

OPEN SYSTEMS

Proyectar la incertidumbre

Reutilization in public space:

from the architect to the user

#reuse# participate

Christina Ioannou

El artículo explora estrategias de diseño que permiten la transformación del espacio público utilizando objetos como arquitectura o la propia arquitectura como objeto, desmantelándola y recomponiéndola a través de procesos artísticos y participativos. La potencialidad de estas estrategias radica en su capacidad de transformar el espacio público utilizando herramientas básicas y a la vez dar una segunda vida (o más) a objetos, en vez de producir residuos. A través de casos de estudio de prácticas de arquitectura emergentes, el trabajo analiza los aspectos que definen el nivel de participación de los usuarios: la transparencia del proceso, el nivel de experticia, la cantidad de participantes, la accesibilidad de los materiales y la posibilidad de una tercera vida para los objetos o los componentes. El análisis y la comparación de esos aspectos pueden revelar modelos de implementación de la estrategia de reutilización que pueden resultar útiles para los usuarios.

This article explores design strategies that permit the transformation of public space by employing objects as architecture, or architectures as objects that are dismantled and reused to create new spaces, through artistic participative practices. The potentiality of these strategies lies in their ability to transform public space using a basic repertoire of tools and gestures and at the same time give a 2nd life (or more) to objects, instead of producing more waste. Through case studies of emerging architecture practices, the work analyses the aspects that define the grade of participation of the users: process, level of expertise, number of persons involved, accessibility of materials and the possibility of a 3rd life for the objects or its components. Comparing those aspects could reveal helpful patterns of how reutilization can be adopted and implemented from users.

Ecology has a central role in today's architecture discourse and it is being investigated by practices that aim to explore solutions that respond to the climate crisis and the current concerns about the ecologic origin of materials, life and recycling of buildings, the energy consumed, as well as new manners to think architecture, that could broaden its relation with its surroundings. This process constitutes an ethical shift.

As J. Till claims, ethical architecture should not be considered as a discipline of good detailing and strict aesthetics nor as a link between social order and visual order. Instead, he proposes an understanding of the social dynamics as much wider relations that transcend the limits of architectural space¹. As the architectural discipline is broadly perceived through its most common aspect, that of the building - which is also the architectural object with the highest 'exchange value' - it is closely associated with control powers. Design, therefore, as an act of societal engagement, includes conflicting demands. Designing to respond to the climate change is the culmination of this conflict: "to frame sustainability in technological terms is only to try to solve the problem with exactly the same tools that created it, setting up a self-defeating circle"². These responses should derive from a deeper reconsideration of the relation of human with all that surrounds him, human or non-human, alive or not. In the context of changing ethics, reutilization enjoys a big reputation, among many creative practices around the world. The most common practices of **reutilization** in architecture are reusing either construction materials or elements of the equipment of buildings. The following study is concerned with the second action, from a point of view

ARCHITECT
architecture of
"realization"



USER
architecture of
transformation



WASTE
accessible
material



VS.

ARCHITECT
↑

of architecture as a discipline that goes beyond the creation of buildings.

This kind of preoccupations appear to be linked to a broader socio-ecological crisis. Architecture often seems far from the users, that perceive it like a discipline for experts, evaluating themselves as incapable of shaping their own spaces.

"...architects are assigned architectural space as their (private) property, economists come into possession of economic space, geographers get their own 'place in the sun', and so on. The ideologically dominant tendency divides space up into parts and parcels in accordance with the social division of labour. It bases its image of the forces occupying space on the idea that space is a passive receptacle"³.

Appropriation and initiative, however, seem a lot more possible when it comes to everyday objects. While users consider themselves incapable of actually producing architecture-buildings, they are being in charge of shaping space through the arrangement of objects and furnishings. Post-modern architecture in many cases prioritized the **users' participation** and thus changed its own perception as a field responsible to shape the solutions to the functional needs of subjects unaffiliated to it, to that of a mediator between the user and the function. The architectural project can be reproduced and reinterpreted in time, while its potential future forms are not less important than that of the moment of its realization.

