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## **Waste recycling sheds: a spatial architectural approach<sup>1</sup>**

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### **Abstract**

This article brings to surface the issue of trash, of the garbage collectors and recyclers in the city, the bad architectural conditions that these workers are subjected in their daily work in the Waste Recycling Sheds. It proposes to approach the trash from the themes of territoriality, order-disorder, center-suburb. It introduces the architectural universe of the Waste Recycling Sheds with a brief overview of recycling in Porto Alegre. Explains the spatial zoning of the

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<sup>1</sup> The information presented here is drawn from the study "Units of Separation, a study of regulatory and architectural typologies." Fuão, Fernando (coordinator), CNPq, UFRGS, PROPESq, PROREXT, 2003-2010. The research aim is to study, analyze, evaluate and propose alternatives to existing Waste Recycling Sheds in Porto Alegre. Participated or are participating students in the survey: Euphrasie Bruno César de Mello, Bernadelli Camila, Camila Rocha, Marcelo Heck, Thiago Wondracek, Antonio Fernando, Ananda Kuhn, Agate Carvalho, Lucas Weinmann, Agata Muller, Fernanda Schaan, Michele Raimann and Antonio Pedro Figueiredo. This article aims to present the reader with a basic overview and introduction to the architectural universe of recycling sheds.

Waste Recycling Sheds, and illustrates brief analyzes of three facilities: Association *Profetas da Ecologia*, Association of the *Vila dos Papeleiros* and the Association of the Hospital *São Pedro*, from the typological perspective and its functioning.

**Keywords:** Typologies of Waste Recycling Sheds, recyclers, solid waste.



Figura 1: Internal view of a Waste Recycling Shed, Rubem Berta. Porto Alegre. Photo by Marcelo Heck.

"Flies are the angels of misery,  
they are everywhere, escorting the rotting."  
Carpinejar

## Collectors and recyclers

Today the profession of recycler is already recognized by the Federal Government, but the knowledge of 'what is', and 'where' is performed this work, is still unknown to many of the population and architects. The problem of solid waste questions invites the participation by architects together with the recyclers. Designing a coexistence with the collectors and recyclers implies the knowledge of their daily work and lives, and how the working conditions and earnings can be improved at the Waste Recycling Shed. Coexisting in a kaleidoscopic world is to recognize the diversity of individuals, groups and communities, and above all create the potential for diminishing undesirable differences by promoting the necessary equalities and

rights within these differences. Drawing the coexistence is to move toward each other and their understanding, to rethink the order and meaning of space, redesigning the knowledge from the logic of this 'other' who works with discard.

In general, different societies have always had a relationship of keeping distance with the removal of waste they produce. Garbage is often associated with those who work with it, the homeless and the collectors. Garbage is also associated with order and disorder. Therefore, we confirm that it is in the field of architecture and the city. Balandier, in his book *The disorder, praise of the movement*<sup>2</sup>, explained that the disorder and chaos are not only located in one place, they are also exemplified. This imaginary topology is associated with a set of figures, characters who express their action within an own controlled and monitored space. From this perspective, not only garbage but also the people who work with it emerge as figures of disorder. Figures, that are trivialized and full of ambivalence by what is said of them and what they designate, are objects of suspicion and fear because of their difference; their situation and margin; they are usually the first suspects and victims of prosecution; certainly, they are not invisible like some theories want it. Figures that drag other figures such as violence, disease, hunger. The very phenomenon of collecting and recycling of waste ends up by explaining the disorder of the modern order. The dirty.

Garbage is more than a byproduct of modern society; it depicts and amplifies the very structure of the productive society we live in. It has always existed, but the abundance as we see today is a phenomenon of recent years. It is the more faithful picture of the consumer society and the shallowness of a society that priorities the packaging rather than its content. Packaging was invented so that the products could last longer and travel long distances. A packed life<sup>3</sup>.

The renowned artist Armam in the 50ties and 60ties, and other neo-realists, like Gordon Matta-Clark, had already noticed the potential of the waste, the waste as a talking thing of a human action in the society today. Armam did what he called "portraits" of his friends: he presented them with circular and transparent bins, where they put all the waste, all the garbage, produced day by day. These materials, after all, should portray and / or represent part of the individual such as a photograph. With this process, Armam showed that the human being at present, is a major producer of waste, and no longer needs to be represented by his physiognomy, but by the very objects that he produces, consumes and discards.

