argan himself, is a matter of values – "every projects assumes its values". According to the values one has of what would be better, a new project is made.

Nowadays, as the world has increasingly more influences of vernacular design and ever more experiences of participatory and community design, the designer must be aware of the complexity of the cultural fabric that creates the world. As Bomfim puts it:

The figure of our daily life objects is directly or indirectly a result of the cultural context that surrounds us and this context is increasingly complex and multifaceted. The designer is one of the intermediaries between the chronological and cosmological dimensions and the different protagonists who work in this space. In this sense, the designer's task will be accomplished through the configuration of the poetic forms of becoming. And for this to take place, it is necessary to have a knowledge that goes beyond specific areas. It is necessary to live and understand the cultural fabric, the locus in which the persona identifies in its being in the world (Bomfim, 1999, p. 152-153).



Figure 1. View of *Lago Lindo* village.

The Huni Kuin people, on the other hand, tend to work with a well known method, and there does not seem to be a search of constant improvement, or a diversity of influences. The strict schedules and plannings that modern Design works by are not present in the Huni Kuin method, as we will see in the following sections.

The Huni Kuin speech and the absence of planning

The Huni Kuin do not work with a plan or schedule and are not theoretical at all – they have very little formal education – the school in the village has a very small course load. They do not speak Portuguese well, have a reduced vocabulary and make mistakes of foreign speakers, especially women, who have less contact with the outside world.

Among them, they speak only Hatxa Kuin, which is impossible for outsiders to understand. However, if we pay attention to their conversations, we can hear some words in Portuguese in the middle of the speech. We can suppose that the words spoken in Portuguese do not exist in their language, showing it belongs to a completely different mindset. The words that could be heard in Portuguese were: *organizar* (to organize), *planejar/planejamento* (to plan, planning), *dia X* (day X), *X horas* (X o'clock), *X reais* (X Brazilian currency), *explica* (explains), *liderança* (leadership), *importante* (important), *antigo/antigamente* (old, in the old days), *hoje em dia* (nowadays).

The absence of planning, of organization, of linear time and of explanations reveals itself in the language itself.

When the researcher asked them about the shape, methods and materials, she often got vague answers, showing a total non-systematization of knowledge and the lack of instructional explanations. This happened when she asked Bane Sales, who is an Indian who has already lived in Rio Branco and speaks fluent Portuguese:

"How do you build the house?"

"We do build it."

"Do all materials come from the forest?"

"It's all from the forest."

"And what trees do you use?"

"It's wood indeed."

Or when asking about the seeds of a necklace:

"What seed is this?"

"It's seed indeed."

"But what seed is it?"

"It's seed indeed."

The same happened when Maspã putting some herbs on the wound of her granddaughter Joseane Mawapae and the researcher asked:

"What's this that you're putting on her wound?"

"It's medicine indeed."

"But what plant is it?"

"It's medicine indeed."

She could not obtain well explained answers; the best explanation they gave was by doing things. We asked

Mawapae to teach us to make baskets. She accepted and got the straw that is used for baskets, that is the same one that is used for roofs, but not mature yet, from inside the culm. Firstly, she prepared the strips, cutting out the thick part of the leaf.

Then the weaving process starts (Figure 3). Mawapae was extremely patient, but she did not give us any explanation on how we should do it, she just did it. None of the people who were doing the "basket workshop" – Julia and three other non-Indian women – were able to understand the logic in the weaving process. In each layer, the number of strips that went on top or below varied, and we could not understand the logic, we could not reproduce it. Mawapae helped us in the confection of each one's basket, but she did not give us any explanation.

The Huni Kuin non-elaborate speech can be because they might find it hard to translate the terms of their language to Portuguese, such as the names of plant species. According to the linguist Maia (2002), in the Brazilian indigenous languages, including the *Pano* languages (linguistic branch of the Hatxa Kuin), there are elaborate modalizing systems, that cannot be translated to Portuguese. Particles and grammar elements, that do not exist in Por-



Figure 2. Mawapae preparing strips for the basket, observed by her daughter.



Figure 3. Mawapae weaving the basket.

tuguese and that show the source of the information – if it is about the speakers direct experience, if he has heard someone saying that, if there is doubt, if there is bewilderment, etc. This linguistic richness cannot be expressed in Portuguese, which can result in a simpleton speech.

This linguistic obstacle must be taken into account, but still we have observed that the practical experience is much more relevant than the speech among the huni kuin. Because the planning is not precise, and the moment of practical action is much more important. Even among the Huni Kuin we can observe that the learning occurs much more by observation than by explanations.