1 Jeremy Till, *Architecture Depends*, (Cambridge USA: MIT Press, 2009), 181

2 Jeremy Till, *Architecture Depends*, (Cambridge USA: MIT Press, 2009), 182

3 Henri Lefevre, *The production of space*, 90-91

4 Jeremy Till, Tatjana Schneider and Nishat Awan, *Spatial Agency: Other ways of doing architecture*, (Abingdon Oxon England: Routledge, 2011), 28

The projects analysed in the next parts of this study are aiming to transform **public space**, employing objects of that are dismantled and reused to create new, **ephemeral situations**, through artistic participative practices. They are concerned with raising ecological and collective awareness, on the one hand, and elaborate architecture objects as a response to the climate and the ecological crisis, on the other. These are creations of emerging architectural-artistic practices that have come to a realization that "the standard tools of aesthetics and making are insufficient to negotiate these [dynamic context of networks where spaces belong to] networks on their own, and so the examples collated here use other priorities and ways of working as part of their toolkit"⁴. The parameters that define the transformative potentiality of reutilization strategies: process openness, level of expertise, number of persons involved, accessibility of materials and the possibility of a 3rd life for the objects or its components, are going to be compared in three categories of interventions.

CATEGORY 01: architecture as object

CASE:

Name: Casa Rompecabezas
Place: Seville
Architects: Recetas Urbanas
Open System: Refill, Reuse

CASE:

Name: Rhombi house
Place: Munich
Architects: ON/OFF studio
Open System: Refill, Reuse



ON/OFF, Rhombi house



Recetas Urbanas, casa rompecabezas

ARCHITECTURE AS OBJECT

what used to have another use, either in an object or in a building, is recomposed as a completely dismantable building that aims to transform and activate a public space

CATEGORY 02: from objects to space

CASE:

Name: Entre Canastas
Place: IES José Frugoni Pérez de Telde, Las Palmas
Architects: Recetas Urbanas
Open System: Appropriation, Reuse



Recetas Urbanas,
openplay



El warcha, the common library



Recetas Urbanas, aula abierta Trabenco



collectif etc, Détournez !



Recetas urbanas, entre canastas



Recetas Urbanas, aula abierta Torresoto



Basurama, intervención
en el huerto de San
Juan



Basurama, southwark:
our park



Basurama, autoparque
en Maputo

FROM OBJECTS TO SPACES

after their functional state, objects are dismantled and re-composed to create communal spaces in the public space

CATEGORY 03: from objects to objects

CASE:

Open System: Appropriation, Reuse, Refill



Basurama, milan sobre ruedas



Recetas urbanas, Aldo Van Eyck en Sevilla



straddle3, Wikitankers



Basurama, con las cosas serias no se juega



ON/OFF, domesticity



Recetas urbanas, bancos alegres



todo por la praxis, open parlamento analogico



collectif etc, bons plans pour le refuge ?



collectif etc, cuisine itinérante à hautepierre



Basurama, bicinecleta



MAKEA tu vida, Reunió, Joc, Aixopluc



voltes cooperativa, cabaña canadiense

FROM OBJECTS TO OBJECTS

after their functional state, objects are either dismantled and re-composed or being used in alternative contexts and arrangements in order to activate public space through new ways of experiencing it

PROCESS - CONTEXT

Casa Rompecabezas (Puzzle House) is reusing architecture as object. In 2002, Santiago Cirugeda, founder of Recetas Urbanas, was commissioned by the Architects' Association of Cadiz to design an exhibition space to be placed in a public square. The architect accepted under one condition: Recetas Urbanas would get to keep the piece after the end of the exhibition. The same year, the *Puzzle House* was taken out of the warehouse to find its new use. According to the civil code, placing a furniture into an unused plot is permitted and is not subjected to property leys, as long as it does not use any concrete and it has the capability of being dismantled without demolition. This lightweight structure only consists of a 12m² floor, a second one of 7.2 m² and a small bridge, all together supported by four spider-leg steel columns. No foundations are needed and the elements are all screwed together. For this, the *Puzzle House* was not any longer perceived as architecture, but as a furniture-house. Through the "closet strategy", as it is called by the studio, the *Puzzle House* was placed in an abandoned plot, as a reaction to the policies of gentrification of historical city centres. Despite the legal argument that allowed the realization of the project, the group preferred renting the plot from the owner and then reassemble the house. The house remained in the plot for over a year and it hosted various cultural activities, becoming a meeting point for the neighbourhood. "This multiplicity of uses proved that, for the city, it is more interesting having a space of encounter than an empty plot"⁵. It has been an action of claiming public space, finding ways to temporarily occupy it and involve the neighbours in the creative process.

