

Objetos da Floresta

explorando a amazônia através do olhar de designers

Objects of the Forest

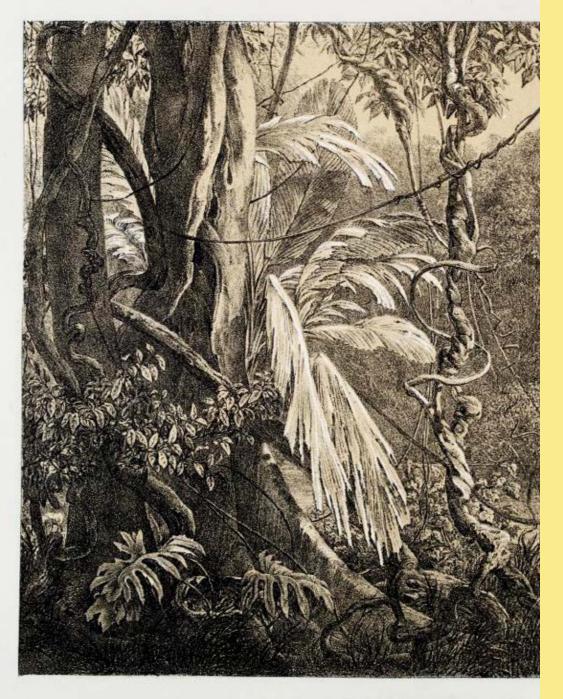
exploring the amazon through designer's eyes

1st Edition

São Paulo, Andrea Bandoni de Oliveira 2012

Imagine a place where you can just take, use and reuse whatever you need in a sustainable and ecologically responsible manner. A place where you have the ability to pick 'objects' from a tree, or to take 'objects' out of an animal. Create tools that remove poison from a plant, enabling the once dangerous and lethal plant to become a nutritious and lifesaving food source. A place where the most popular furniture is created from the very trees it hangs on. This environment is so sophisticated that even the most functional of organisms can also be used as decoration.

"Objects of the Forest" presents a selection of objects found in the Amazon which tell compelling stories about the coexistence of man and nature from a design perspective.



RIPAR INSULARUM IN

The Designer in the Splendor of Nature

Vanessa Grossman

Lost paradise, reservoir for the future of civilization, world's lung, land of the few, no man's land, underworld, stage of carnage, barbarism, green hell. The myriad of representations that the Amazon evokes in the global collective imagination corresponds perhaps to its incommensurability as a forest. However, in the national fiction and reality, the Amazon's presence at the forefront of culture is an extremely recent phenomenon. Many still see it as a sort of Brazilian Wild West, in which the various voices that have tried to denounce the numerous crimes and destruction were silenced. The rest of the country has socially and culturally neglected the Amazon over the past century, since, for colonial reasons, the country's centrality was entrenched in the Southeast. This is where, in Brazil, the Amazon's fate is hitherto discussed.

Nevertheless, if the 19th century saw the heyday of naturalist expeditions to the region, which can be proved by the creation and collection of the Paraense¹ Emilio Goeldi Museum, the resonances of the Amazon, even if episodic, have indeed punctuated every one of the most important Brazilian cultural moments of the following century. Without going into the artistic production of the colonial years, it was not by coincidence that the Amazon was tied to the construction of the country's national identity since the dawn of modernism in Brazil. The latter's uniqueness lied precisely in the fact that it implied in a Janus-faced effort of building a past and a future for art, and for the country itself.

"In these travel notes [...] Sometimes I stop and hesitate to tell certain things, I fear people will not believe." As an "apprentice tourist" Mário de Andrade

was willing to hear the multiple voices of the Amazon—by indigenous peoples, rubber tappers, riverine—in his 1927 expedition. A year later, he wrote "Macunaíma," the founding text of Brazil's modernism, which emulates the alchemy of "Brazilian culture", heroic and with no character. In its pages, the Amazonian rivers have turned into "liquid streets," whose "usual transportation is the manatee, and the Amazon river dolphin for women." To deal with the exuberance he witnessed, the author resorted to the fantastic, and "projected" the city into the forest, and vice versa.

In the same way as the architecture of this unusual territory and lifestyle of indigenous peoples inspired Mário de Andrade, they also penetrated the imagination of some of the best-known Brazilian architects, urban planners, landscape architects and designers. Actually the first "architectural landmark" of modernism was erected when the then-Minister Gustavo Capanema refused to build a neocolonial project in nothing less than "Marajoara" style designed by the Cearense² architect Archimedes Memória, the laureate of the national contest for the Palace of Ministry of National Education and Public Health. Instead, Capanema cancelled the competition and invited Costa to develop the project, with the advice of the Swiss architect Le Corbusier.

In contrast with the ideals behind the mimetic neocolonial architecture that was exhibited at the 1922 "Modern Art Week" [Semana de 22] the idea that modern architects and designers should act as "interpreters" has prevailed in Brazil. "... in a sort of return to the origins, I made a draft that in Barreirinha, in the heart of the Amazon, the native poet constructs with zeal and love." By interpreting the local "savoir faire" Costa designed a residence for his friend, the poet Thiago de Mello in the Amazon. The latter was the land of the

grandparents and mother of Costa, who is considered to be the father of Brazilian modern architecture. Another famous modernist, Roberto Burle Marx, has showed that beauty lies in the exuberance of nature's untamed flora that he "discovered," amongst others, in the Amazon, and which he introduced into the international vocabulary of landscape architecture. The Amazon also served as material resource and source of inspiration for the work of renowned designers who favored raw material, such as Sérgio Rodrigues's "Oca," his trademark. "Oca" was named after the Tupí-Guaraní term for "home," in the language spoken by one principal indigenous people of Brazil.

Some foreign artists who have settled in the country, like the French anthropologist Claude Lévi-Strauss, amongst others, have expressed their social critique by amplifying less "interpreted" popular voices. After her experience in the Northeast of Brazil (1958-64), the Italian architect and designer Lina Bo Bardi wrote a little book entitled "The Impasse of Design: Experience in the Northeast of Brazil" ["Tempos de grossura: o design no impasse" (1980)], whose considerations can certainly be extended to the Amazon. They point to the appreciation of the creative design solutions conceived by socially excluded people, an appreciation that is stripped of any vestiges of what Bo Bardi designated as "patronizing mythology," which was certainly one of the aspects of Brazilian modernism. Since the 1970s, when the environmental movement was still embryonic, the Polish artist Frans Krajcberg has, in turn, denounced the deforestation of the Amazon rainforest by transforming charred trunks and branches into sculptures. These operations have granted him the title of "poet of vestiges." His objects made from "still lifes" tell the story of a death of no return. "No Brazilian remembers that human beings are living in the forest, and that they are burned along with the trees."