Who lives from garbage not only explains his condition of exclusion, his deterritorialization, the other side of the human being, but also the exploratory human chain from the beginning to the end. The collecting activity is not new, it is pretty old, Baudelaire spoke in the nineteenth

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<sup>2</sup> Balandier, G., 1997. *A Desordem, elogio ao Movimento*. Rio de Janeiro: Bertrand Brasil, pp. 48

<sup>3</sup> Fuão Fernando, 2009. *A vida embalada*. Inscritos no Lixo, [blog] 16 March, Available at: <<http://inscritosnolixo.blogspot.com/2009/03/vida-embalada-fernando-freitas-fuao-1-o.html>> [Accessed 15 August 2010]

century of ragpickers in Paris. In any case, throughout history it shows not the right to use the city by the person who cleans the world, and lives off the leftovers<sup>4</sup>.

However, the phenomenon of picking, practiced by thousands of people pulling carts throughout the city, separating trash or inside of Waste Recycling Sheds, is new and hitherto unseen.

These people who lived segregated and hidden in the suburb, the gray suburb of the suburb, suddenly invaded the centers and city streets with their carts. These 'unknown' appeared in a new way, as a happening, an event that arrives on carts for display, advertising the unseen. It is precisely this 'other' formerly hidden, mythologically trailing fear and dread - that somehow free us of guilt of the wastage and the responsibility with the garbage we throw away. These collectors and recyclers represent the source of the unexpected, are the actual happening (event) that goes against the natural course of things, against the very order of cities. In fact, they are the harbingers of the uncertain future; present in the streets carrying the intolerance of the dirty in their carts. They are the future hidden from the human beings of which no longer they feel owners, that presents itself as a potentially disturber, as noted Balandier.<sup>5</sup>

"Through their slowness, they are remarkable. They take new rhythms to the streets and cars, with the intention of questioning the logic of acceleration."<sup>6</sup>

Throughout history, moving away from the trash and putting it out of the relations of a hierarchical and aseptic society, it was necessarily approaching those who lived on the margins of cities, outside the walls, the neighborhoods, in the suburb of the suburb, within the limits of cities, in the gray. Always it drove to the outskirts the rejects of the city, as a form of separation, of elimination. This gray suburb, somewhat apart from the city is the place to dump and shelter for thousands. It is the place where all is deposited that, for some, is ugly and smells bad, it's violent and disturbing. The garbage has an ethical dimension and therefore aesthetic, usually not considered.

We associate order to the center and what is around you as suburban disorder. The garbage as garbage in its state of dump is pure disorder. Rearrange the garbage is function of these people: which were excluded from the power of the city and now return.

The displacement of the huge amount of garbage and its trajectory within the city reveals its importance as an object of investigation of the city and its architecture, as the trace of the superficiality of life and the organization of cities. The garbage, finally, assumes for architects

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<sup>4</sup> The *Historia de la Mierda* illustrates well this eschatological relationship with the urban structure, in which the waste is the result of order-beauty-cleaning triad that founded the city and the language from the sixteenth century on. See: Laporte, D., 1988. *Historia de la Mierda*. Valencia: Pre-textos.

<sup>5</sup> Balandier, op. cit., pp. 38

<sup>6</sup> Moehlecke, V., 2005. *Corpos da cidade: territórios e experimentações*. [online] ARQTEXTO N. 7. Available at: <[http://www.ufrgs.br/propar/publicacoes/ARQtextos/PDFs\\_revista\\_7/7\\_Vilene%20Moehlecke.pdf](http://www.ufrgs.br/propar/publicacoes/ARQtextos/PDFs_revista_7/7_Vilene%20Moehlecke.pdf)> [Accessed 15 August 2010], pp. 65

a questioning role about the binomials of centrality - suburb, inside-out, and the triad: order, beauty and cleanliness.

Bauman, commenting on the instability and fluidity of human relations in modern times, in his book *Liquid love* used the production of garbage to illustrate these relationships:

The residents of Leonia, one of Italo Calvino's *Invisible Cities*, would say, if asked, that their passion is 'the enjoyment of new and different things'. Indeed – each morning they 'wear brand-new clothing, taken from the latest model refrigerator still unopened tins, listening to the last-minute jingles from the most up-to-date radio'. But each morning 'the remains of yesterday's Leonia await the garbage truck' and one is right to wonder whether the Leonians' true passion is not instead 'the joy of expelling, discarding, cleansing themselves of a recurrent impurity'. Otherwise why would street cleaners be 'welcomed like angels', even if their mission is 'surrounded by respectful silence', and understandably so – 'once things have been cast off nobody wants to have to think about them further (Baumann, 2003, p.11).

