

Piecing together: on architecture and bricolage

Urban Architecture: Spolia

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Introduction

This booklet documents the research that has been conducted as part of the graduation studio Spolia, from the Chair of Urban Architecture. The research investigates a site in Anderlecht, a municipality of Brussels, in which an urban plan and architectural design are to be developed. Its ambition is to expand knowledge on the theme of spolia and bricolage.

A study topic proposed by the studio is the starting point. The research then expands into an exploration of bricolage as way of doing and conceptualizing architecture. This is done to develop alternatives to more conventional design methods. The research moves on to study everyday practices of bricolage, through analytical drawings made from a photographs. The research has served to further my understanding of how often subtle ways of getting by with our lives can spur on our creativity. They can also change the way designers think and make architecture.

This learning trajectory has influenced design decisions so far, having impacted on my approach towards the challenge presented by the studio. The urban plan focuses on mending a fragmented site, incorporating new constructions through reuse of existing structures, paying special attention to the architecture of a residential care centre. Being the central piece in the urban plan, this building pieced together from existing and new structures,

aims to represent and express a genuine care for the city, the site and the neighborhood. Its ambition is to reverberate the qualities found on everyday bricolage, in gestures of mending, repairing, protecting through the construction of new wholes out of incomplete and fragmented structures.



Early rural situation

Fig.1



First industries

Fig.2

Historically there has been a mix of working and living, with industrial activities, worker's housing and resorts in the outskirts of Brussels.