Still in the field of the post-Tropicalista³ culture of the 1970s, the movie "Iracema, uma Transa Amazônica" (1976) addressed the same silenced voices as Bo Bardi and Krajcberg, by way of a manifestation against the so-called dictatorial "economic miracle." By associating the Transamazonic road crossing the Amazon forest—a construction project of pharaonic proportions—with the failure of the nation, the film is scarily up-todate. After more than 35 years, very little seems to have changed with the controversial Belo Monte dam complex, implying in the construction of the world's third largest dam on the Xingu River in the Amazon, and the displacement of thousands of indigenous people from their lands. Even though these and other aspects, like the discussion of Brazil's new forest code, seem to have persisted in the country, ecology and the environmental crisis have gained a weight on the post-industrial global agenda that are not the same as 35 years ago.

Despite the systematic and unpunished destruction, today Brazil may not be the only territory where the last natural resources have persisted on the globe, but also the nation that has something to teach about the appropriation and creative use of them. In the digital era, and vis-à-vis the environmental crisis, this is provocatively suggested in "Objects of the Forest", a book conceived by the designer and architect Andrea Bandoni, as the result of a project funded by the Funarte/ Ministry of Culture of Brazil.

Unlike the neocolonial mimicry, and the often patronizing modernist "interpretation," or the whistleblower muteness of Krajcberg's objects, the project calls attention not to the death but to the narratives and processes involved in the life cycle (the so-called "cradle-to-cradle") of the most representative objects of the Amazon material culture.

"Objects of the Forest" is closer to Bo Bardi's reading of the popular culture of Brazil's dry Northeast, less interested in its forms than in its methods. And yet it breaks with the idea that shortage, or "deadlock," has generated the objects analyzed, and prevented the development of more complex forms and processes, as a kind of subjection to the social reality, or to nature. Rather than for their functional and aesthetic value, the objects were chosen from their splendid cradle through the prism of contemporary problems and needs, and according to the ethics of sustainability—that is, their minimum degree of interference in the Amazon ecosystem.

Furthermore, the project questions the identity and practices of both user and designer. Firstly, it emphasizes not only design of traditional or ritualistic objects made by man (Tipiti), but also the objects that animals design (Caba's house), as well as those that are found in nature as such (Pirarucu's tongue). Secondly, the project encourages its local and external participants, the authors of such a selection, to diversify their conventional role as designer. Ultimately, the project enhances the sense of belonging to a particular ecosystem, and community. Each analyzed object presents a sort of DNA of the complex Amazonian context.

Neither the pure text of semiotics, nor the sheer materiality of objects: the project reminds us that objects "talk"—and may reveal their nature and social dimension, both saturated with cultural significance—when the different layers of matter and meanings mesh.

Without wishing to cover the sociocultural and biological diversity of the Amazon, or point to closed-form solutions, "Objects of the Forest" proposes an excerpt that reveals a heretofore unmeasured potential. The project challenges the logic of both capitalist

production and consumption, while taking for granted the social, economic and cultural reality of craftsman. In this sense, it proposes a contemporary rather than nostalgic return to Lévi-Strauss's lesson in "Tristes Tropiques" (1955), reminding us that the modus operandi of our civilization is one option amongst many others that could be offered to humanity.

- A native or inhabitant of the Brazilian state of Pará.
- 2. A native or inhabitant of the Brazilian state of Ceará.
- 3. The adjective "Tropicalista" refers back to Tropicalismo, also known as Tropicália, which arose from the title of a work by Hélio Oiticica (1937–1980), shown at the New Brazilian Objectivity exhibition [Nova Objetividade Brasileira] at the Rio de Janeiro Museum of Modern Art [Museu de Arte Moderna do Rio de Janeiro MAM/RJ], in April 1967. In this work, consisting in the conception of an "environment," the use of signs and images that are conventionally associated with tropical Brazil was not intended to represent a given national reality, but "to objectify a Brazilian image by "devouring" the symbols of Brazilian culture," in the artist's own words. This idea of "devouring" refers directly to the revival of the Cannibalism emulated at the already mentioned 1922 Modern Art Week. Oiticica's Tropicalia found echoes in other artistic manifestations of the period, equally experimental and socially critic, such as in the cinema, theater and music.

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The Objects

Andrea Bandoni

The Amazon Forest is an area with the greatest diversity of species found anywhere on the planet. Here, man's relationship with and appropriation of shapes and materials all originate from either necessity or opportunity. By observing the existing relationships in an area where nature prevails, I aim to illustrate nature's applications and its contexts, by articulating many of these layers found through a collection of objects.

Given the enormity of the Amazon, the collection could have been endless. However, I undertook the challenge to refine this potentially vast collection by electing exemplars and typologies that—due to their aesthetic, cultural or social expressiveness—I believe to be relevant for the contemporary design debate.

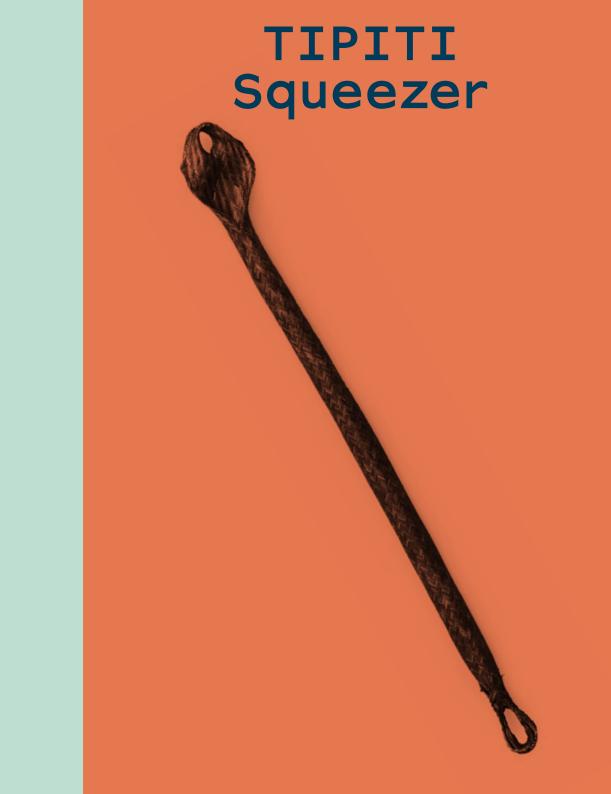
The objects of the forest here exhibited

reveal an impressive condensation of material, cultural and eco-systemic richness and knowledge. It is possible to perceive nature, its cycles and processes through them. Whether each object has a few studies or is recognized as a cultural heritage, they all are shown to be used in the XXI Century, proving the timeless character and the value of solutions often regarded as "primitive". The connection most of them posses with an ancestral indigenous culture is explicit, hence the importance of ensuring their preservation.

