# METARECICLAGEM

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## What is MetaReciclagem?

A group of people with a common aim. A collaborative methodology. A social technology project.

All these descriptions were given by participants of MetaReciclagem's actions and mailing list. If there are many possible ways of seeing it, let's start by its name.

"Reciclagem" means "Recycling" in Portuguese, which basically describes the group's main activity: to recycle old computers. "Meta" comes from "Metáfora", "Metaphor". So what does the title mean?

Projeto Metáfora (Metaphor Project) was a mailing list created to discuss new technology in everyday life. It lasted 16 months and ended in 2003, but its impact and results – one of them is MetaReciclagem – are still around. That's what Miguel Caetano, a Portuguese journalist from Lisbon, has been trying to analyse. He's writing his M.A. thesis on Metáfora. And in order to understand how it all began, it is helpful to have some background on the original project.

# Projeto Metáfora

The mailing list Projeto Metáfora was created in June 28th, 2002, in Brazil. In less than three months, there were a dozen projects in areas such as education, art and media, from a series of public interventions to discussions of (what turned out to be) the Brazilian tactical media lab, MidiaTaticaBrasil. Felipe Fonseca, one of its members, describes it as a free incubator for collaborative projects.

All those projects followed a few principles, notes Felipe:

They emphasized the idea of collaborative development,

inspired by the free software movement. By publishing the knowledge created during the process, it would be easier to replicate the projects; therefore, they were all based on copyleft and free knowledge concepts;

A different perspective from other projects that deal with technology. We did not want to train people to become accustomed to computers, but transform technology to transform their lives;

An effort to keep the conversation free from computer jargons, so that anyone could understand, and open to anyone willing to participate (subscriptions to the list were unrestricted). There was also a concern to fight notions that technology is something apart from everyday life and that online and offline activities are opposite.

"I never subscribed to the list because the number of messages sent everyday was so huge that I thought I wouldn't be able to digest it all", says Miguel Caetano. By the time Metáfora was created, he worked as technology journalist for an online publication in Portugal and started watching the list closely. "I was regularly following the creation of new subprojects."

Caetano then decided to write about the project he considers to be at "the cutting edge of cyberculture, the most advanced project in the technology-artistic vanguard". "And in Portuguese language."

# A technical project

All projects discussed by Metáfora dealt with a new way to use technology. Felipe explains that MetaReciclagem was born to provide the physical infrastructure to some of them. "In a given point, we realized we would need computers to get those projects running. Someone sent the group a link to accr.org website, an American organization that delivers used computers to NGOs. A member suggested we ask for donations. Other pointed out that transportation would be too expensive, and a lot of Brazilian companies and people also had old computers. What if we asked them? We were not an organization, how could we formally justify and process the donations? A draft of what we then called MetaReciclagem was created on our wiki site.

Who was the author? Everyone, I guess. Then I met Agente Cidadão, a NGO working with what they call 'Social Logistics': they pick up donations all around São Paulo and deliver them to charities. At that point, they had some computers and didn't know what to do with them. I talked about our project and in less than one month we started working together. They offered us exactly what we needed – space, old computers, internet access and energy, but, furthermore, the most important: a goal. We would transform technology using free software to help people in need."

To restore computers which are broken or considered obsolete, put them running Linux and donate the machines to social organizations: that was the basic idea. The choice for free software is not only political: it's based on hardware demand – most donated machines have low processing power and need "lighter" software – and protects the group from being accused of software piracy. Hernani Dimantas, other active member of Metáfora, emphasizes that MetaReciclagem is probably the first project which "came from of the internet and became real".

#### **Searching for definition**

If it is such a pragmatic project, with purpose and methodology, why

## is there such a diversity of definitions?

Felipe emphasizes that there isn't a particular group called MetaReciclagem. "We are not MetaReciclagem, we do MetaReciclagem. We use (the title) only to identify some of our actions." It is a decentralized movement, without hierarchy.

"It's a pirate operation", says Hernani. "People get together when they want to, and use MetaReciclagem as a form of expression. That's why the voluntary side of our work is so big. The connection between us follows the logic of our individual projects."

In a group formed by people with such distinct backgrounds and interests, participation is also variable. Since people involved in the actions are not usually paid to do so – they generally work on other projects with governments or NGOs not necessarily connected to MetaReciclagem's work. To Dalton Martins, this is the reason why they can be called a movement, and not an institution.