Industrial development

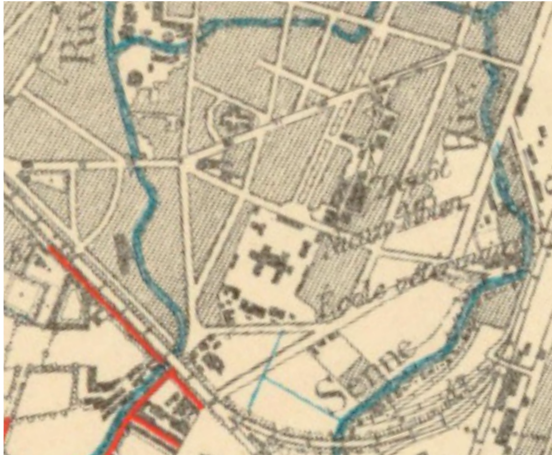


Fig.3

Mixing with residences

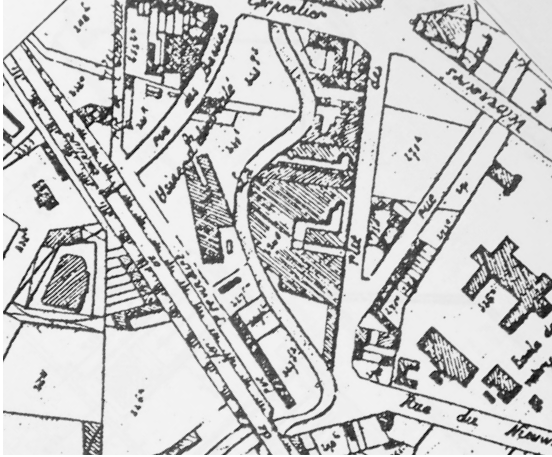


Fig.4



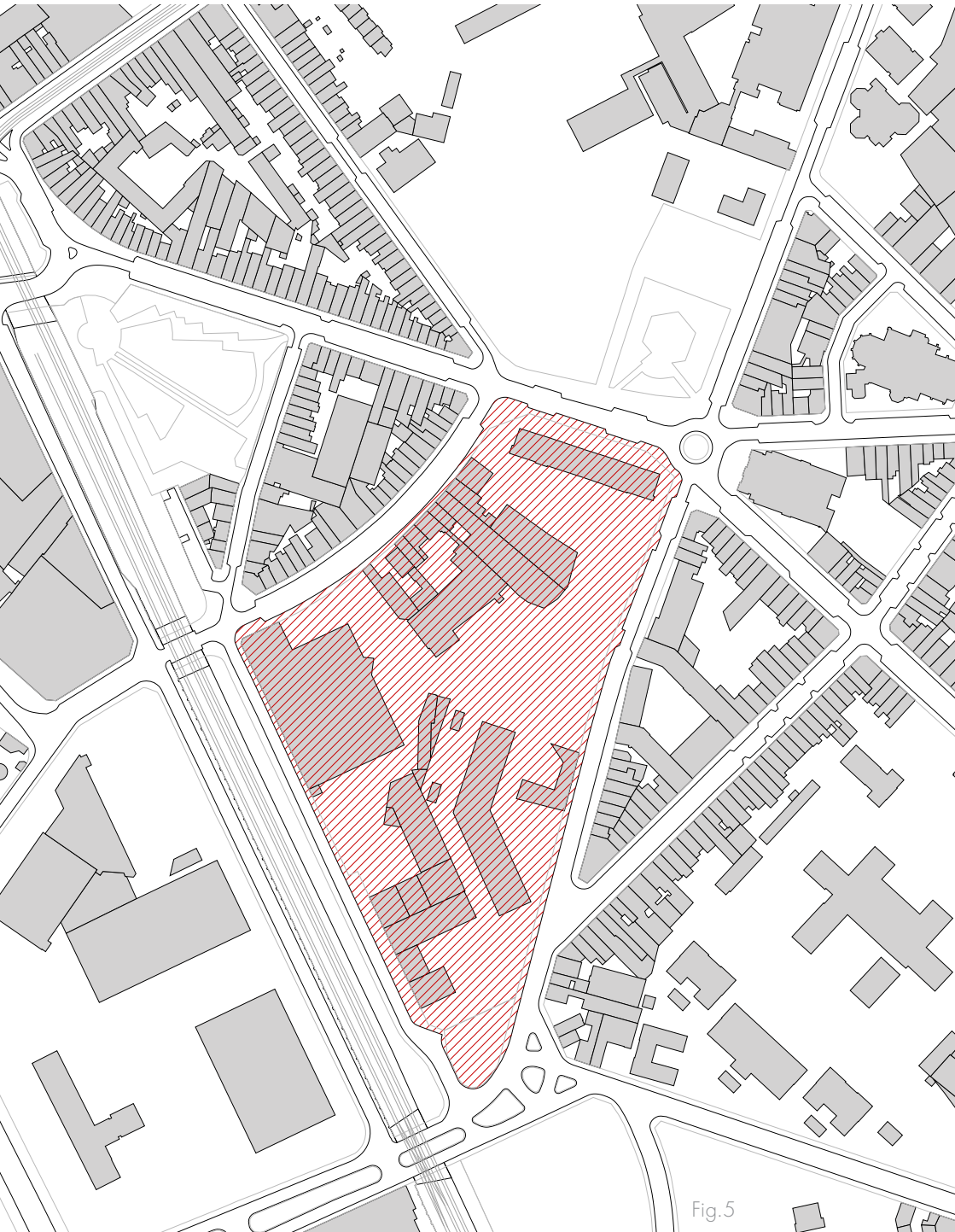


Fig.5

Unstable city

The site in Anderlecht has seen successive rounds of development and material investment throughout its history. The existing situation attests to this through its material and immaterial remnants of the past. There is the former Leonidas factory, which hints at the industrial past of the site. There is also the social housing high-rise, which was supposed to be part of series of similar building, although the development was not finished. Another social housing building exists on the northern part, next to a group of houses with backyard workshops. In their back and adjacent to the social housing high-rise, there is a park where there was once a mix of houses and workshops. Furthermore, there is the river Zenne that used to cut through the site, and even though it has been covered, buried and unseen for many years, it is still part of the memory of Brussels.

By reading the site as a collection of fragments, rather than a stable composition, a situation of instability is revealed. Such fragmentation is worthy of further study, being more evident when looking at how the site has been cleared over the years. Nowadays, it stands in contrast with the neighborhood's more stable urban tissue. While referencing a past they had once belonged to, the existing parts remain believable promises of what was once whole. This unstable site in Anderlecht and its collection of fragments portray a process of de-densification and fragmentation. In order

to intervene on and re-direct the area an alternative route must be investigated, leading to novel ways of conceptualizing and doing architecture. This is where bricolage comes in.

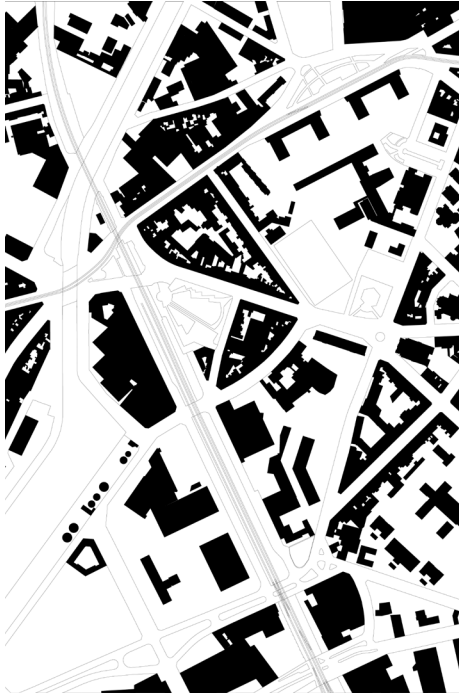


1944

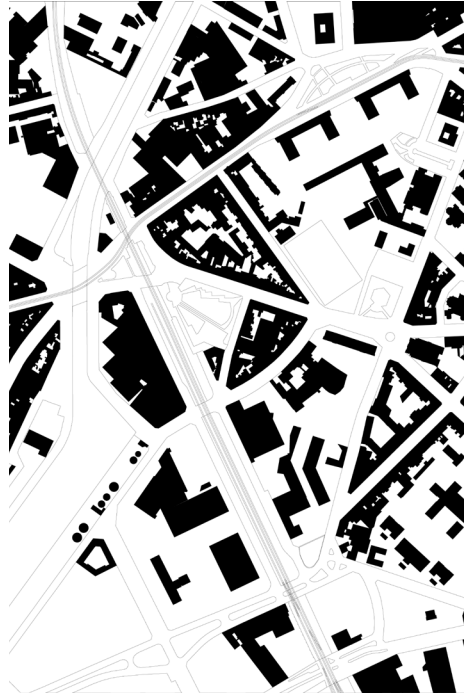


1987

The covering of the river Senne, and the lack of developments that redefined its direction, has left the site in a largely fragmented state



2009



2019

Fig.6-9 (left to right)



1944

The river still present, shaping the city.



1987

Infill buildings built over where the river used to be. Demolitions start to occur at the north side of the site.



2009

Further demolitions lead to such state. In the centre of the block, the park appears.



2019

Fruit of community effort, a social restaurant is built adjacent to the social housing tower.

Fig.10-13 (left to right)



Fig.14

The structure of the Leonidas factory arises in front of the old factory. A replacement. A new logic, new structure, new materials. In its shape there is no memory of the river that once cut through the site. Old and new juxtaposed. Perhaps more stable then, than it is now.



The site is has a diverse collection of buildings of different types and periods, standing as evidence of different modes of development.

Les Goujons (social housing).



Rue des Bassins and its varied housing buildings, giving access to workshops.

Fig. 15 (top left), Fig. 16 (top right), Fig. 17 (bottom right), Fig. 18 (bottom).



Social housing built in the late 90's.



Former Leonidas factory.



Bricolage

One view on bricolage is that it is a process of constructing something from found odds and ends, and it was theorized by the anthropologist Claude Levi-Strauss in the 1960s. It can be seen as an attitude to the material world, with equal emphasis on both process and finish product. The practice balances the constraints of an existing context and new possibilities. In the 1980s, Michel de Certeau extends the study by opening up a new read on it, relating practices of bricolage to everyday life. While both their works will not be studied in depth in this research, it is important to note how everyday life starts to be seen as a practice analogous to that of bricolage.

Bricolage is proposed here as a method for mending this site and reinstating a stable situation to support development. It is a process of making-do with existing conditions, based on the piecing together of found remnants of the past. Furthermore, bricolage promotes consideration and care for the existing situation, while seeing fragments as starting points for new forms and ideas. The idea of *spolia* then becomes important, as it is this idea that invites the practice of bricolage.

Spolia here refers to fragments of previous buildings, or materials, that have found themselves back in a new structure. These hold ideas and traces from the past, and their reuse can be considered

a sustainable practice. One that rejuvenates the old fragment, while promoting many reads into what this reuse practice can mean for contemporary architecture. It can be used to ensure historical continuity, promote craftsmanship or to keep existing social and material structures in affordable conditions. But why should bricolage be employed as a method, and how is it different from other ways of dealing with spolia?