When working with this selection, I noticed that any attempt to group the objects around a common denominator always proved to be insufficient. For example, when objects were classified as furniture, toys, tools, and so on, the ones that have multiple uses or are open to improvisation couldn't fit. Due to the inadequacy of well-known "manufacturing categories" as a means with which

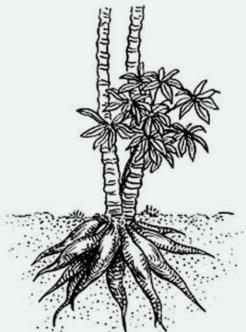
to understand these objects, it was necessary to leave these aside and to instead focus on the relationship between objects and nature, leaving the observer scope for association.

At a time when we face the harsh consequences of irresponsible and unconstrained industrial production, this project calls attention to the possibilities that nature— at its most intense expression— offers to contemporary society in general, and to design in particular. The objects of the forest depend on natural conditions for their production and are at many times perishable; they are rooted in a nonconsumerist culture and are derived from techniques that survive from artisanal practices often endangered. These objects can thus serve as inspiration for rediscovering nature in multiple ways, for tightening our bonds with it and helping us reinvent the world in which we live.





When not in use, the tipiti is kept hanging in the roof structure of the flour production house.

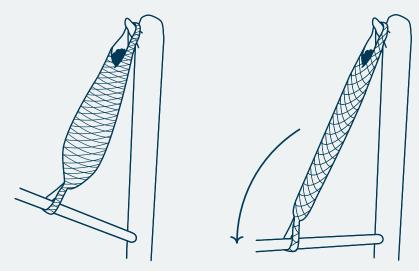


● This is a tool created specifically for processing cassava, one of the basic food staples in the Amazon region. Despite being poisonous — it contains hydrocyanic acid, which is lethal — if handled correctly every part of it can turn into food, from roots to leaves: farinha (flour), polvilho, biju, maniva and tucupi are just some of the products.

Tipiti is a sort of squeezer made of the straw from local plants, such as Arumã or Jacitara. These are hand-woven in a way that allows the fibers to move. It has an appearance similar to that of a long, narrow cylindrical basket, with an opening on top and two handles: the first is used to anchor its position, and the other to introduce a lever and pull it. The tipiti is used to separate liquid (water and poison) from the solid part of the cassava.

The Cassava plant contains mortal amounts of Hydrocyanic Acid.

After grating, the cassava roots are put inside the Tipiti. The tool is then stretched in order to extract the liquid. This operation and the release of poisonous water are only possible due to the way the fibers are crafted. The solid material that resonates inside the tipiti is the flour's raw material.





Due to the plant's poison, the cassava leaves must be cooked for 7 days to make Maniçoba – a traditional dish from Belém.

For a long time this was a means of survival in the Amazon. Today, with the diminishing number of traditional flour production houses, the use of tipiti is dwindling, and the knowledge of this object's production is gradually lost. The tipiti today is encountered mainly seen as a souvenir, available in different sizes.



The Cassava flour that can be produced with the tipiti is still vital for the nourishment of many Amazonian populations.



DESMONCUS phengophyllus.











The Jacitara is one of the plants from which the straws are used to weave the tipiti.

CASA DE CABA Caba's House



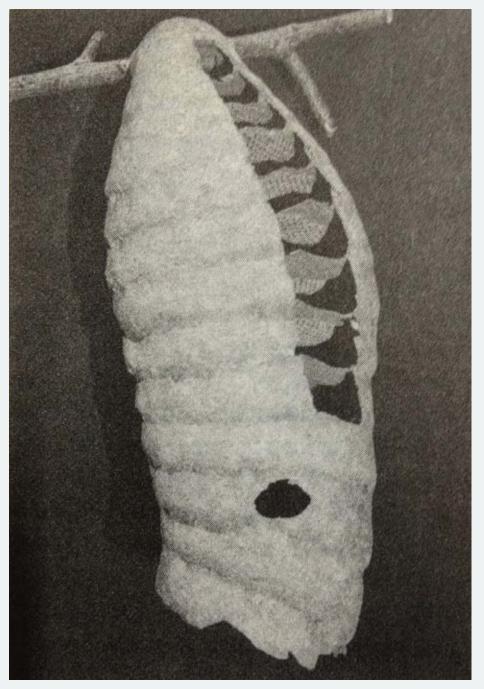


The various species of wasps build their nests in different shapes, usually found hanging in tree branches.

• This decorative object is an uncommon natural shape that is appropriated for its strong aesthetic quality.

"Caba's House" is the name used in the region for the shelter or nest of wasps, which dangles from a tree branch. This exemplar is special for having an elongated shape. Its appearance is highly evocative of human craftsmanship, and when removed from its original context, it acquires the status of an art object.

The object is made out of paper-like material. The species of wasp that produces this kind of shelter exists only in the Amazon, and they "chew" the wood until it turns into a paste, which then hardens as a parchment, creating a lightweight structure. The nesting chambers are constructed vertically, with openings facing downwards. Many combs are fixed, one below the other, and all combs combined are wrapped in many layers of "paper", with an opening for the wasps to enter and leave.



Through a section made in a caba's house, it is possible to observe the various levels of internal combs and how thin its outer shell is.



The lower part of the nest has an opening for the wasps' entrance.





Paper wasp, the "architect wasp".

CUIAS Bowls





The cuia ready to be harvested and a sprout growing on its side. Unlike other fruits, the pulp of the cuia is thrown away while the skin is utilized.



• This object is actually the skin of a fruit of the Cuieira tree, abundant in the Amazon. Available in several sizes but always of a round shape, it can reach the size of a large watermelon. The "globes" are usually cut in half, with their pulp removed, and are dried in the sun.

When cut straight through the middle, the cuias serve as bowls and vessels for many activities: for eating and drinking, preparing mixtures, for bathing, to store liquids, as a shovel, bag, case, vase, as packaging, etc.