There are disadvantages. Despite the relative success of its actions, many of them are partnerships with government or NGOs. Although MetaReciclagem's tactic is to keep an open dialogue with them – instead of facing big companies, for instance – to depend on other organizations and politicians (and therefore on their agendas) does not give the actions the necessary stability to grow and produce.

#### MetaReciclagem is...

If there are many voices inside MetaReciclagem, then there are many ways to describe it. Some of them were presented at a recent group meeting:

"MetaReciclagem is a project that tries (and miraculously achieves) to make computers that were considered obsolete work with free software, and to introduce people in need to the idea of digital inclusion. To me, it's also a chance to learn and teach others how free software works."

"It's construction of technologic independence to political and social actions"

"Garbage is only garbage because it's in the wrong place. Things at their right places have value. To some, it's nothing, to others... it's an inversion of values."

"It's a great school, a place to look for help, where we can create."

"To recycle ideas, minds and hearts. To raise blue flowers in dry land."

"It's a family with freedom of expression; although it is work, there is autonomy to come and go."

"It's a collaborative methodology of technologic re-appropriation to social transformation."

## **Digital inclusion?**

Hernani notes that, although MetaReciclagem was supposed to be a pragmatic project of computer recycling from start, people started developing their own theories in time. That's when it stopped being merely technical and showed a social aspect. What people involved in these actions think of them, however, changes. And this difference in points of view turns the project even more interesting.

To Hernani, the group's work is characteristic of a "third phase" of digital inclusion. To restore computers and pass this ability to others is more than what other "digital inclusion actions" are doing right now, he observes: to simply provide access to the internet and access to information was something done at the first stages of the movement. What MetaReciclagem does is provide people with means to produce their own knowledge and encourage this process.

Felipe, for instance, disagrees with the vision that MetaReciclagem's actions can classified as digital inclusion. Not that he's against the movement for the right to universal access to computers connected to a network so people can interact. However, one could say this purpose is already being served by the electronic urn, he argues. "MetaReciclagem has a much deeper objective. We appropriate technology to provide a critical approach to the use of communication tools"; it's not about "inclusion or exclusion", but about "conscious, creative use" of computers and internet. "This is why we did not choose to open a number of telecenters, but to work on research and development of new ways."

## What about Metáfora?

Projeto Metáfora ended in October 2003. MetaReciclagem's "spores", however, keep spreading and growing in other cities. "Despite its force, vanguard and creativity, Metáfora was too ambitious. Its force was divided into various projects", thinks Miguel Caetano, the Portuguese journalist. In his opinion, "its philosophy was too anarchic and utopian to establish a long term project". MetaReciclagem, on the other hand, "is not as radical. It has a technologic and social approach, is well-structured and seems to be efficient".

But he hopes that, one day, the group involved in Metáfora may dedicate themselves to other projects. "I hope that, after working to establish MetaReciclagem, they would develop other projects created at the list, which are more related to cyberculture. Metáfora is an authentic storage space for great ideas yet to be explored."

## Santo André – Parque Escola

Among trees and botanical gardens, MetaReciclagem found a perfect place to replicate its work and spread its ideas. Located in Santo André – a city near São Paulo – Parque Escola (School Park) was not planned, but put together as a jigsaw puzzle. Its structure was entirely built with recycled materials: old tires, discarded gates, containers and even a bus were transformed into buildings and classrooms. The park's main goal is to draw attention to the importance of environmental preservation, and it organizes workshops and cultural activities related to the subject.

We first heard about Parque Escola at II Semana de Inclusão Digital, a meeting about digital inclusion held in Brasilia, capital of Brazil. Dalton Martins and Felipe Fonseca, from ProjetoMetaFora, were at the event, where they were introduced by Hernani Dimantas to Solange Ferrarezi, assistant Secretary of Education of Santo André municipal government. Through her, we were introduced later to the architect that created School Park, Luiz Henrique Zanetta.

With 665 thousand inhabitants, Santo André has a PT administration (politicians from the Workers' Party).

At a meeting, we presented our plans to Zanetta, who realized MetaReciclagem shares the same principles with Parque Escola: both have recycling as a premise. He welcomed the project and gave us the necessary structure to work in the park.