The communitary work

The sense of community in the village and among the villages is extremely strong. Hardly anyone does a job alone, there are always work groups for all tasks in the village – cooking, washing the dishes, washing clothes, harvesting the manioc, fetching water, fetching wood, building, planting, doing handicraft, among others. Among the villages, there are always exchanges – if one village plants the crops, people from another village go help.

The collectivity is very strong, and there is no sense of privacy – night and day, people are together, doing things together. There is not the concept of individual jobs and projects. Each person is a collaborator in a traditional and collective activity.

When we talk about a sustainable material culture nowadays, many authors suggest that it should be less based on material goods and more in social interactions. Which is a characteristic present in pre-industrial societies.

An essential author that speaks about the importance of interpersonal relationships was Ivan Illich, who wrote about it in the 1970s. Illich is an outspoken critic of industrial society, which, he said, centralizes and bureaucratises knowledge and production, making the people dependent and with a progressive loss of their creative potential. He states that Institutions lead to the loss of autonomy of communities - things that were once within the peoples' authority, such as children's education, care of the sick, the production of goods, are gradually becoming institutionalized and people are losing their autonomy (Illich, 1973).

The author created the concept of conviviality to designate a proposal of society in which people would

explore their creative potential and the interpersonal relationships.

Illich (1970) also highlights the importance of education and information exchange in a non institutionalized way. He makes a strong critique of institutional knowledge in our society and proposes convivial knowledge, which has spontaneous and unscheduled learning. According to the author, the way the knowledge and production are organized today, few people know how to operate certain complex devices. In convivial society, everyone would be able to learn, informally, how to deal with tools.

Illich proposed conviviality as an alternative for industrial societies. But we can see these convivial and informal characteristics in the Huni Kuin daily life.

Pottery making

As the building of the house did not happen, the researcher talked to Bane Sales and he decided to start pottery making, a women's traditional activity. They went to fetch the clay on the river, Julia and Bane Sales. On the riverside, there is a kind of clay that is very good for pottery, and has a light grey colour. We also fetched the sand on a little beach by the river.

Working with clay is a feminine task and the Huni Kuin have a strong labor division between men and women. Bane fetched the clay in the river because it was very heavy to carry, but he said he was being kind, because many men would not do that – fetching the clay is also a women's task. When he fetched the clay, he 'talked to it', calling its name in Hatxa Kuin, to ask for excuse and help to get the best piece of clay possible.

On the next day, Maspã, Bane's mother, would start the shaping. We went, Maspã and I, to her cousin's Francisca house, to fetch a tool that they use to help in the shaping. We went after lunch, but, when we arrived at Francisca's house, she was going to serve lunch and invited us to lunch. It is common for people to have lunch more than once when they visit their relatives, friends and neighbours (and the menu is basically the same – manioc, banana...). The work was postponed, but we started it later on that day.

During the days we worked, we did many pots. Sometimes other women from the village would come, they



Figure 4. Maspã working alone and with other women who came to work with her.

passed by and started helping on the pots, continuing the ones that had already began being done or starting to make new pots. There were no rules – the women came by, made pots, talked and soon went away (Figures 4a and 4b).

They followed the traditional Huni Kuin method for making pots. All the women Julia asked said the pots have always been done like that and they have learned it when they were children. They first mix clay with a bit of sand and mould a lot, creating a smooth dough.

Afterwards, they form little ‘snakes’ with the clay (Figure 6). Then, the ‘snake’ is structured in a pot shape, and they start smoothening and fixing the shape.

The process of fixing the shape takes a long time and they take care of the details – a same pot can be worked on by many women.

After the pots are dry, a few days later, they smoothen the surface with a smooth stone, closing the pores, a time consuming task.

After another day of two, when the pot is completely dry, it is fired (Figure 8). The firing is rudimentary. The pot is put over the wood, and over the pot, they put light sticks. The pots are thus inside the fire. The firing lasts approximately an hour. The pots become completely black, and, when they begin to lighten, they are ready.

It was observed that the work follows a method that is previously known by the Indians, but the work is flexible and communitarian; there is not a schedule, nor a task division. The work is collective and harmonious, and there is no sense of authorship or property.

Materials and structures

The houses

The huni kuin houses are made with the material from the forest – the only exception are the nails, that are bought in town.

The houses are built collectively by the men and they take approximately 30 days to be done, from fetching the material to the finishing, as Zeli Maspā informed me.