These "ultramodern angels" moving from the suburbs to the center, from one side to another of the city, carrying hundreds of pounds of cardboard, plastic bottles and aluminum cans, wherever they go, not only sanitize, but leave the trail of "naked existence." They are, by exposing themselves, that what makes the communication between these imagined worlds: the seen and unseen. By incorporating themselves within the urban core, they break, in a certain sense, the dichotomy of an inside and an outside, of an included and an excluded, of a center and a suburb.

The suburbs, presents itself today as the locus of the possibility of change, of renewal that comes from outside, as a barbarian invasion, barbaric! Paradoxically, the suburb, sometimes is inside, underneath our feet, in the shallows of the expressway overpasses<sup>7</sup>.

This suburb is also the place of revelation and response of innovation, where many of the Waste Recycling Sheds were located.

## **Brief history of waste recycling sheds in Porto Alegre**

If the complexity and intensity of the process of collecting and sorting vary from place to place, working conditions in the sheds are generally almost all the same and inhuman. In Porto Alegre, according to Pedro Figueiredo, former coordinator of the Association *Profetas da Ecologia*, there are "three moments that were important in the history of the garbage. By late 1990 began in large cities a kind of selective collection, disjointed and with a total absence of a disciplined organized public policy. The garbage was collected and taken straight to the dumps. In addition to those workers, who were on top of the dumps, which were many, very many, there were those who walked door to door, since many decades ago, both surviving of the

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<sup>7</sup> See the excellent research of Carlos Teixeira, Flavio Agostini and Luciana Cajada, Projeto baixios de viadutos da via expressa leste-oeste, in *Arqtexto* n.7. A prancheta eletrônica. Ano VI, n.2 (2005). Propar. UFRGS. pp. 42-48. On the topic of the use of the shallows of the expressway overpasses, see also Fuão, Fernando. *Sob Viadutos* at <<http://www.fernandofuao.arq.br>>, and <<http://inscritosnolixo.blogspot.com>>.

collecting. Until a few decades ago, garbage was not considered a valuable material. In recent years, in various cities, and more precisely in some states, the National Movement of Collectors was created after an intense struggle of articulation and cooperativism, and the Federation in the State of *Rio Grande do Sul*. Families in the center and in the residential neighborhoods ended up creating ties of solidarity with those people. They not only took home the trash in their carts, but also food, clothing, notebook for the children. A housewife or housekeeper kept them, because she knew the other day would appear "her guy" who had a face, and come to her door. She knew his children, their needs. But when local governments took control of the selective collection, ordaining, these interpersonal relations were increasingly being suppressed<sup>8</sup>.

In a second moment, the municipal governments of large cities were then to assume management control of the selectivity of solid waste in a planned way. The trucks of the local government start to travel collection routes that were previously alternatives to existing compaction, and thus was build a management system as a whole, not only recyclable, but of all waste. It begins then the construction of the Waste Recycling Sheds by the City.

A third moment is the "explosion" of garbage in the last ten years. Unemployment, coupled with the expansion of absorptive capacity on the part of the recycling industry, has launched thousands in search of whatever is found. There is a joke that says " collector does not steal, he picks whatever is ahead." Today, we have in Porto Alegre sixteen official Waste Recycling Sheds<sup>9</sup>.

After surviving more than fifteen years, the recycling sheds and their associations did not 'break', but are in continual crisis. This is not just a problem of Porto Alegre, but all over Brazil and the Third World.

We might also add that it appeared a new type of "entrepreneur", as stated by Márcio Magera<sup>10</sup>, who collects the garbage and disputes it directly with the public system. He builds illegal sheds, buys the material from the collector, who needs money immediately. The industry needs quantity; often, sheds do not have enough quantity, since they are no longer able to separate the material that arrives. Their productivity is high, but their profitability is low. So, the figure of a middleman appears, who has the logistics of storage, buys a little of each one and makes the volume. Therefore, he responds to the scale that meets industry needs, and so can negotiate better prices and better sales. The Federation of Associations of the Recyclers of *Rio Grande do Sul* (FARRGS) or the National Movement of Collectors (MNC) arise in this context to organize workers in Porto Alegre.