In August 2003, MetaReciclagem occupied a container at the park and created a computer recycling laboratory. At that time we received our first donation: 50 computers. By then, we did not have a "target", a particular group of people to work with yet. Later, we met Jorge Gouveia, of the Departamento de Geração de Renda e Trabalho (Work and Income Generation Department), who provided a public for our first action: cooperatives assisted by the local government cooperative incubator.

Sixteen people – members of eight cooperative associations – were invited to attend classes with MetaReciclagem. They learned how to use word processors, spreadsheet programs, web browsers and other basic computer programs. When preparing a course, we try to convey the idea that technology can be an instrument of change. Computers can be a great help at daily tasks, but, more importantly, they can also be used to discover new ways of expression and connection with other people, such as collaborative websites and blogs. At the end of the process, which lasted three months, computers were donated to each association.

Soon we noticed that five cooperatives have put the machines aside. All complained of the same thing: the lack of a computer printer. The fact is that cooperatives (as well as other companies in Brazil) still rely heavily on printed documents; they need to send letters through regular mail and fill in bureaucratic forms to hand in to the government. Looking back, Dalton Martins thinks it's clear that the experience would have proved more successful if there were printers available to donate along with the computers.

Those five cooperatives did not remain in touch with MetaReciclagem. The other three, however, managed to find printers and use the machines. These are TextilCooper (a textile association with 100 members), CoopCicla (works with garbage recycling) and Olho Vivo (sewing association with 30 members, one of the oldest cooperatives in Santo André).

## WiFi

Besides the experimental lab, MetaReciclagem created a videowall

and a WiFi spot covering the entire park. It is now the first public park in Brazil with wireless internet.

## Computers as a work of art

All the computers recycled and donated (there are some in the park's library) have been painted by a local artist called Glauco Paiva. His colorful and creative work uses machines as a support for his art. To Hernani Dimantas, Glauco's collaboration totally changed the project. "MetaReciclagem gained a new form of expression. A computer is transformed into a work of art, doesn't matter if it's old or not. Until then, recycling language was grey."

## **Digital Park**

Epac (Escola Parque de Arte e Ciência – Art and Science School Park) is a project of science & technology popularization aimed at public school teachers and students. The idea is to unite science, art and everyday life. At Epac, teachers will have the chance to conduct scientific experiments so that students can see what they have only read about in books. The plan is to create a science museum, an art gallery and to offer workshops and courses.

MetaReciclagem is helping implement the physical and logical infrastructure of the project, Parque Digital (Digital Park). Dalton develops software, computer games and all kinds of experiments that involve recycling.

# Santo André – Sacadura Cabral

After the course given to cooperatives, we wanted to teach young people how to recycle computers so they could start their own business. With the help of Assessoria da Juventude, a governmental department that develops projects aimed at youth, we taught a class of 12 people appointed by the Assessoria. They were all from Sacadura Cabral, a slum recently re-urbanized by Santo André government.

A teacher, Julio Milan, was hired and students attended daily classes for a month, in April 2004. They learned how to assemble and maintain computers, install Linux, etc. The purpose was, at the end of the course, to give support to students willing to start their own commercial enterprise.

Of 12 young people, only 2 remained, Erick Bento Dias Ferreira and André Garrão, who founded a cooperative called InforMeta. We helped them by finding clients and donating computers that were sold to provide cash for the enterprise, in order to hire an accountant, buy office equipment and so on. The experience has been successful, for they are already working and being paid. Now the plan is to replicate Sacadura Cabral experience in other communities.

At InforMeta, André has worked to sell computers and provide technical assistance, while Erick has focused in actions inside the community. With friends, he is transforming the local community center, which offered only a literacy course until then. Now MetaReciclagem occupies two rooms at the place: one is a telecenter and a laboratory for network solutions, and other is a computer recycling lab, where Dalton gives classes.

"We want to provide means for them to build their own knowledge and gain autonomy", says Dalton. "They are already developing a project of sharing internet connection through WiFi network between houses, market places, etc. It's all being planned and made by them, we only give support. And those students who are really interested will receive training at InforMeta." With the WiFi spot and the recycling workshops, the idea is to offer internet access and cheaper recycled computers to the community. This allows people to have computers in places other than telecenters, notes Hernani Dimantas. That is positive, he says, because it dissociates computers from work and gives voice to people, at a low cost. "LigaNóis is a proof that people want other things than just chat rooms and instant message programs. And that's our purpose"

## **ABC Free Software Project**

MetaReciclagem is heading an effort to unify free software groups in ABC area (the cities surrounding São Paulo: Santo André, São Bernardo do Campo, São Caetano). Projeto Software Livre ABC (ABC Free Software Project) is trying to create a discussion forum so that groups can collaborate with each other. They hope to form an independent group that will pressure the government to use free software and encourage local activities.