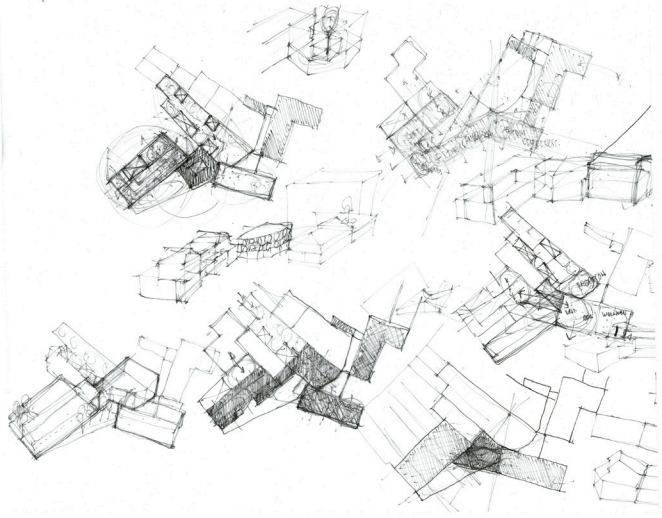
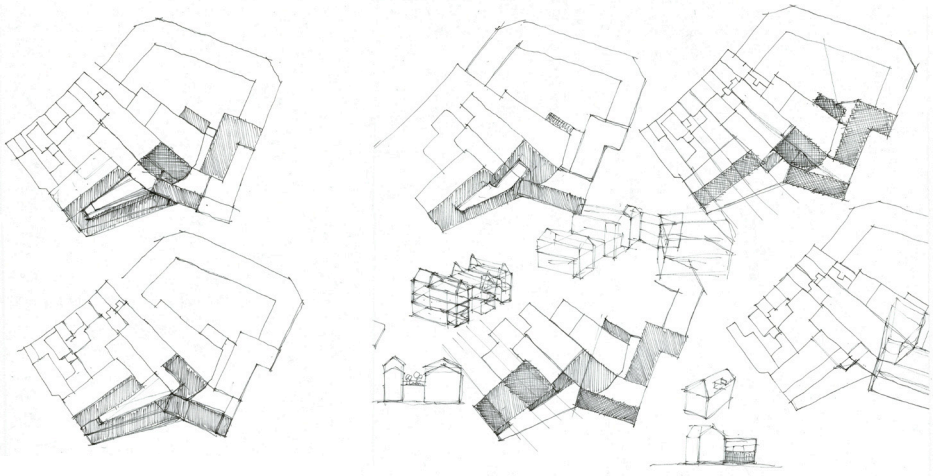
Firstly, because it presents an alternative to usual design methods that often approach the city by filling in the blanks in urban space. It is the counterpart to a tabula rasa approach supported by the persistent demolition and replenishment of the building stock. Bricolage, as a method, demonstrates a certain care and appreciation for the existing material and immaterial values of the context. Therefore, it is an appropriate approach towards the spolia found on the site. As bricolage becomes a practice in this context there is no intention to recreate the past, but to use it as a starting point. These remnants become parts of a new work, which is pieced together from found structures, buildings and materials.

The piecing together of the new and the old in this case will serve to stabilize the new in place and time. It is in this sense that bricolage is different from other approaches to spolia. It does not aim to establish specific connections to the past or to present

the material fragments as romanticized decorative elements. This practice in architecture is rooted in the reuse of building elements, with spolia being a component that conveniently integrates a particular work, rather than being an aestheticized piece of history. This stabilizing effect of spolia will be explored further in the design, and bricolage is an appropriate way of doing it. Thus, it is important to expand the knowledge of how this method can be applied in architectural design.

It is in the study of everyday practices that bricolage presents itself more clearly as a potential design method. The designer, as bricoleur, has to make-do with found bits and pieces, as people often do in their everyday lives. This should prove interesting because people are often engaged with acts of bricolage daily. Sometimes unknowingly or just naturally, other times when forced by contingencies of everyday life, less-than-ideal conditions or real scarcity. These everyday examples of making do with what is available spur our creativity, display ingenuity and are both playful and effective. While not under the pressure of being ideal, acts of bricolage can often propose solutions that challenge the way materials and structures are used, their common applications and use, as well as their aesthetics. Furthermore, bricolage can result in effective alternatives to their engineered counterparts, while being cheaper and arguably more sustainable. The next step of

the research looks at a type of bricolage in Brazil, referred to as gambiarra.