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<sup>8</sup> About the daily life at the recycling sheds, we indicate Antonio Pedro Figueiredo, *Traições tolerantes, histórias de um tempo em que tentávamos reciclar gentes e coisas*, In <http://historiasdepedras.blogspot.com/>

<sup>9</sup> Figueiredo, P., 2005. (Interview). *Unidades de Triagem de resíduos sólidos, um estudo tipológico e normativo*. UFRGS. Research report. CNPq. Porto Alegre.(not published).

<sup>10</sup> Magera, M., 2003. *Os empresários do Lixo, um paradoxo da modernidade*. Campinas: Editora Átomo.

On environmental legislation there are many laws, decrees and regulatory standards, ordinances. Regulatory instructions and resolutions that address and signal a national policy on environment, but the truth is that the architecture of the recycling sheds has never been sufficiently recognized in the problem of recycling waste, and have often even be underestimated by their importance in light of the more emerging needs of the collectors. Even within other scientific fields such as Administration, Education, Sociology, Psychology studying this topic, it remains insignificant in this process. Often the importance of architecture and space do not appear directly as a reference item in the "politic of garbage."<sup>11</sup>

The recyclers are working within a physical space, spend most of their time of their days in this places, and unfortunately most of these spaces do not have the minimum conditions of habitability. Even the models of sheds built by local governments ultimately demonstrate a considerable lack of the social-spatial dimension of the collectors and their behaviors. All this resulted in poorly designed spaces, and in turn ended up being reflected in the social and productive relations of the collectors.

The politic of garbage has been taken up strongly from increased productivity, and its profit from a monetary perspective, concealing the social needs of these workers, annihilating the human potential that such worker-owned cooperatives are able to produce and develop in their experiences as for example literacy programs, digital inclusion among others. In most recycling sheds, an effective study does not exist about the planning of space, a management of space, a space of management. It is known that space and its organization are essential in production, but the collective discourse of the members, and all partnerships of the sheds, unfortunately, are unaware of the importance of a life defined by the space.

These spaces should incorporate, for example, correctly and allocated installed canteens with reference to the areas of separation, sinks and washbasins, cloakrooms for the collectors, rooms for the production of crafts from waste, and a whole number of propositions for these sheds, to be proposed from the analysis and experience of the architects. Unfortunately, given all these possibilities for the reconstruction of identities, of the citizenship of who picks paper and does not have a role. The architecture has not appeared in central or peripheral speeches, for remaining paperless as well.

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<sup>11</sup> See for example the Call from CNPq (2007) about assistance to collectors who do not even looked at the item space-architecture, giving priority to conveyors, presses and other equipment.