MetaReciclagem also wants to expand its actions, by providing computers and developing projects in other cities, "places where there's a need of expression through technology", says Dalton.

"We don't have this belief that a telecenter is to provide access to information; it's much more than that, we want to use it as a language. When I have a good command of the technology involved in this language, I have the ability to express myself with it, and that creates a little 'problem'", jokes Dalton: "this can increase actions in a way we can't even imagine. That's what's interesting, what's capable of changing someone's head."

To sum up, he says, MetaReciclagem's purpose is "to create decentralized actions and establish ourselves as a force at technology

recycling and free software production".

## Agente Cidadão

Agente Cidadão (Citizen Agent) is a non-governmental organization that provides transportation for donated material. They pick up beds, mattresses, furniture and any other items people want donate of at their houses and deliver to charities. Felipe Fonseca met them in early 2003 and learned they received old computers but didn't know what to do with them. The partnership soon began: MetaReciclagem occupied a space in their office (located in a shopping center in São Paulo) to create our first experimental laboratory, where we worked to assemble the machines, install free software and prepare them for donation to organizations. Allies who worked in the place were Dalton Martins, Eduardo Mota, Fernando Henrique and Felipe Fuches.

With Agente Cidadão, we organized events and met future partners:

**Cybersocial**was an event that lasted one month and took place in SP Market shopping center. There was a telecenter open to the public which offered internet access and workshops.

Autolabs was part of CAJU project (Centro de Ação Juvenil, Youth Action Center). 45 computers were donated to create three telecenters in the east area of São Paulo. MetaReciclagem also offered technical support to the telecenters, a workshop about computer assembly and maintenance, and orientation to 15 people with a scholarship (Bolsa-trabalho) from the local government to form their own enterprise. Through Agente Cidadão we met **Corrente Viva**, a NGO incubator which assists community groups. They connect organizations so they can exchange experiences and be better prepared to offer professional services. Recently, 27 members from this network attended a workshop ran by MetaReciclagem (Felipe and Elly Chagas) at Galeria Olido, about communication and low technology. Now the idea is to establish a partnership: MetaReciclagem will be responsible for the communication plan of Corrente Viva.

Agente Cidadão was the first to provide donations, space and a purpose for us to work. The partnership lasted until October 2004, when the organization lost part of its office space in the shopping center and decided that MetaReciclagem will be only one of the benefited groups they attend. We no longer work there, but still received donations.

### **Galeria Olido**

Olido was an old movie theater in the central area of São Paulo, recently reformed by the local government. It is now open to the public as a cultural center, which offers many activities and a telecenter.

Some MetaReciclagem allies are working at Olido Gallery: Elly Chagas (activities coordinator), Willians Pedroso, Julio Milan, Joe Nascimento and Valquiria Friedrich (monitors).

All of them are hired for Cybernarium project, part of the @lis (Alliance for the Information Society)

Linux installation and Suse Slackware and RedHat/Fedora

installation. Valquiria runs workshops about hardware painting and Elly, about internet search and cyber activism.

Elly was also responsible, along with Felipe, for a low tech collaboration workshop, offered for non-governmental organizations of Corrente Viva. 27 people participated. They discussed network communication and the use of new technologies.

#### LigaNóis

LigaNóis is an online collaborative site for telecenter monitors and community communication groups. All content is created by the users, and each user can have his/her own weblog.

Felipe Fonseca, developer of the site, says the idea came up in 2003, when MetaReciclagem was getting bigger: we were receiving donations from Agente Cidadão and were ready to open our first independent telecenters. That's when he started discussing with some people the possibility of creating a system which would also have an impact on economy. The plan was to buy or receive used computers, which would be restored by cooperatives (with free software) and sold for cheaper prices to users and small commercial enterprises.

But provide access to the internet for what? "So that people could increase the audience of big commercial portals?" Felipe then thought of creating a collaborative website, "to show that, since its beginning, internet is not about access to information, but about connecting people".

LigaNóis ("ConnectUs") was created sometime later. It is a free publication site, not moderated and simple to use. The experience has been successful. Today it has more than 800 registered users and around 600 visitors a day.