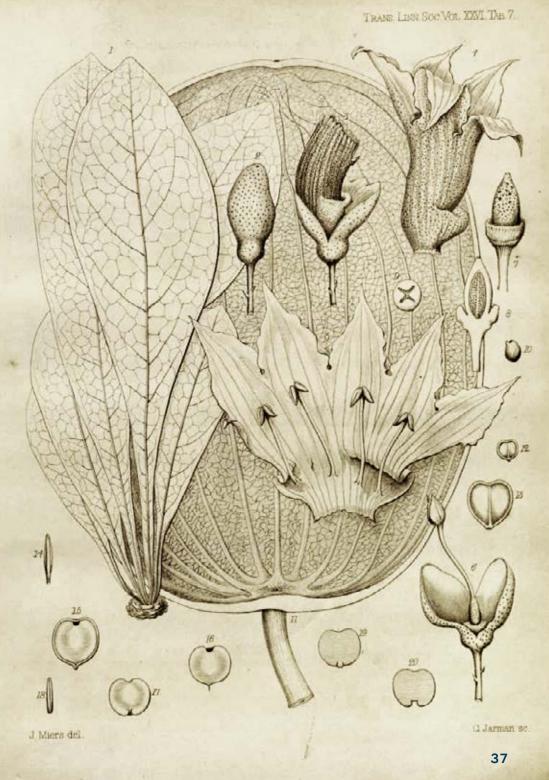
Semi-closed cuias with small cuts, are used to make music, for instance as rattles or amplifiers. Its natural shape, the various cutting options and the durability of the material are key characteristics to provide such versatility.

The "Cuias from Santarém", typical of this Amazonian city, are hand crafted locally, and this tradition has been recognized as Cultural Heritage of the Brazilian State of Pará.



A special use of teh cuias is as a measuring unit, to "pick up" prawns at Ver-o-Peso market in Belém, serving as a rough measure.







HOW TO PAINT THE CUIAS BLACK?

After drying the cuias, it is very common to paint them black with the resin of the stalk of a plant called Cumatê. The Cumatê is very adaptable and abundant in the surroundings of where Cuieiras usually grow.

There's an interesting technique to close the pores and fixate the darkness of the Cumatê: the black cuias are put in contact with human urine. The ammonia present in the urine hardens and darkens the Cumatê resin, resulting in a smooth and shiny surface, which protects the cuia from rotting and improves its functionality and hygiene.

This process is still used in some localities in the Amazon, where the cuia is then called "pissed cuia".



Click to watch the video with a report of a project made with cuias, and the process of painting them black.

20cm

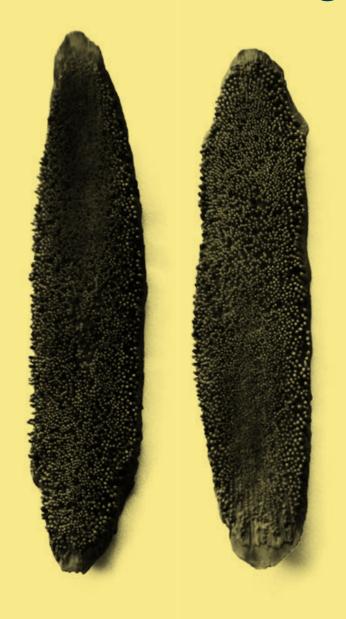


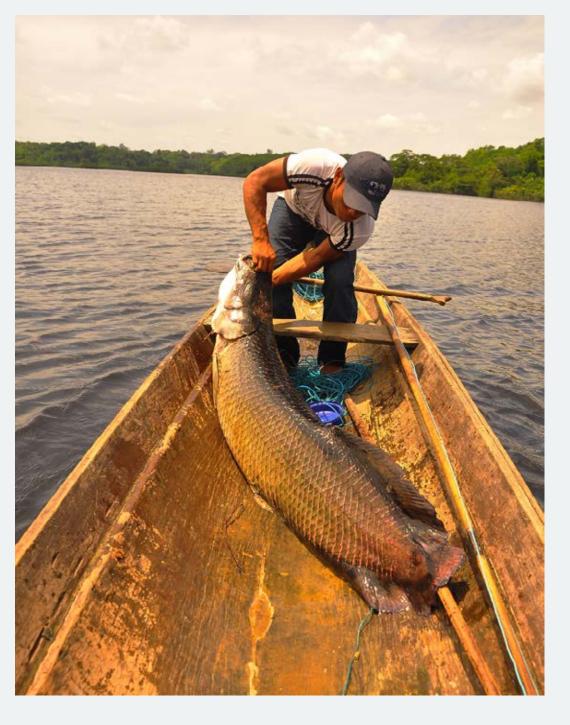




The cuias can have many different sizes. It is usual the selling of decorated cuias, which have hand-carved drawings on their skins.

LÍNGUA DE PIRARUCU Pirarucu's Tongue

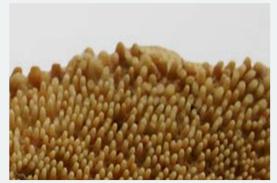




● The Pirarucu is a giant fish, one of the most well-known of the Amazon, measuring on average two meters long. Whilst the meat is widely appreciated in many culinary dishes, the dried scales of the fish are used as 'nail-file' and for ornamental purposes.

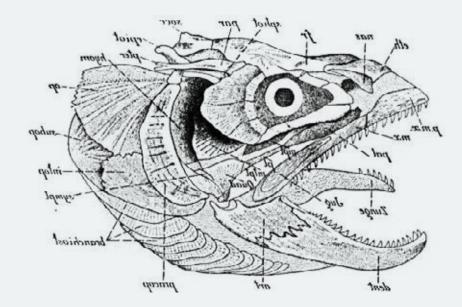


The Pirarucu is one of the largest freshwater fishes in Brazil. It can reach up to 3 meters in length and weigh up to 250 kg.



The bonytongue's "teeth" give the fish extra help when eating.





Pirarucu's tongue is a bone rather than a muscle.

Once dried, the bone of the Pirarucu's tongue acquires the texture of a rough sandpaper, and measures approximately 20 centimeters in lenght. It is used to grate Guaraná sticks into powder. (Guaraná is an amazonian fruit, and the stick is the oldest form of retaining and trading this product).

In keeping with the tradition of using every part of the Pirarucu, this object also appropriates part of the animal and turns it into a domestic utensil. Given the symbiosis between fish and object, this object is at as much risk of extinction due to excessive and unregulated fishing practices, as the Pirarucu itself.



The object is traditionally used to grate Guaraná sticks and the resulting powder is used to prepare energizing breakfast drinks.



The Pirarucu skin is a flexible and extremely solid natural armor capable of withstanding even Piranha bites.