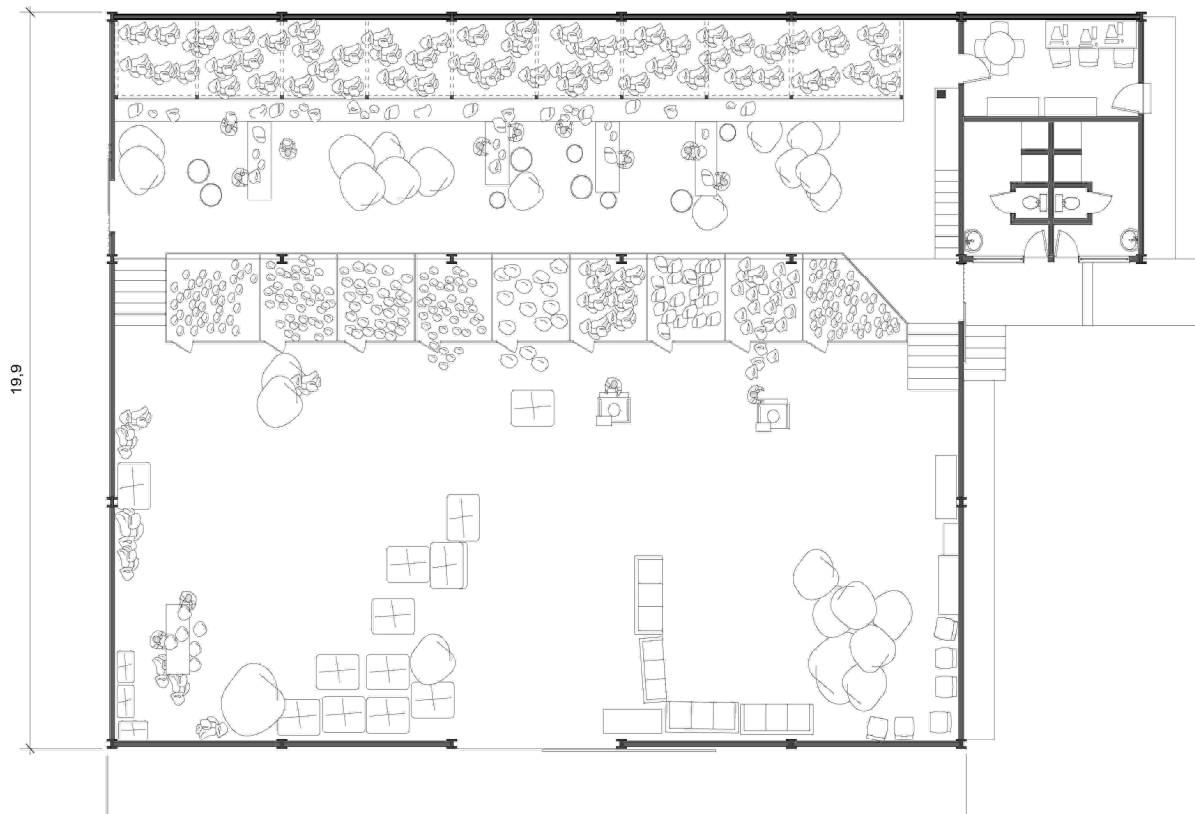


Figure 2: Floor plan of the waste recycling shed ARLAS, Canoas (RS). Drawing by Thiago Wondracek and Marcelo Heck

## The sheds

During the period between 2003-2010, systematic visits were carried out to various recycling sheds in Porto Alegre<sup>12</sup>, revealing a reality hitherto unknown to most architects. Anyone who has had the opportunity to meet some sorting garbage waste recycling shed is well aware of unsanitary and habitability conditions of these spaces. We believe that the experience and coexistence are the way to begin to understand this phenomenon. For us, there is a very direct relationship between body and architecture, between work and production space. Everything passes through architecture, because architecture is the final wrap of existence.

The phenomenon of selection is relatively new to the academic knowledge, and the sheds that were formed throughout Brazil during the last decade, whether they are built by municipalities or associations of the recyclers themselves, never were using planning of a more refined space. Its promoters were not concerned with working conditions, closed their eyes to the unhealthiness in the midst of such misery. We believe that architecture represents one of the

<sup>12</sup> Among the architectural surveyed sheds we highlight: Centro de Estudos Ambientais da Vila Pinto (CEA), Associação de recicladores da Vila dos Papeleiros.- AREVIPA, Associação Profetas da Ecologia 1, Associação Profetas da Ecologia 2, Associação Novo Cidadão, Associação de recicladores Hospital São Pedro, Galpão de reciclagem Rubem Berta, Galpão da Cavalhada, Galpão da Restinga, Galpão da Lomba do Pinheiro, Galpão da ilha dos Marinheiros, Galpão Passo Dornelles, Galpão da Santíssima na Vila Dique, Galpão Padre Cacique, ARLAS (Canoas), Galpão de reciclagem Passo Dornelles (Viamão), ACATA (Ijuí), ARPES, ARCELE, ASCOVI (Santa Maria), Associação Jardim Glória e Associação Esperança (Bento Gonçalves), Interbairros (Caxias do Sul).



oldest and most efficient productive machines. In it, it shows up all the virtues and shortcomings.

Roughly, the operation and layout of a recycling shed comprises a sequence of steps and movements of production: the city truck unloads the material (garbage) in the cages; after downloading of the material is removed gradually, bag by bag, to be opened and separated on the sorting tables; each separate material is thrown into the corresponding tambour or barrels; the person responsible of the tambours is in charge to collect the full tambours and unload it into the boxes (small cages where the selected material is joined: tetra pack boxes or green PET bottles); from there the material is removed and taken to the press. Once pressed, the bales are stored waiting for the buyer who will arrive with the truck.