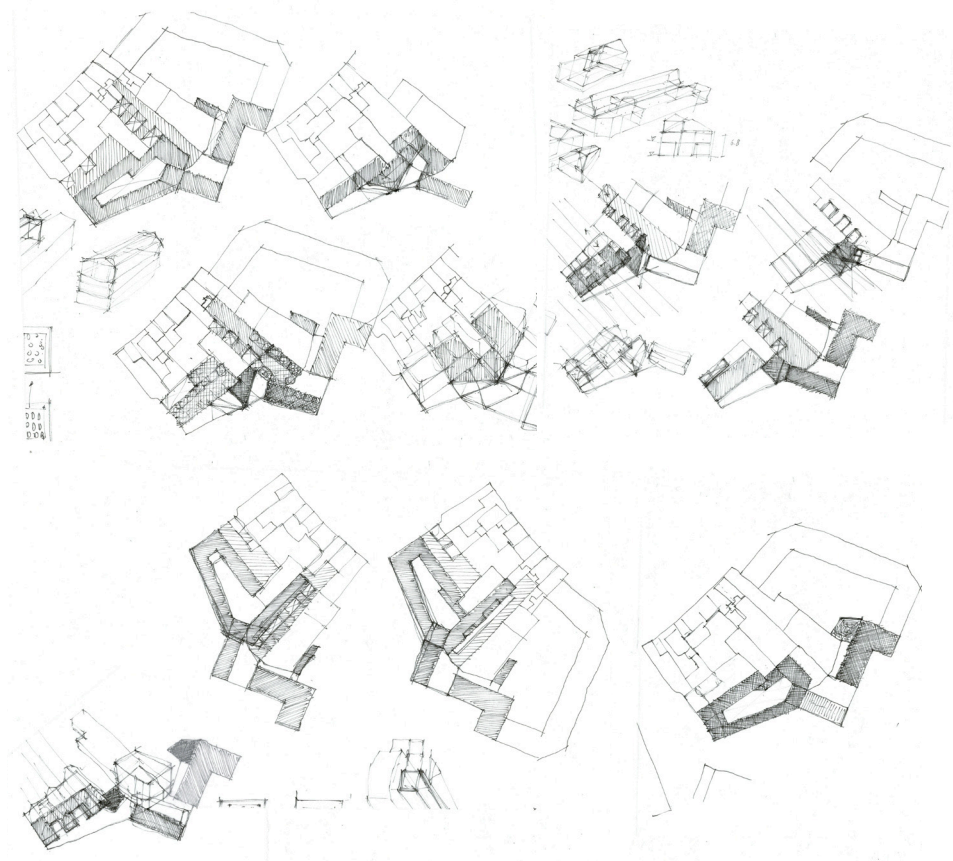


Fig. 19

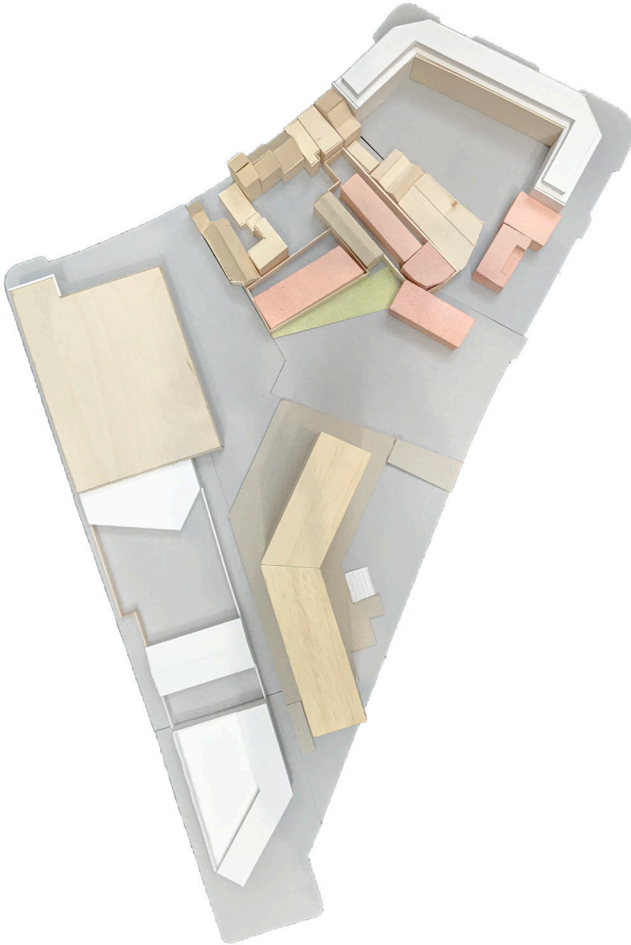


Fig. 20 - Model 1-500

Provide the necessary structures so that the neighborhood can develop towards stability.

Locals should benefit from public and collective spaces. A park is a valuable asset to have at the heart of a city block. It should open itself to the city, be cherished and shared by the community.

Industry should remain a part of the site, ensuring that people continue to produce material and immaterial value in the city.

Affordable housing should be available to both existing communities as well as to new-comers, of different cultures and ages.

The urban plan is about piecing together a part of the city, so people can continue to live, work and create (in) Anderlecht.

Making do: Gambiarras

In Brazil bricolage mostly refers to do-it-yourself projects, made from materials either bought or salvaged before hand, while following a set of instructions and thus is more related to crafting decorative objects cheaply. On the other hand, the term gambiarra refers to practices of improvisation carried out by people in their everyday lives. It is a type of specialized bricolage that takes advantage of resources as-found, as opposed to bought. It uses what is ready at hand in order to construct, devise a solution to a problem or fix something. The study of such practice has value because this type of bricolage, in the context of the everyday, displays an aspect of material intelligence and resourcefulness that can inspire other modes of design. This is conducted by an analysis of photos of gambiarras, some of which were taken by me, others shared by friends or collected from online sources.

This everyday practice of bricolage can be a source of inspiration for design intentions and decisions. The idea of mending, adding, subtracting, replacing and propping up directs part of the interventions on the site. Existing buildings are tinkered with in order to resolve a corner, appended to in order to accommodate a new use and through propping up, new structures are supported.

The site can then be mended by these gestures, as fragments become the wholes they were once the promise of.

Like a gambiarra, the design strives to balance existing material and immaterial values and the provisions needed for further development. Existing forms and functions are to be reinterpreted, appropriated and incorporated into new structures. Applying this practice to the spolia can stabilize and enrich the new while referencing the past.

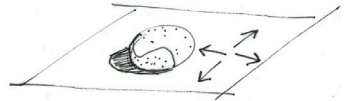
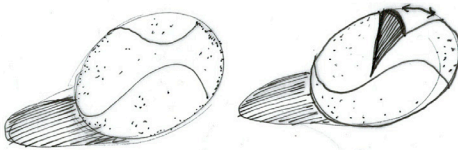
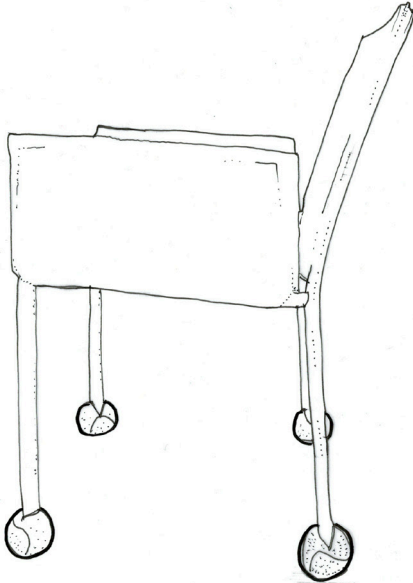


Fig. 21

Replaces an existing product: the felt disks that are usually made to specific sizes.