The architecture of the indigenous houses was influenced by the rubber tappers, who arrived in the indigenous lands from the end of the 19th century and brought the construction model of elevated floors, which protects the houses from animals and floods (Figures 9a and 9b).

Before, the houses used to have a triangle shape and did not have a wooden floor – the straw roof went down to the floor – a model called *cupixaua*.

According to Pereirinha, a Huni Kuin Indian born in 1948, until the 1980s, the indians didn’t have electric saws, and they used only roundwood and boards of a wood called *pachuba*, that can be obtained by opening the tree trunk and removing its core (Figure 10).

The straw that covers the houses comes from a palm leaf called Aracuri. They pass the knife in the middle of the leaf and fold the leaves in half, letting them dry for a few days. The straw is applied from bottom to top (Figures 11a and 11b).

These houses are done easily, are made with the material from the forest and are light, especially the straw



Figure 5. Maspā kneading the clay with her cousin Francisca.



Figure 7. The pots while they are drying



Figure 6. “Little snakes” coming into the pot shape.



Figure 8. The pots being fired.



Figure 9. View of the huni kuin houses, with elevated floor.



Figure 10. House made from *Pachuba* boards, that do not need an electric saw.



Figures 11. Aracuri Palm tree and the leaves being applied on a house.

roof. The structures have a comfortable atmosphere, they are open, the air circulates within and they are light, with no need of artificial lighting during the day.

Nature and forest's material wealth

When we study man's relation with nature, there are many modern thinkers who suggest there could be a more integrated interaction, in which man does not op-

pose nature, but learns how to work and build within its patterns and flows. Interesting to us is the systems thinking in Design and the broader observation of nature. It was a concept used by Fuller (1985), who was a designer, engineer and architect and he advocated that we should design with a systemic view in mind, knowing that everything is part of a bigger system and that we must observe nature and how it builds things most efficiently. Fuller sees Design as a possibility of organizing matter and energy in

the most efficient way possible, becoming thus, similar to natural patterns (Sieden, 1989).

Also inspired in the systems thinking and in the integration of nature's different elements, we have the contribution of Bill Mollison and David Holmgren, who coined, in the 1970s, in Australia, the term 'permaculture'. At first the term was created as a short for 'permanent agriculture', but later, it became a short for permanent culture, having a wider approach. As Holmgren (2009) explains, permaculture proposes to build from nature and with nature, avoiding, thus, doing transformations that are too elaborate and is based on the thought that it is important to take advantage of nature's cycles in everything that we create. Permaculture makes use of the services nature provides for free – such as water purification by certain plants and decomposition of waste by microbes or even the benefits that plants and animals can bring to soil. It is a design system that aims to emulate nature's patterns and to use its flows for the production of fibers, food and energy necessary to human needs. Permaculture works with the certainty that it is necessary to make use of phenomena that occur naturally, instead of undertaking actions that go completely against what would occur naturally, or that require complex interventions.

Permaculture also believes in the "bottom up" or decentralized solutions. According to Holmgren (2009), communities should not wait for solutions coming from the government or big institutions. Because they are not interested in creating a lifestyle that is less dependent on industry or that consumes less energy. It is important, thus, for each community to create its own local solution. Nature must not remain untouched, but it is necessary to interact with it in a sustainable way.

Though the Huni Kuin are not aware of this thinking, they traditionally have a sustainable way of dealing with nature, getting all they need from local nature for centuries. The Amazon forest has a great material wealth and the Huni Kuin have a vast knowledge of this wealth, and they are able to survive only from what the forest provides. They have little access to industrial goods and can be considered poor regarding these products and money in general. In spite of the local isolation, the Indians have ever more access to industrial goods – from food to music, clothing, tools and utensils. However, unlike the goods from the forest, that can be acquired directly from work in nature, the industrial goods demand money. The Indians

are fascinated by industrial goods and always propose exchanges with people who arrive there with these goods. We know that the more contact they have with industrial goods, the greater the chance that they will lose the traditions of using the materials from the forest.

Many of the Huni Kuin's material traditions are extremely labor intensive – such as the weaving – they plant the cotton, harvest it, make the yarn and weave manually. Thus, the things they weave take a long time to be done – a hammock can take six months. They also weave tunics, shirts, trousers, skirts and jackets, all done with patterns of traditional drawings. The industrial goods are much easier to be acquired, if they have the money. The anthropologist Marshall Sahlins (1966) presented the idea that modern industrial society is constantly generating scarcity, by always creating new products and new desires. In nomadic societies, that Sahlins analysed, people can satisfy their needs with few simple objects. They do not need more, and therefore, they are affluent. We could say that perhaps the Huni Kuin were originally an affluent society, as the nomadic societies Marshall Sahlins studied, but contact with industrial goods progressively generates scarcity.