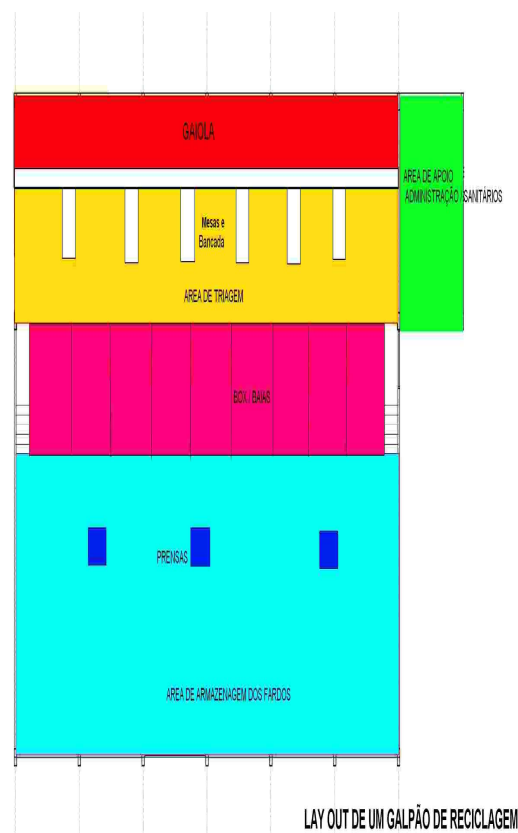


Figure 3: Operating diagram of a Waste Recycling Shed. Drawing by Fernando Fuão.

Initially our first notes focused on the point of view of typological and architectural conditions. Most of the sorting units never had an initial design, except those built by the Municipality. Typologically we can define these spaces in three basic types of occupancy: sheds, use of the shallows of the expressway overpasses, and occupations of abandoned buildings.

The sheds are organized through this zoning of selecting by slides or spots, divided spaces that in many cases do not follow a more accurately logic of productivity. In many sheds there are errors in forwarding material starting from its incoming to its outgoing, ie there is no linearity of the production process, and the location of the recycling equipment is often wrong.

What initially has been observed is that these Waste Recycling Sheds built by the Municipality have been badly built, lacking a better knowledge of the desires and ways of working of the collectors, and ignoring basic issues of habitability. Within a few years, these sheds had shown poor structural and functional conditions, some of them did not have further than insecure roofing.

For the most part, they have a very questionable deployment in rough terrain with steep slopes, or departing from a doubtful initial concept that prioritizes the loading and unloading of materials brought in by truck, forming platforms at the expense of workers moving around inside the shed.

There are problems of all kinds, for example the illumination of the work place at all is wrong; the workers area of selecting (table and bench) is turned towards the openings located in the front, causing glare and eyestrain.No additional artificial lighting is provided, because often there is no money to replace the bulbs.

Next, at analytical and descriptive title, three recycling sheds in Porto Alegre are highlighted: Association *Profetas da Ecologia*, Recycling Association Hospital *São Pedro* and Recyclers Association of the *Vila dos Papeleiros* (AREVIPA).



Figure 4: View from the main shed Profetas da Ecologia 1. Photo by Fernando Fuão.



Figura 5: Vista sob o viaduto com os pequenos volumes, galpão do Profetas da Ecologia. Foto Fernando Fuão.

The Association *Profetas da Ecologia* (1994) was a pioneer in the sheds in Porto Alegre, and is located in the shallows of the expressway overpasses near the city, known as the Viaduct of the *Sertório*, a chaotic residual area generated by the implementation of the tangle of overpasses and the *trensurb* railway network.

Currently living conditions and hygiene of the *Profetas* are still very poor. The *Profetas da Ecologia*, now an average of 30 members, consists of several small buildings constructed during that time. There is the large rectangular shed that was built during the founding of the Association, where is located the kitchen and canteen that open directly to the area of sorting and storage of waste; in the same building, on the mezzanine is located a classroom, an administrative room and two bathrooms.

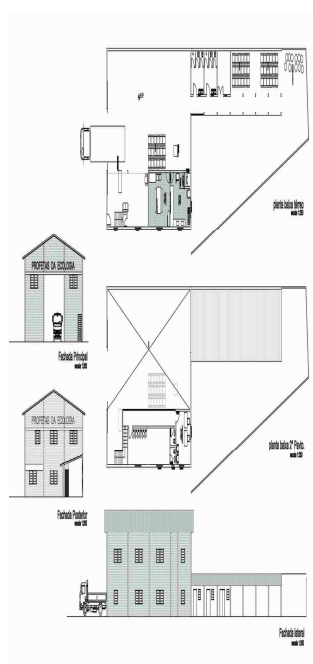


Figura 6: Profetas da Ecologia. planta baixa do galpão principal. Desenhos de Camila Bernardelli e Camila Rocha.