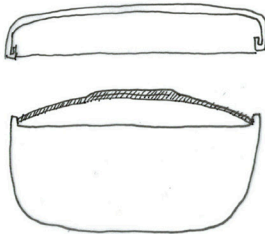
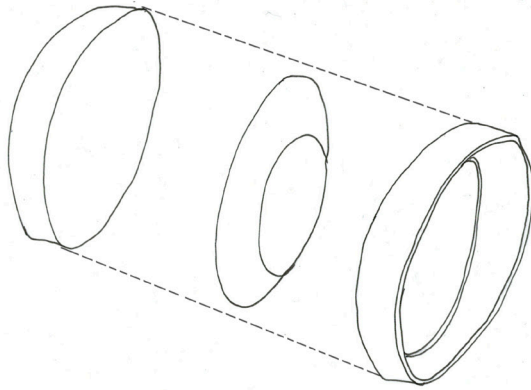
The tennis ball is arguably more flexible as it can fit any size and type of chair.

Material is suited and performs just as well as the engineered counterpart.



The author had old tennis balls around the house. He claims that this works perfectly, and the furniture does not move or slide, even on the polished floor.

The plate is of the right size and material, withstanding the heat generated from the lamp. It can be fitted inside the existing front lamp body without alterations to its form.



As an alternative to getting a new glass, this plate is a worthy substitute despite the colour being unusual.



Fig. 22

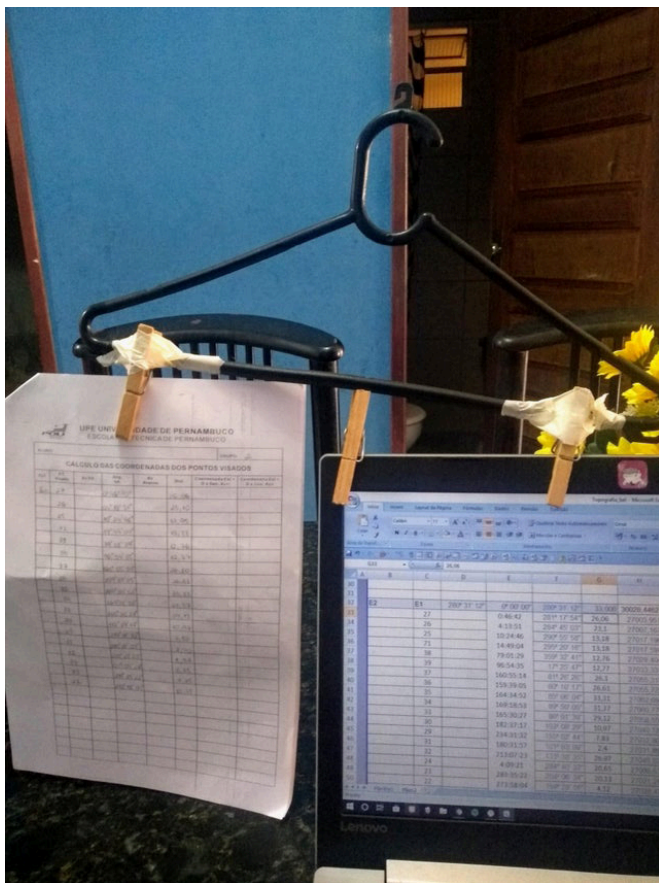
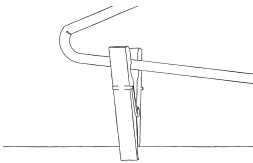
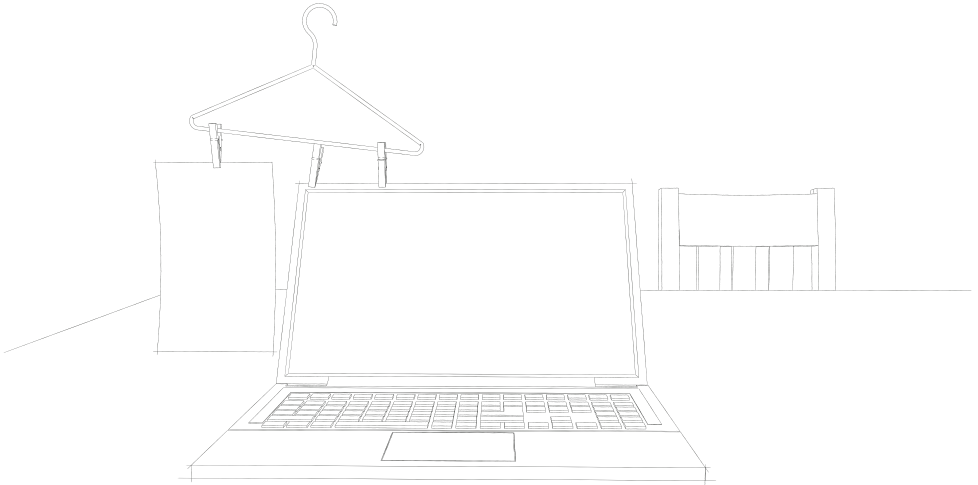


Fig. 23

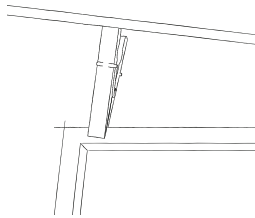
A balancing act. The hanger provides the sturdiness and adequate length.

Tape is added so it does not roll over.

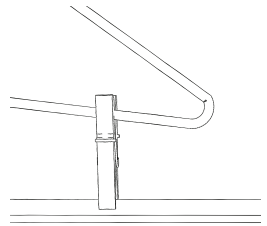
Temporary.



Grip 01.



Keeping it level.



Grip 02.

For the sake of speeding up the work, avoiding neck pain and the purchase of a second screen.

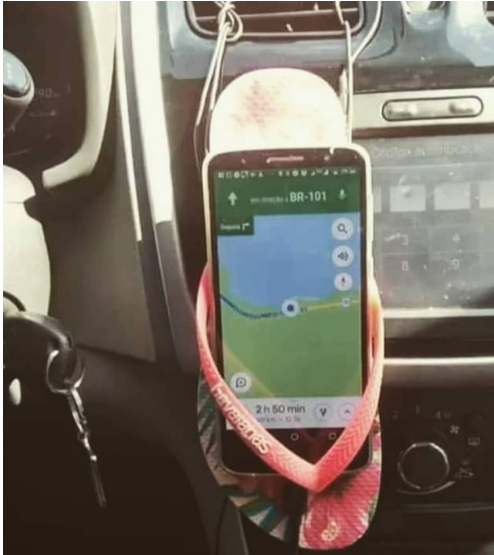


Fig. 24 (left), Fig. 25 (right)

Replacements exploring form. The sandals can be more expensive than a phone support, but replaces one when the need arises. Not meant to last, but works just as well as its counterpart. Perhaps ideas for new products?