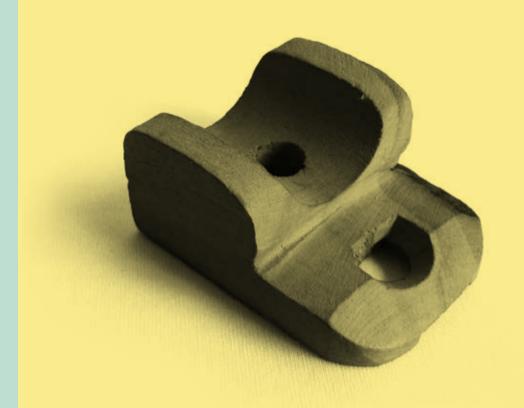


The dried scales of Pirarucu are commonly sold as souvenirs and can be used as a nail -file.



Most of the techniques used to catch the Pirarucu are based on traditional local fisherman's skills. This absence of rules can result in the extinction of the fish.

APITOS Whistles





The body mass of the Mutum makes it a good meal. To attract this bird, amazonians reproduce its sounds through whistles.

• Whistles are very common objects in the Amazon, and their function is to mimic the sound of birds to attract prey or to serve as means of communication, for instance to call to people inside the forest. They are artifacts made of natural local materials, which at the same time assist in the exploration of the local environment itself.

There are several models, and the sounds produced are quite different. Some shapes are the appropriation of natural forms: usually seeds or fruits whose pulp is removed and the skins then perforated. Others are crafted using local materials, such as wood, clay or mud.

Some whistles are played in unusual ways, like blowing it with the nose instead of the mouth. It is also common to find the shape of a bird in hand-modeled whistles, as a direct association of form and function in the object.

Whistles made with seeds

Whistles with bird shapes





10cm





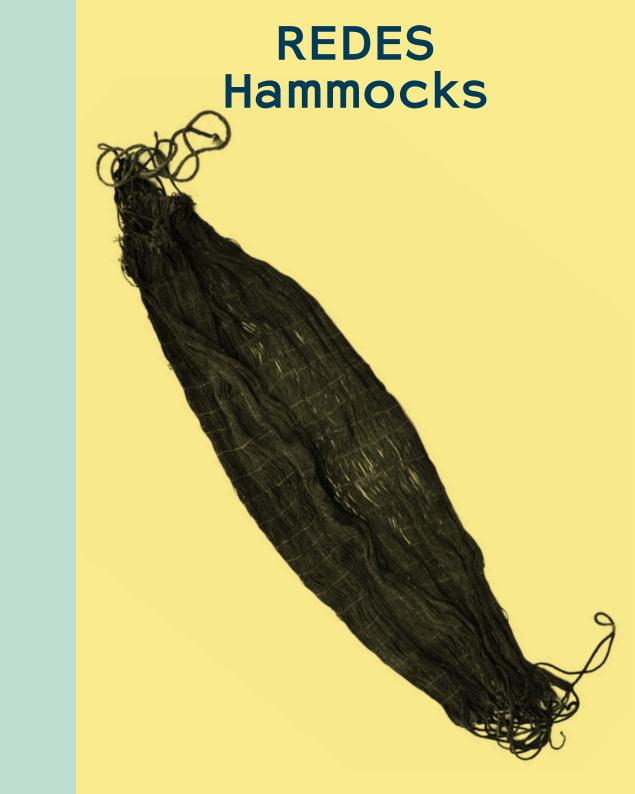
Wooden whistles







Click to watch a video on the sounds and how to use the whistles.





In houses without doors, it is important to keep a distance from the floor so that animals and insects don't reach people during their sleep.

• The hammock is an object widely used and extremely well-adapted to the Amazonian needs. This piece is both furniture and a simple textile; it is light to carry, allows easy installation and can be hung at a distance from the floor - all of which are fundamental requirements for a camp in the forest. Furthermore, it allows a swinging movement and forms a "shelter" without becoming too hot. Its popularity all around Brazil shows the great formal and functional convenience of this object.

The hammocks seen in the Amazon are generally industrial. However, the traditional indigenous legacy is handcrafted hammocks, made by weaving natural fibers such as the straw of Buriti or Tucum.



Hammocks in boats



The use of hammocks in the long- distance travel boats of the region is remarkable. The main transportation means in the Amazon are the rivers, and the journeys between the major cities last an average of two days. Due to the weather, the boats are mostly open air - and do not have any seats: they are totally adapted to the use of hammocks. Each passenger must bring and attach his own hammock, which will be his bed during the long trip and offers some private spaces aboard. Far from being impersonal, this system presents a unique solution for the accommodation of passengers: at the same time the boats carry big masses of people they can still be highly customized.

PANACU & JAMAXIM Natural Bags





● These are different models of bags or backpacks created by weaving together leaves or vines, often produced in the forest to be used instantly to carry things. A peculiarity observed in the Amazon is the way people carry these volumes: they rest their strap across their forehead.

Some are manufactured through a simple but ingenious use of leaves of different palm trees — such as Arumã, Buriti, Açaí, amongst others: by taking advantage of the strength and shape of the material.

The most robust vessels are made by weaving vines, such as Cipó Titica or Ambé. These vessels have a rigid and thin material, with its weave tightly knit, resulting in a very resistant piece. This kind of backpack can bear a lot of weight, and is commonly used to carry children or to transport products from the forest.

Click to watch a video on the usage of bags in the forest tracks by Tapajós River.

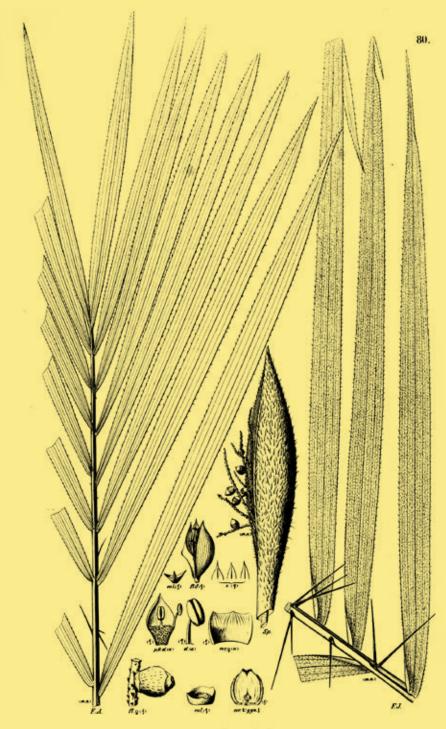
• The Panacu





The bags must be woven while the leaves are still green. The resistance of the piece comes with the aging of the material.