In front of the set, underneath the two bridges that pass over the ground, there exist in addition to a new shed, that was built to remove garbage from the old shed, two other small buildings that were built through an agreement between the *Profetas* and the Municipality of Porto Alegre. One of the buildings that they call the "box" consists of ten cubicles, "garages" that served initially for collectors who would separate their garbage independently and not in the cooperative. The other is a small set of toilets and showers<sup>13</sup>.



Figure 7: Outside view of the Waste recycling shed of the Hospital *São Pedro*. Photo by Bruno Cesar E. de Mello.



Figure 8: Interior of the Waste recycling shed of the Hospital *São Pedro*. Photo by Bruno Cesar E. de Mello.

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<sup>13</sup> About the Association *Profetas da Ecologia* see: Mello, B. C. E., 2009. *Espaços de triagem de resíduos sólidos na cidade de Porto Alegre. O caso da Associação Profetas da Ecologia II e outras reflexões*, Vitruvius, [online] Available at: <<http://www.vitruvius.com.br/arquitextos/arq000/esp465.asp>> [Accessed 15 August 2010]



The waste recycling shed of the São Pedro Hospital Association is part of the Psychiatric Hospital building complex, located at Avenida Bento Gonçalves, Porto Alegre. This association differs from others because some hospital patients work in it, who use that work of recycling as therapy and treatment. Internally, there is a bay for storing paper, enclosed by metal bars and subdivided into smaller bays, it is at the center of the facility, like an island, and all activities are occurring around it. Between this and the cages for storage of garbage, which comes from the street, are arranged four tables of different sizes for separating.

To the right as you enter the kitchen is installed and a small office of the Association. The kitchen is represented as a place for socializing and exchanging ideas. Unfortunately, the door opens to the recycling area, as in the Profetas da Ecologia.



Figure 9: Internal view of the AREVIPA Shed. Porto Alegre. Photo by Bruno Cesar E. de Mello.



Figure 10: View of the AREVIPA Roofing. Photo by Bruno Cesar E. de Mello.

The Association of Recyclers of the Vila dos Papeleiros (AREVIPA) get together recyclers who work collectively in the shed, receiving material from selective collection, as well as the independent carters (collectors), who are also residents of the Vila dos Papeleiros, but not members, all working under the same roof. Thus the set of Arevipa consists of two main buildings: an existing and a new shed. The existing shed is a rectangular building where the separating takes place. It belongs to it also a kitchen, a few small rooms and an adjacent space where are the presses to this large internal space.

The access of trucks bringing garbage from the selected collection is done by a large gate near the centre of the shed. To the left of that entry is the cage for the storage of material to be sorted. Three wooden tables are supported for sorting it, in the back of them a dozen canisters to collect the different materials.

The other volume, a large shed is a structure of prefabricated concrete beams and pillars without any closure or internal walls that protect the many carters from the weather. The dynamics in the shed is given as follows: the individual carters collect recyclable material from the city center and surrounding neighborhoods, take it to the shed where it is sorted into small improvised tables or the floor, and then sold to middlemen. The aspect of this work is one of chaos. They are many bags of garbage carts, bales, small tables for sorting and countless men and women working, coming and going at an intense pace. People with their carts enter and leave at all times. Together, they arrive with their young children who, by the inability of their parents to put them in an appropriate place, stick around, picking stuff to play in piles of garbage and plastic bags. All this is in an area where it is difficult for anyone coming from outside, to define where the workspace of a group begins or ends, what are the materials for the sorting of a particular worker. It is difficult to distinguish what is the order established by them for this large work space.