⁵ Santiago Cirugeda, Situaciones Urbanas, (Editorial Tenov S.L., 2007), 58

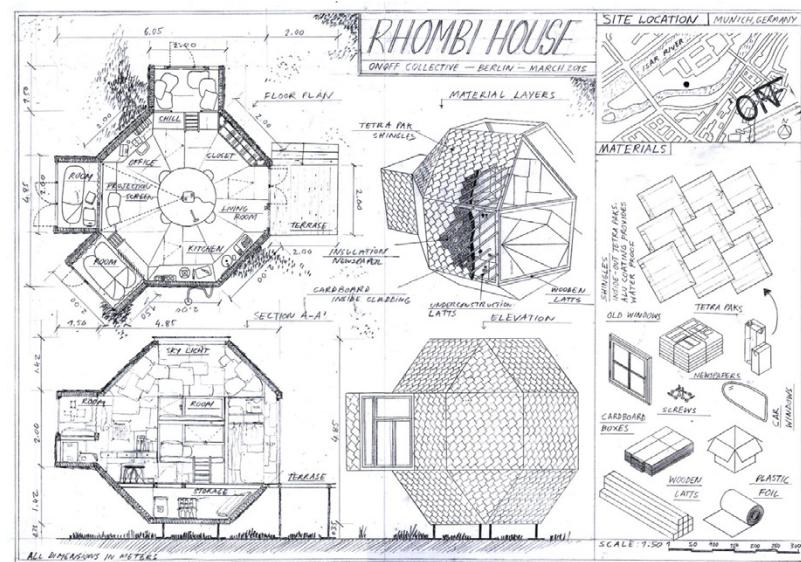


casa rompecabezas

occupying an empty plot by reassembling a building that is no longer used

PROCESS - CONTEXT

Rhombi House is a proposal created by the Berlin studio ON/OFF, in the context of Shabbyshabby Apartments experimental program, organized by Raumlabberlin. The call was searching for practices that would envision and construct houses in the public space, as alternatives to the housing crisis, that is still a very topical issue, as well as a manner to activate the city and propose alternative ways of experiencing it. The studio conceived their proposal as a central communal space surrounded by 3 extruded boxes/sleeping units that can be united or separated from the main space. Rhombi is a flexible house made out of reclaimed materials, that has the ability to be dismantled and assembled in various contexts. Its footprint is small so that it can fit in narrow, abandoned plots and other urban "gaps". It was built in 8 days and it costed only 250 euros. It remained in the park for 2 months but the design team is whiling to give it another use in the future.



rhombi house

experimental proposal for a communal house, responding to the housing crisis and the lack of collectivity in the urban space

PROCESS - CONTEXT

The studio Recetas Urbanas has been developing the project *Aulas Abiertas (Open Classrooms)* for over 20 years, having constructed 20 of them, all over Europe. The objective of the project is changing educational spaces by moving the learning process to the outdoor space and at the same time transform inactive common spaces. Covid-19 increased the need to enable more open-air educational spaces. **Entre Canastas** was constructed in 2022 in the secondary school IES José Frugoni Perez, in a zone of the yard that was designed as a green space but had been abandoned ever since. The project was commissioned to the studio from the Department of Fine Arts and the art centre La Regenta. The school's parents association, the Education Council, the Parks Council and a local educational centre's (IES Fernando Sagaseta) carpentry department contributed to the different stages of design and construction. The project was financed through a crowdfunding and was supported by collaborators such as Lopesan Resorts, Spacio Telde, Leroy Merlin, Toys "R" us). Like in the previous case study, the construction process was participative and it began after the realization of participative design workshops.

OPEN CALL

SELF-CONSTRUCTION PROJECT FOR AN OUTDOOR CLASSROOM IN JUBILEUMSPARKEN



entre canastas

participative construction of open-air classroom to activate an abandoned zone of the school yard

from objects to objects

PROCESS - CONTEXT

There are plenty of cases that use the strategy of transforming objects of the city into other objects or furnishings, aiming to activate public space. Like the previous categories, this process is usually institutionalized. Depending on the context and the group that is executing the project, the objects produced can be functional or not. The factor that connects all of them is their common purpose.