As they form a kind of "basket", besides serving to transport belongings these objects are also used as containers, for example as waste bins.



BACTRIS Glaziovana.

The Jamaxim





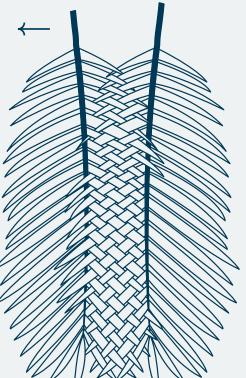
The jamaxim being used to carry heavy cassava roots.

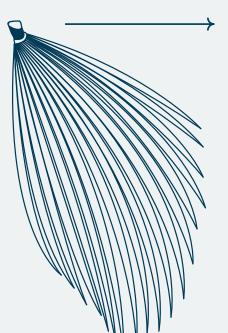


The aerial roots are the parts of the Cipó Ambé used to make the jamaxim.

PHILODENDRON Selloum.







Making the bags

The craft technique uses the most rigid part of the palm tree leaf as a structure for the bags, and the most flexible part to be woven in different ways.



CUIA-DE-MACACO Cuia-of-Monkey





Different kinds of cuias, with diverse shapes, hang from Amazonian trees.

● This object is actually a "box" of seeds. It is the fruit of the tree called Cuia-de-Macaco (Cuia-of-Monkey). It hangs on a tree that grows on the river bank, and, when the "lid" of the fruit falls off, the nail-shaped seeds trapped inside the "box" are scattered around and dispersed by the flowing waters.

Since its shape is so intriguing, the fruit is used by people to turn into decorative and even playful objects, taking advantage of the organization of the seeds inside the "box", which look like a perfect puzzle.



The shape of each seed is unique and fits inside the bowl in a specific position.



A natural container







TÊXTEIS Textiles





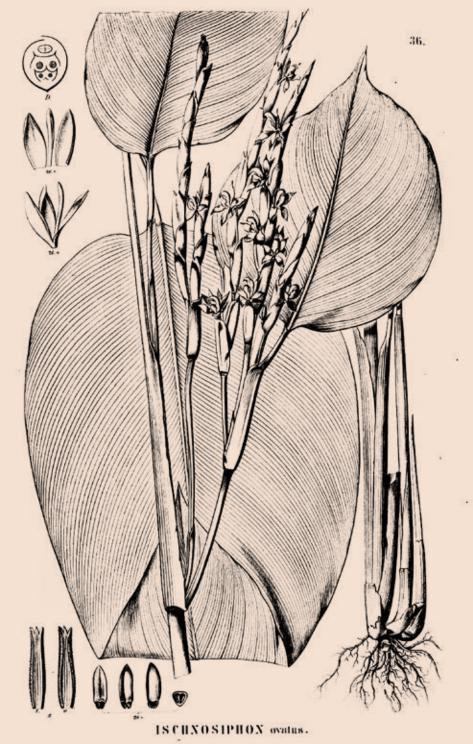
The use of mats as sunblinds is very suitable to the Amazonian region, since they are produced with natural materials that refrain light and heat.

 These objects are made from different natural materials crafted into tissues and fabrics, with or without decorative patterns.

Mats or tupés are generally fabricated with the splint of plants like Arumã or Buriti, which can be dyed and waterproofed and then hand-woven. They can be produced in large dimensions and are commonly used as carpets, panels and sun-blinds.

Cloths can be found in the Amazon made from local materials, such as Patchouli, Tururi, Buriti and Tucum straw, and many others. Their production generally consists of making threads, yarns or units with which it is possible to knit, crochet, sew, etc. The textiles are then used to make towels, curtains, hammocks and even garments.

Since they require direct work with the natural materials using ancestral techniques, and given the increasing availability of industrial fabrics and machines, some of these processes are not commonly encountered, and the knowledge of these processes is at risk of extinction.



The Mats

The drawings in the mats are an indigenous tradition and refer to nature and to local daily life, or even to the myths told by the elderly. They have names that can be translated as snake knitting, ounce mesh, pineapple skin, maçarico (bird) foot or spider web. The patterns are created in the weaving process, by mixing dyed and natural splints of Arumã.



Click to watch a video on the production of Arumã mats with native-indian patterns.



The Aruma splints are the raw material for the mats.

The Cloths



Table cloths by Dica Frazão, who works only with local natural materials.



With the Tucum straw it is possible to crochet pieces in different styles.



ASTROCARYUM I. Weddellii, II. pygmaeum.

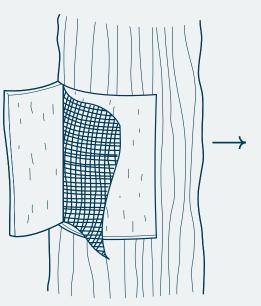
A dress by Dica Frazão made with Tururi (liber).



Click to watch a video on the Museum Dica Frazão - a 90 year-old amazonian fashion designer.



Threes that produce textiles





Tururi, a material found in the Amazon, is a tissue ready to use, without first needing to make threads or to weave. It consists of the fiber found under the bark of certain trees, such as Copaíba, Tauari or Caxinguba. It is obtained by scraping off the most external bark of the plants, and then simply removed, soaked, beaten and finally dried in the sun.



ESPATA DE PALMEIRA Spathe of Palm Tree





The spathes, present in some palm trees, are like recipients that safeguard flowers and fruits.

• The object consists in the appropriation of a part of the palm tree whose function is to protect flowers and fruits. It is called spathe or bract, and it resembles a large modified leave. It is found in palm trees like the Inajá and Babaçu. When it falls from the tree and dries, it becomes stiff and can be used by people.

This is an extremely versatile natural shape, able to generate movement and suitable for several uses when appropriated: as a fruit bowl or receptacle, a decorative object or even as a swing or cradle for children. These are customs inherited from indigenous cultures.