The Huni Kuin do, traditionally, handicraft with traditional patterns, representing some animals from the local nature, such as the boa constrictor, the monkey, the turtle. Traditionally, this craft is made of woven, dyed natural fibers or seeds and feathers. However, currently, there is almost no craft made of seeds - necklaces, bracelets, headbands, etc. are made of plastic beads (Figure 12b). They use the traditional geometric patterns, but with colored plastic beads. The beads are brought from outside and the Indians ask people who are coming from outside the village to bring beads. Working with seeds is harder, because they must be fetched in the forest and have a hole drilled in them, a process that is time consuming and people can hurt their fingers. Thus, the use of other materials by Indians is motivated by convenience and by fascination with industrial goods.

The awareness the Indians have of the advantage of working from nature is related to the economic aspect. They have the experience that in town, one must have money for anything. In the village, it is possible to live without money. They plant, harvest, hunt, fish, take the materials from the forest and work with it. Whoever arrives, as explained Zeli Maspā, does not have to pay hotel, does not have to pay for water and the food is shared.



Figures 12. Huni Kuin ornaments, with traditional geometric patterns, made of cotton and of plastic beads.

In the city, accommodation is expensive and everything must be bought. This is the advantage that they point out of living in the forest.

Conclusion

The field research in the Lago Lindo village leads us to some conclusions.

As we saw with Ingold (2013), both design and anthropology are types of observational engagement. They observe, describe and have creative proposals. In this paper, we brought design and anthropology together to be able to observe and learn from different ways of life to open the path to new creative proposals that might arise from these observations.

We could observe that the production among the Huni Kuin people does not have precision or innovation – it follows an ancient tradition on the way things are made and the relation between objects and the community and nature. This tradition, of a society that works, above all with materials that come directly from nature can be related to the ideas of Holmgren (2009) and Fuller (1985). We have in the Huni Kuin an example of a society that has its own knowledge of how to deal with the natural environment and transform it.

The observation of the Huni Kuin village revealed the strong presence of Illich's conviviality in the community's material culture. The work is collective and the teaching is informal, through observation and by doing things together. The people always count on one another to produce, in a collective work. People rely on each other to build what is necessary and are constantly exchanging knowledge in a practical way. There is a school, but most of the learning happens in an informal way. So does most of the health care – people rely on one another. The conviviality is that of a pre-industrial society, in its social organization and its relation with nature. People depend on the community and on the environment to produce their things.

The Huni Kuin speech, as we saw, is not abstract or reflexive, but it always focuses on direct experience. The creation is not individual – it is the reproduction of a traditional way of doing things, in which each person's individuality is irrelevant.

The collective way of doing things reproduces the way things have always been done – people learned that way of doing with their parents, grandparents... A hand-made way of doing that does not seek innovation. Those objects, made that way, have always been enough. We saw, with Argan (1992) and Petroski (2007), that modern Design is always seeking innovation, in a pursuit to always improve the existing objects. The Huni Kuin do not seek this improvement – they do as has always been done, without thinking of evolution along time. As we saw, they use Portuguese words to refer to linear time – the Huni Kuin way of making things is always in the present. This traditional way of doing things has always brought them all they needed, with no need for innovation.

The Huni Kuin can be considered an 'affluent society', according to Sahlins (1966) term, as they have their needs fulfilled by the environment, using simple techniques, having no need for more. However, with the contact with industrial society, there is growing creation of needs. Many

tools, utensils and material goods increase the needs of the people. The community's traditional goods are not enough after this contact.

The capacity of producing their own things locally, from nature, is always very strong. Though they have ever more access to industrial tools, materials and objects, the access is expensive and hard, and there is still an intrinsic relation with the forest. The knowledge of local nature is very big – the Huni Kuin know how to obtain food, building materials and medicines directly from the forest.

Sustainability, emulating nature or integrating in it is not an aim or an awareness for the Huni Kuin – the intrinsic relationship with nature is something natural in their way of life, as they build with biodegradable materials and discard them in nature. The objects created by them are also integrated in nature in its colour and appearance, since all materials are extracted from it. It is a traditional sustainable way of production. But the arrival of industrial, non-biodegradable goods complicates the relation between the Huni Kuin and the environment, for they do not know how to deal with the waste of these products – they throw it away directly in nature, as they are used to do with the things produced from the forest. This brings a new challenge to these people, which actually is the same challenge of all of industrial society.

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