## Metalinux

Metalinux was born as a Linux distribution to old computers, a system that would answer MetaReciclagem's technologic requirements. Most of the machines donated have the following profile:

Processor: Pentium 75Mhz~200Mhz Memory: 16Mb ~ 32 Mb Hard disk: none ~ 2 Gb

Focusing on those demands (machines with low processing power), Fernando Henrique started developing a first version of Metalinux on May 2003. He chose Gentoo as a platform due to its good performance running games and multimedia applications.

Version 0.5 was the first to be publicly released. The following versions – from 0.6 to 0.9 – had improvements. By the time Fernando was developing version 1.0 and a new generation of Metalinux, Metalinux 2 (this one, based on Suse Linux), an accident with his hard drive on January 2004 caused the loss of all data. Since no one else had copies of Metalinux available, Fernando began to work on the third generation of the distro, based on RedHat9 and Mandrak9. In time, he incorporated some characteristics of other distributions, such as Suse, Slackware, Debian and Conectiva. Until then, Fernando was the only developer.

Due to a lack of communication with other members of MetaReciclagem, Metalinux was not being used by in the machines recycled and donated. Slackware was being installed instead.

Fernando then decided to keep a record of his work and created Komain, documentation on how to create a Linux distro from scratch. When other MetaReciclagem members talked about the need of a distro of their own, Fernando suggested that the group contributes in the development of a version along with Komain Linux group (). Now there are eight developers.

## Partnerships and events

In association with **Sampa.org** and **Banco do Brasil**, MetaReciclagem opened two telecenters, one in Capão Redondo, the other in Jarinu.

## Capão Redondo

Capão Redondo is one of the poorest and most violent areas in the city of São Paulo. Along with Associação Chico Mendes, a local community association, a telecenter was opened with the computers donated by the federal government and restored by MetaReciclagem. The group ran a workshop of hardware painting on the very first day. Elly Chagas describes the enthusiasm felt on that Friday:

"We had the collaboration of many people, whose names I don't recall, but cannot forget their happy faces. Beto is a local *grafiteiro* (one who writes/draws graffiti on walls) who wanted to learn more about colors mixture. At the end, he was very satisfied. Opening day showed the force that work can achieve when everybody's participating, without restrictions."

At the following week, all the computers were stolen. "They took the computers. Took everything else that cannot be explained in words", says Elly. "But force, work and collaboration are still with us. We're still standing." MetaReciclagem is presently waiting for Sampa.org to decide when Chico Mendes telecenter may be reopened.

Jarinu is a small rural town 70 km away from São Paulo. In September, Dalton Martins, Glauco Paiva and Elly Chagas were there to open a telecenter with 15 computers in a room of the local women's association (Associação das Mulheres de Jarinu).

During the week, they installed and painted the machines. "Among children impressed with the colors of the computers and citizens who said our work would only distract people's attention, work was being done", remembers Elly. When the lab was finally ready, they already had their first users, such as Robson, an 11-year-old enterprising young man who showed great interest for all the activity. "Who knows, what we did is not a guarantee of anything", thinks Elly, "but maybe it can help a kid with so much vision, who already knows that the world is not only Jarinu".

#### **Other projects**

#### Pontos de Cultura (Culture Points)

Technical and conceptual support to the development of Pontos de Cultura Project, from Brazilian Culture Ministery

## Waag / Sarai Platform

Conceptual support from Waag Foundation and Sarai NGO for a "knowledge exchange" between MetaReciclagem and similar activities in the south hemisphere.

# Oficina Nômade

Workshop at Sesc Pompéia (São Paulo) with Belgian artist and researcher Etienne Delacroix about symbolic deconstruction and esthetic experimentation with used computers.

## **Tactical Media – Next Five Minutes**

MetaReciclagem held an exposition of a recycled telecenter and ran a workshop about collaboration networks on the event Mídia Tática Brasil (Tactical Media Brazil), in February 2003. Felipe Fonseca went to Amsterdam in September 2003 to represent the project in Next Five Minutes festival and talk about appropriation of technology.

# Suporte.MetaReciclagem

Website directed to technical support to MetaReciclagem's actions. Under construction.

# Xemelê

Website about digital culture and free software. Under construction.

# MetaOng.info

Online collaborative publication about third sector and social enterprise.