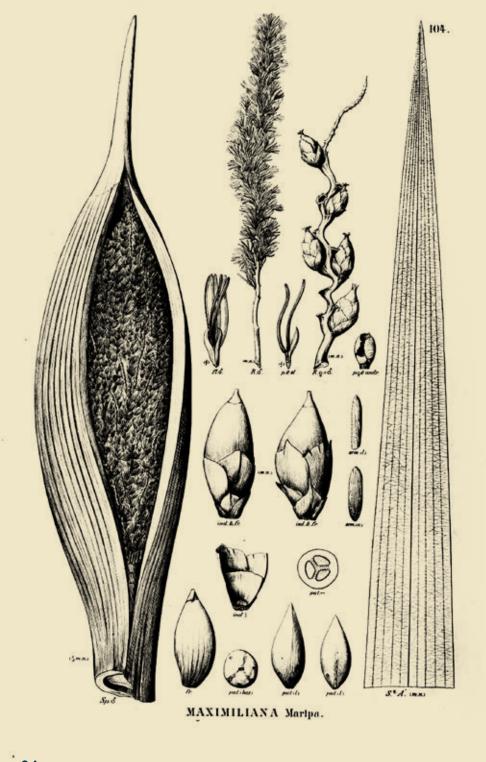


ASTROCARYUM I. caudescens, II. gynacanthum.



The shape of this spathe can cause movement, being used by indians as a cradle for their children.

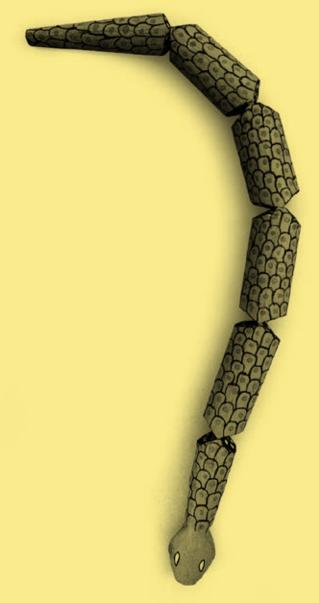






Inajá is a palm with a long and closed spathe, resistant enough to serve as a vase without decomposing.

BRINQUEDOS DE MIRITI Miriti Toys

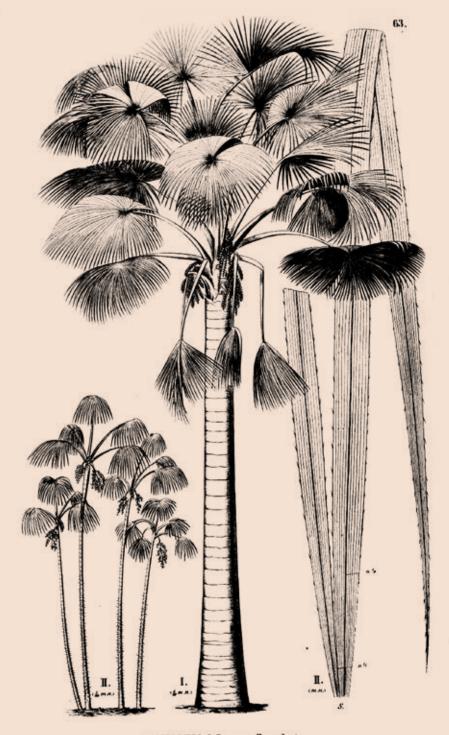




• Miriti (or Buriti) is a palm tree abundant in the northern region of Brazil, and it is used for several purposes. The fruit is used in the local cuisine and the leaves can serve as a roof for houses. Toys are made from the plant pulp, which is called "Amazonian foam" on account of its extreme lightness. To manufacture the foam, the external splint of the Miriti – a kind of hard fiber – is removed, and the pulp is then dried in the sun.

The toys are made by carving this pulp, which is round and very flexible – easy to sculpt with knives. After that, a resin is applied and the objects are painted. The shapes of the objects express the artisan's view on nature and typical Amazonian elements or scenes: snakes, birds, lovers, boats, etc.

These toys are the symbol of the Círio de Nazaré, the largest religious festival of Belém. In the traditional cortege, many followers make and carry Miriti objects – which are very light – to fulfill vows.



• The city of Abaetetuba is the main hub of production of the Miriti toys, which are recognized as Intangible Cultural Heritage of the Brazilian State of Pará.



The Miriti toys for sale on the market in Abaetetuba.

The Miriti is one of the plants with the biggest economic value in the Amazon region, since its different parts can be availed for various purposes, such as food, construction and crafts.

MAURITIA I. flexuosa, II. Martiana.

Making Miriti toys



The raw material for the production of the toys is the inner part of the plant that sustains the leaves.

10cm







Click to watch a video on an artisan explaining and making a Miriti bird.

EMBALAGENS Packaging





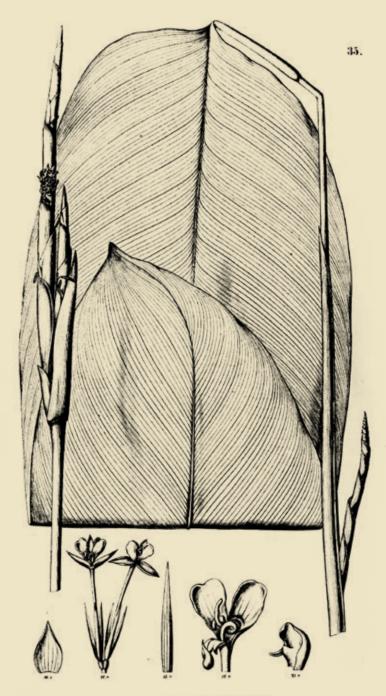
Wrapping and structure being created from natural materials in the forest in order to make cooking viable without a pan.



● These selected packages are wraps made of leaves, vines and other materials available in nature, without any kind of processing. Some of the most common materials are Arumã leaves, dried leaves and Bananeira leaves, which are simply folded and can be tied or pinned to create a better structure.

These natural packages take advantage of the properties of a certain material to isolate and store another item. This isolation can be merely visual, or also to avoid the smell or touch, and can serve for various other purposes, from facilitating transportation to avoiding the dispersion of a powder. Wraps are also used in cooking: it can be used to conserve things, to impart a special flavor to dishes through smoking, and can even serve as a plate.

The habit of using natural materials as packaging is disappearing in the Amazon region. For example, fresh meat was formerly wrapped in sheets of Arumã leaves in the markets, but today is being wrapped in newspapers or even plastic bags.



ISCHNOSIPHON obliquus.





Natural soaps are sold wrapped in Arumã leaves in an old-fashioned herb store in Belém.



20cm



MUSA L. coccinea, II. sapientum: III. RAVENALA guyanensis.



Fish cooked inside a leafy package to gain a special taste. Bananeira leaves are the most commonly used.

EXTRAS



Besides the presented objects, the expedition "Objects of the Forest" in the Amazon encountered many other processes and materials of interest to designers. These "findings" are compiled on the internet, and can be viewed by accessing the following link:

www.objetosdafloresta.com/extras

"Objects of the Forest" a project by Andrea Bandoni

Nature, as source of inspiration or concern, is one of the focal themes nowadays in almost all fields. From the perspective of a Brazilian designer, I believe nature is the biggest treasure my country holds. This project is a first attempt to head in the direction of discovering the design potential in areas dominated by nature, so that a new methodology for creating sustainable objects can be derived.