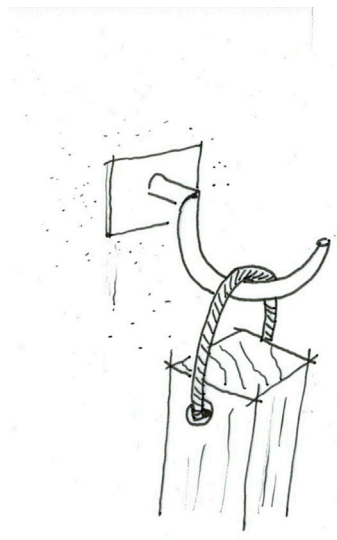
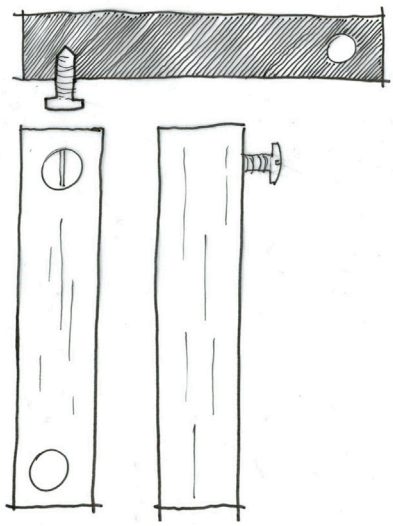
Fig. 26



Fig. 27

A simple device made from a piece of wood and a screw. Likely to be found in bars in Brazil.

Easy to make, though it requires some attention to the materials used.



An alternative to a very popular commercialized object: the bottle opener. This is likely to be found on the wall of a bar in Brazil, hanging from a piece of string or kept above the counter. It is simple enough to make, but one should consider the materials used. A weak support and the screw will split it in half. Too strong and it will be too difficult to make. In addition, the screw head must be wide enough. It should be screwed to an appropriate height to generate enough force to pull the bottle cap off.

Taking advantage of the existing situation to construct something new.

Creatively balancing what is needed and what is available.

Devising solutions using as-found resources and thoughtful application of new ones.

Working with materials and structures in an intelligent and sustainable way.

Learning from the existing and establishing continuity and stability.

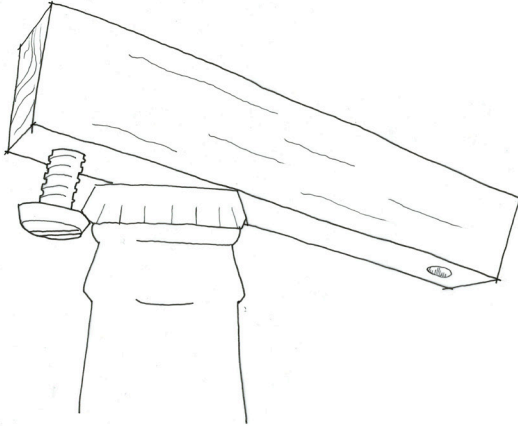




Fig. 28

Author claims: "A VCR dies, a new mailbox is born.". Perhaps more about reuse as a playful way to engage with something outdated. This is less about scarcity and does not display the same material intelligence as other examples.



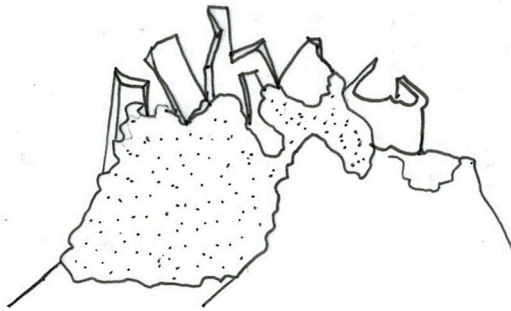
Fig. 29

An example, not from Brazil, that hints at nostalgia. A product, cherished by its owner, finds a second life as a mailbox. Similar ideas, different intentions.



Fig. 30 (top), Fig.31 (bottom)

Using part of the construction materials used to build the wall, this security device is made quickly.



This is popular in households in poorer areas of Brazil, where fences are too expensive and security is of great importance.

TELA DE PROTEÇÃO COLOCADA R\$ 600,00
COLHER DE PAU R\$ 1,99

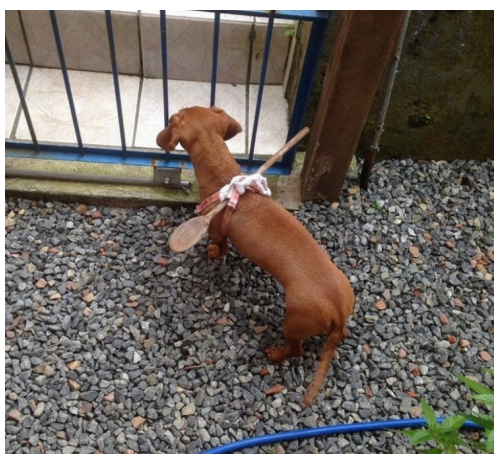
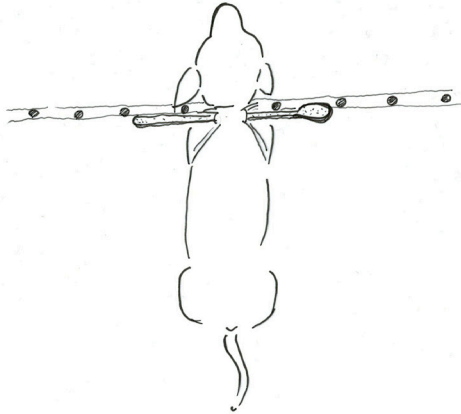


Fig. 32 (top), Fig. 33 (bottom)



The text reads: "Protection screen installation: 600,00 Brazillian Real. Wooden spoon 1.99 Brazillian Real.". A cheap alternative to preventing pets from getting stuck on fences or pups from going through.