## **Suggestions for the waste recycling sheds**

Finally, we believe that an analysis of the sheds and the criteria for drawing up a project for recycling sheds must go through several statements that should be taken into account as: the number of workers involved, working hours, how to share profits, volume of worked material, architectural conditions of the building if existing, adaptation to the terrain, topography, accessibility of pedestrians and trucks, loading and unloading system, trajectory and offset waste and their classifications in the shed, as well as evaluation of the equipment in relation to its location and characteristics of use (tables, benches, treadmills, scales, lifts). For example, work tables with four or six employees are more productive, then the solution of a large bench with members working individually. Besides these, it can be included: evaluation as to the sunshine, natural and artificial lighting, ventilation, humidity, odors, contact with toxic material, safety standards with respect to machinery, and so on. As conditions of the construction materials used in floors and walls, fire safety and especially health. It should be also

considered in the same degree of importance or larger, yet the common spaces such as cafeterias, rooms for other sources of income generation as a workshop paper, sewing, cultural spaces, crafts, administrative offices, classrooms for literacy and computers, small movie theaters / cinema, such as the Center for Environmental Studies of the Vila Pinto, Porto Alegre<sup>14</sup>.

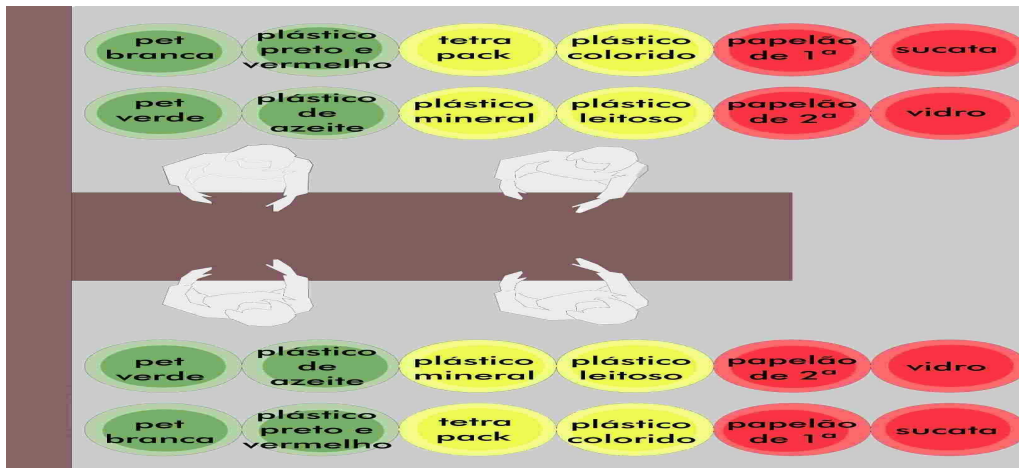


Figure 11: Example of sorting table with four associates. Drawings by Agata Muller and Lucas Weinmann.

## Final consideration

In the world of waste recycling sheds, it was possible to see that there are a number of reasons and needs that go beyond architecture; before even reaching the spatial and typological question, there are many organizational obstacles, important issues of gender, group psychology, microphysics of power, - all these things end up reflecting in space.

A lack of concern by its workers is perceived, about the basic architectural conditions of the Sheds, a lack of concern with an order, an organization of space and a production. The most paradoxical is that we associate the disorder with who actually comes to order the material thrown out, unclassifiable. Actually, what the collectors do is to tame the disorder produced by the devouring of a consumer society, the society of waste. But in the minds of society, reaching out to the trash, to establish a symbiotic relationship between them is like appropriating evil, execrable, the eschatological, forming a perfect match. Anyway, it is concealing the guilt of those who produced it.

Today, the order is the consumption, the life putting in boxes, the packaging, the waste, the excess, and the packed.

<sup>14</sup> About the theme of recycling sheds in Rio Grande do Sul, see : Fuão, F. and Rocha, E., orgs., 2008. *Galpões de reciclagem e a Universidade*. Pelotas: Universidade Federal de Pelotas (UFPEL).

The order and disorder, inclusion and exclusion, are like two sides of one coin: they are inseparable and often we find one inside the other, resubmitting their meanings to each other. There are two aspects to the real, which drag the very concept of meaning. The order is the meaning, the disorder without meaning. And there seems no wonder that our civilization may seem meaningless, to which all complain about the lack of direction.

At the sorting tables are separated, joined, sorted and pressed the meaning of the consumer society that were thrown away. They are then baled to later be crushed, crumbled, to become even meaningless material, until it is again reintroduced under a new form, a new meaning, a new package. That, ironically, is called recycling. The only problem is that these new materials are mostly packaging, meaningless things, which are devoid of any content soon after being consumed. They are representative objects of the throwaway society and this reordering of the whole recycling again becomes disorder through its own movement of the lack of meaning.

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