The project was born when I had my first contact with a tipiti. The appearance, texture and function of this object helped me realize that in an area where nature prevails, where the existing relationships between man and environment are visible and materialized into objects, design has a lot to find and learn that can be of benefit to the world.

"Objects of the Forest" looks at the Amazon from a point of view that has never been explored before, which is to say: specifically from designers who are seeking to understand how one can have a more harmonious coexistence with nature whilst using the skills and techniques laid down by nature itself.

In April 2012, I coordinated a trip through the Amazon region, travelling over 2.000km, passing through 9 strategic locations, encompassing communities, design schools and various organizations. By means of field experience and visiting more than 30 institutions, I tried to understand what sustainability is and its relationship not only to nature but its relevance to modern day society. This question helped me to define the present



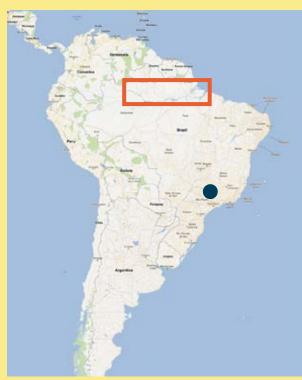
set of objects shown, which also demonstrate a variety of perspectives on nature.

Workshops were held in the cities of Manaus and Belém, aiming to discuss the theme with local stakeholders. In these occasions it became evident that reflecting about the subject and ideals can assist in the creation of new objects with the same level of sustainability the objects presented here possess. The development of the project, in every detail and with images, may be followed in an online diary: objetosdafloresta.com/diario.

The publication of this e-book hopes to encourage experiments in sustainability in the design field (still scarce in Brazil) and to widely distribute the collected information. It also hopes to raise discussions on subjects such as local culture, memory, nature conservation, the social role of the designer, sustainable production, and the use of natural raw materials.

Besides exploring and valuing the potential that exists in the Amazon Forest, 'Objects of the Forest' challenges and encourages contemporary designers to imagine and work for a new, post-industrial system. A system that considers how products can not only stop harming people and the environment, but also how they can have a positive impact in the future, helping to defuse the environmental crisis.

Due to the interest that has surfaced from and for this work, we are studying possibilities of developing and continuing the project.

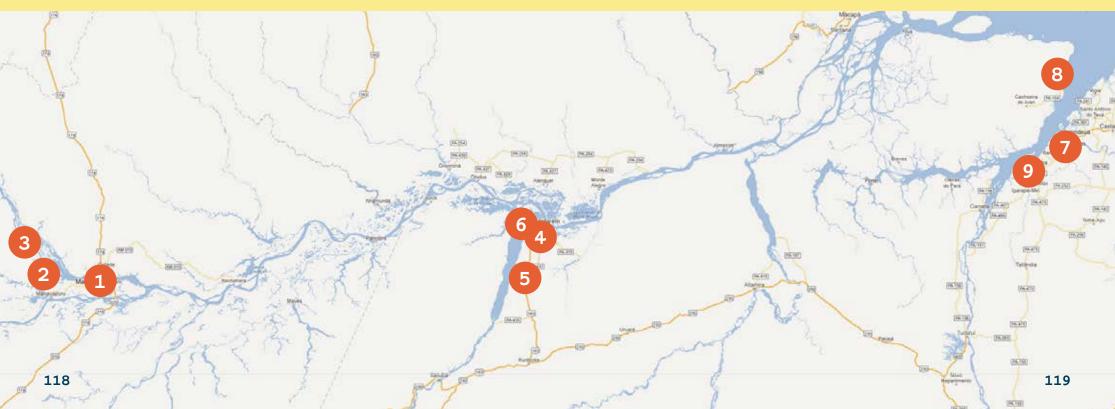


Departure from São Paulo on 7/4/2012 during one month.

The trip

A total of 2 386 km travelled across the Amazon: 440 km by bus, 807 km by plane and 1 139 km by boat

- 1 Manaus 7 a 13/4
- 2 Parque Anavilhanas 14 e 15/4
- 3 Novo Airão 16/04
- 4 Santarém 19 e 20/4
- 5 FLONA Tapajós 20 e 21/4
- 6 Alter do Chão 22 e 23/4
- 7 Belém 24 a 27/4 e 2 a 5/5
- 8 Marajó 28/4 a 1/5
- 9 Abaetetuba 4/5





Workshops "Objects of the Forest"

The goal of the Workshops was to discuss sustainability at a local level and to empower Amazonian artists and designers to seek creative possibilities in nature, understanding a objects under a conceptual bias, and to approach the Amazon Forest with a new mindset.

Whilst the workshops elaborated on the fundamental issues at the top of the design agenda internationally debated nowadays, they valued not only local culture and nature, but also the local professionals. The stance we took is that the creative and active people living in the Amazon should be supported given their knowledge of the local context and be encouraged to innovate and assume a transforming role in nowadays design panorama.

The free workshops took place in the two main Amazonian cities. They each lasted three days and with were supported by local institutions: MUSA /Museu da Amazônia (Manaus) and SESC Boulevard (Belém). The participants were design professors of the main local universities, artisans, NGO representatives, artists, students, scientists and many other people interested in sustainability.

After informal discussions on the first day, the participants chose to visit forests close to the cities. On the second day each participant observed nature from a design perspective, discussed ideas and collected materials. On the last day, each produced a prototype that that respond to their own sustainability criteria.



The workshops were very successful; there was a sense of enthusiasm and a very strong commitment to getting the most out of the experience. The participants still stay connected to the project and are available to discuss themes related to the workshops:

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Support

MUSA Museu da Amazônia (Manaus, AM) SESC Boulevard (Belém, PA)

Partners

Anavilhanas Jungle Lodge (Novo Airão, AM) Chez Lês Rois (Manaus, AM) Eco Pousada Miriti (Belém, PA)

Organization



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Despite the systematic and unpunished destruction, today Brazil may not be the only territory where the last natural resources have persisted on the globe, but also the nation that has something to teach about the appropriation and creative use of them. In the digital era, and vis-à-vis the environmental crisis, this is provocatively suggested in "Objects of the Forest", a book conceived by the designer and architect Andrea Bandoni, as the result of a project funded by the Funarte/ Ministry of Culture of Brazil.

(Vanessa Grossman)

www.objetosdafloresta.com