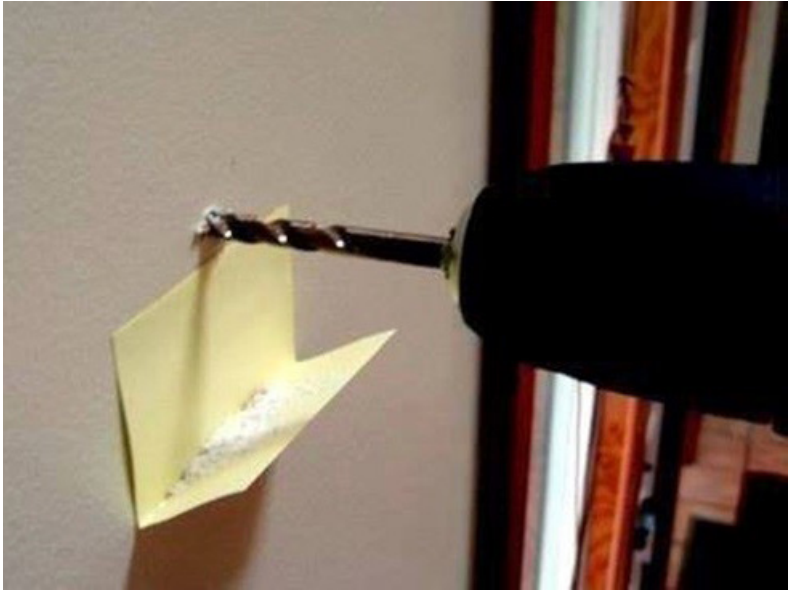


Fig. 34



Fig. 35



Fig. 36 - Photo taken during visit to Anderlech along with the studio.

With a bit of imagination, one can see a similarity in form. An usual substitution.

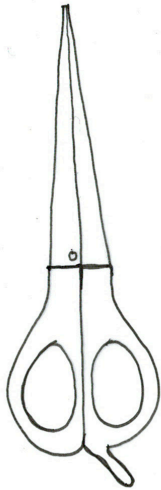




Fig. 37

Shown as an idea to fill a bucket, in a toilet, without making a mess of it. An specific situation, solved through improvisation. The form helps by allowing water to accumulate before overflowing through the handle, conveniently shaped as an open channel.

A good use of the form. As the handle is an open channel, this works well.

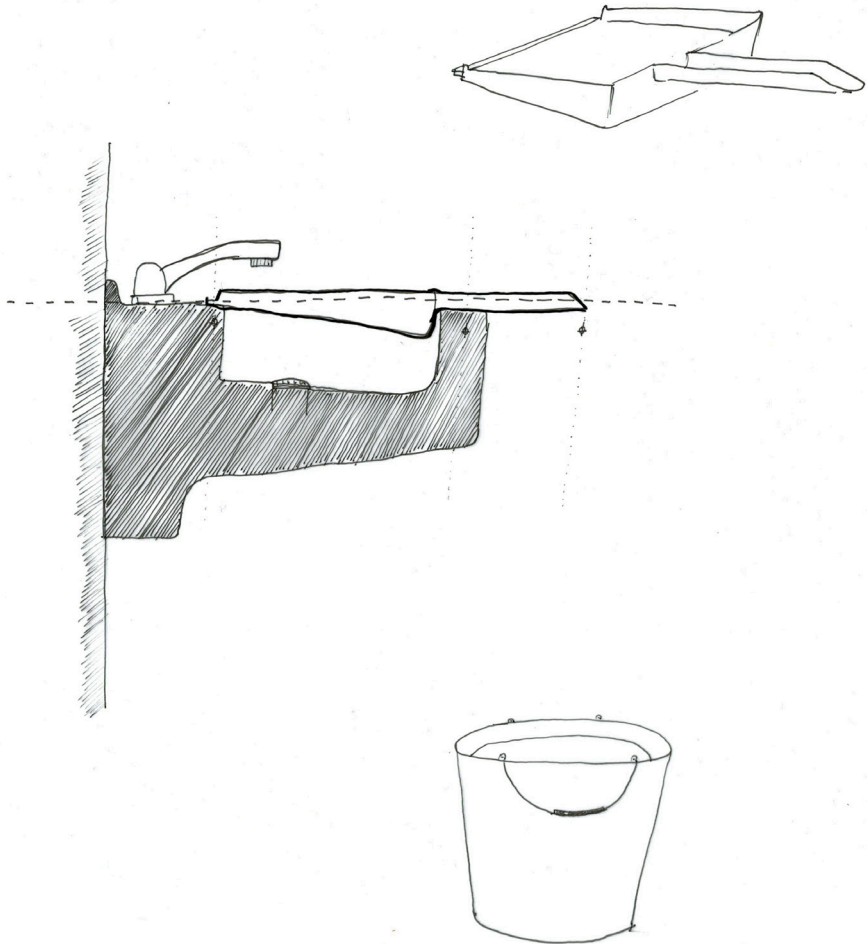


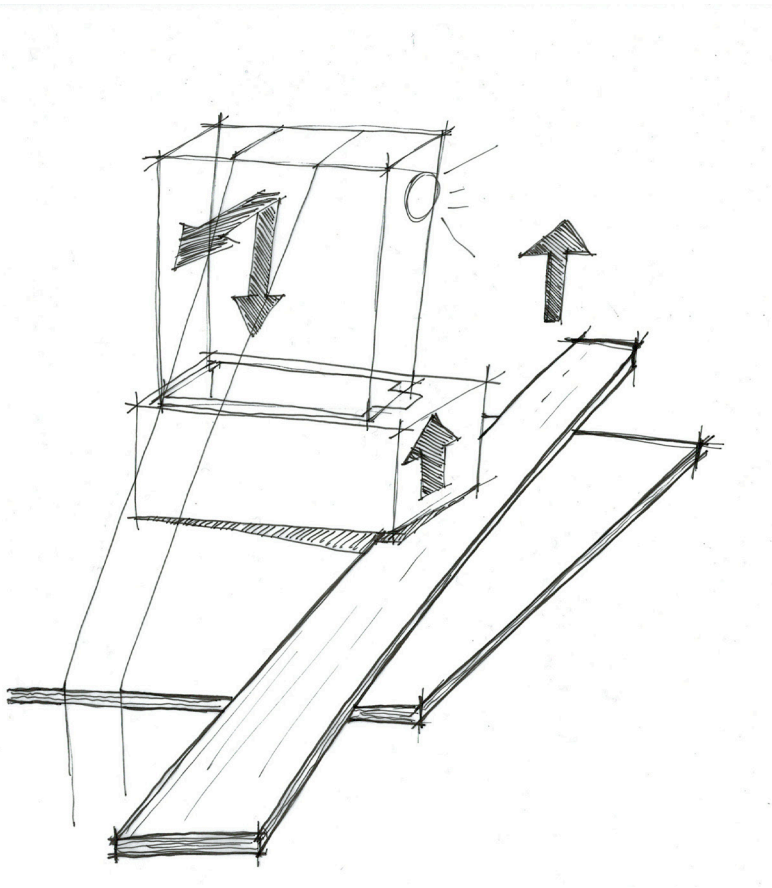


Fig. 38

Performed at the Academy of Architecture in Amsterdam. Architecture students devised a way to adjust a projector. Although it has its own height adjustment, the device has its limitations. Accustomed to dealing with these situations, people will come up with different ways to curb these limitations and get what they want from things around them.

Multiple materials used.

Interesting use of tape. It is used for tensioning the object and keeping it in place.



Piecing together

In the middle of the site, there is a park. This park gives the place a distinct quality of having a green public space at its core, which makes it different from other blocks around. It then becomes central to the composition of the urban plan, which aims to extend this quality. Existing and proposed elements are arranged around the park, one of which is a housing development that wraps around the existing houses. It is developed as an adaptation and addition to the low-rise social housing building on the North part of the site. Delineating the park, in the centre of the site, there is potential for a special location to emerge. A place that alternates between states of serenity and play, the park can be activated by introduction of a building that takes advantage of its qualities.

It can be argued that any type of building would benefit from an adjacent park. Although, as the intention is to re-densify and mend the site, a housing building with an stabilizing quality to it is appropriate. The proposal of a residential care centre is a response to this situation. It also opens up new possibilities for the future, as the area continues to develop in a more multi-generational and culturally diverse direction. The schools of the neighborhood and the children from Les Goujons, the young adults working on the renovated factory and offices nearby, all can be aware of and

connected to this new building. But how can this type of building make the site better?

The ambition in designing a residential care centre is to develop the typology as a desirable one in the city. Such buildings can support collective spaces that enrich urban sites. They should not be driven solely by the idea of vulnerability. An architecture of care can be a gesture towards the city, extending itself generously to local communities. This provides an alternative to introverted buildings, often of institutional character, once relegated to the outskirts of cities. A residential care centre can be a soothing element on the area, helping to piece together a fragmented site and initiating a more stable future. By sharing its collective spaces with the city, it invites the participation of the community and presents itself as a piece of urban architecture.



Fig. 39

Develop the typology as one that is a desirable element in the city.

An architecture of care is a gesture towards the city, extending itself generously to local communities.

A residential care centre can be a soothing element on the site, helping to piece together a fragmented site and signaling a more stable future.

By sharing its collective spaces with the city, it invites the participation of the community and presents itself as a piece of urban architecture.

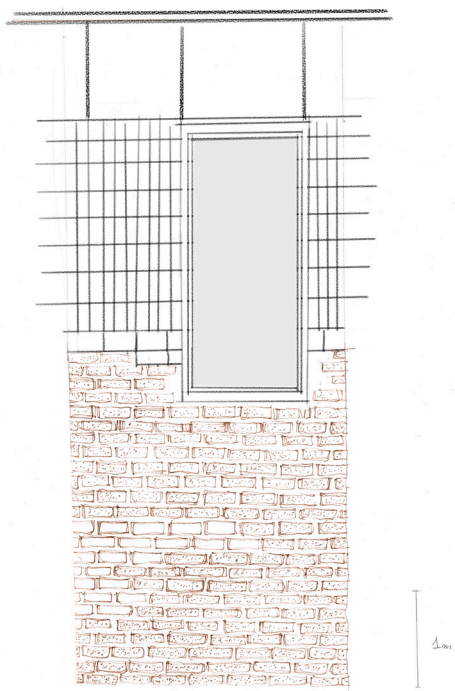


Fig. 40

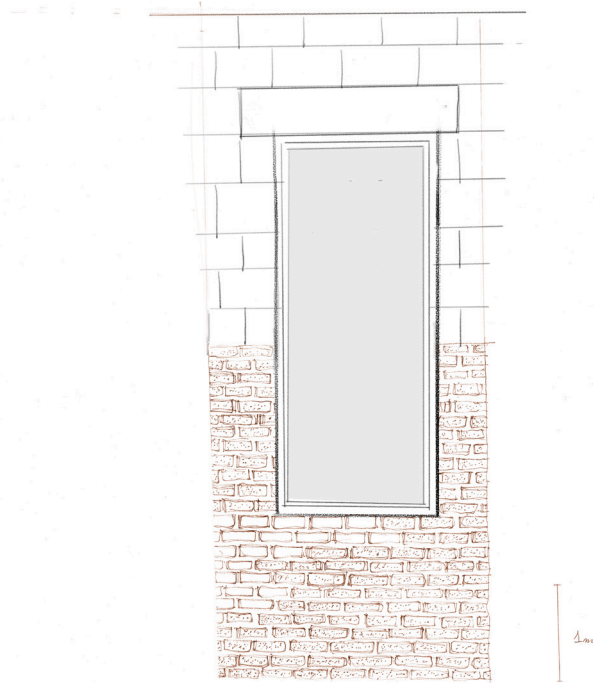


Fig. 41



Fig. 42

Attention to materials and their qualities.

Exploit qualities of existing materials and forms. Then expand on these.

Study the ways of weaving together the old and new, through materiality and form.

Learn from bricolage/gambiarra. Thoughtful additions, careful subtractions, clever substitutions.



Fig. 43 - Interior of one the buildings to be reused.



Fig. 44 - What the existing can afford.

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- Fig.32 https://www.reddit.com/r/shittylifehacks/comments/6jxgyd/need_to_keep_your_dog_from_running_away_put_a/
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- Fig.34 <https://www.megacurioso.com.br/invencoes/98657-13-gambiarra-geniais-que-va-facilitar-muito-o-seu-dia-a-dia.htm>
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Urban Architecture: Spolia

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