bancos alegales

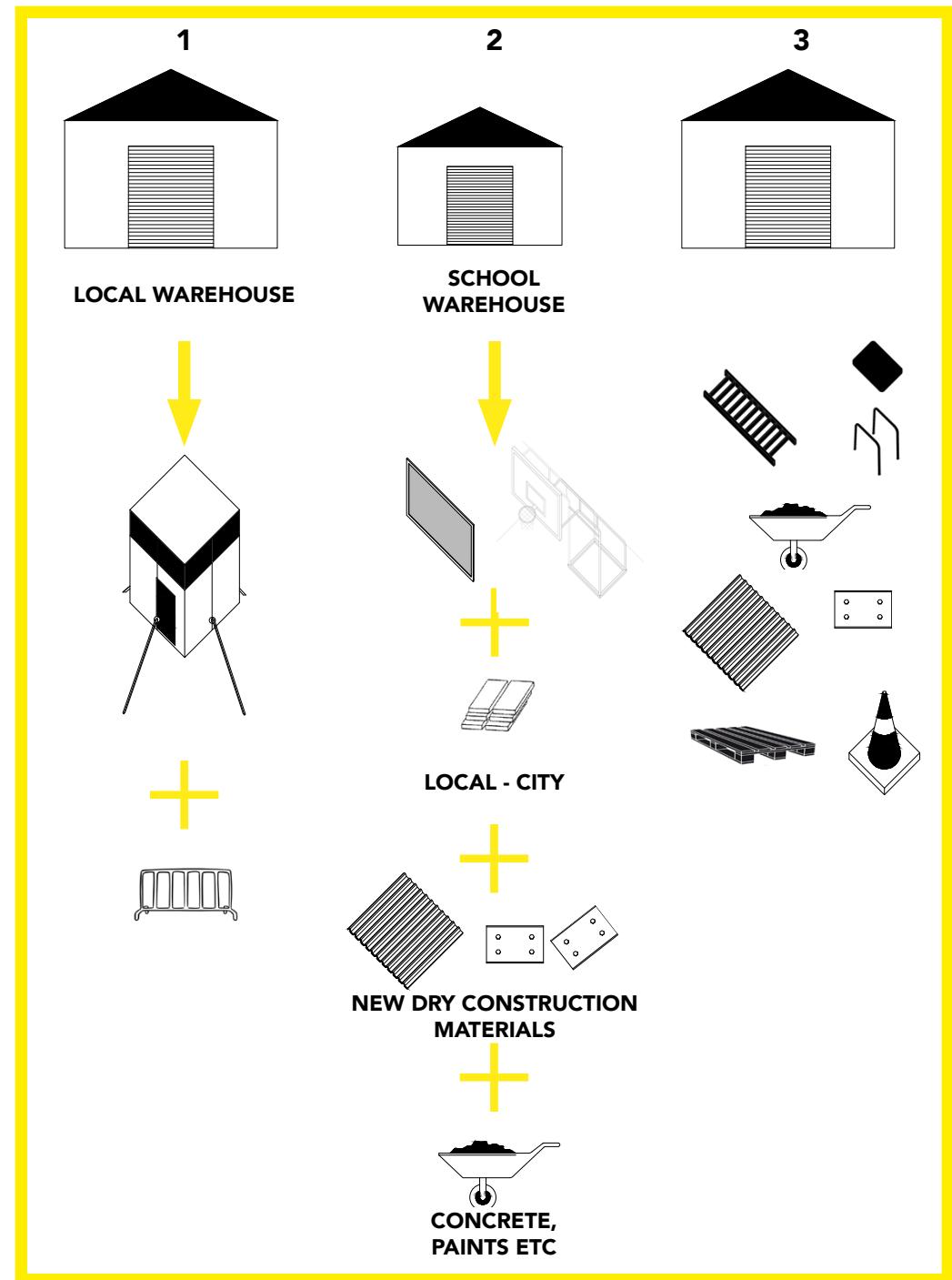
As a representative object of this category, a 2006 project of the same design group. *Bancos Alegales* (*Alegal Benches*), of Reertas Urbanas is composed of six benches made out of reclaimed materials and introduced in an abandoned plot of the city of Vigo. The object was constructed in a few days with elements that were found near the plot: traffic cones and concrete tops casted in pallets. For the group, these fast, unrefined, or even ugly objects, are a statement on the significance of architecture: this kind of interventions should be easy and simple, beyond aesthetic-based and photogenic designs that are often being made for no longer than the duration of concrete occasions.

ACCESIBILITY/ORIGINS OF MATERIAL

In the projects of the first category reutilization is a strategy that accompanies all possible stages of transformation. The **Puzzle House** is a building that, after having served its original purpose, is reassembled without the use of any other components. The steel structure, the envelope of aluminium and polyethylene, the scaffolding elements and the stell sheets of the original exhibition piece are combined with a construction fence in the intervention. The only new objects introduced to it are the sanitary capsules that function after collecting water rain. In the case of Rhombi House, all the materials of the first construction besides metal joints, had already been used: the wood came from old stage designs, beams from a medieval cottage in the Alps, the windows from a demolition site in Berlin and the cladding was sponsored by a packaging company. Furniture, kitchen equipment, and decoration were donated by flea markets.

In the case of **Entre Canastas**, the construction is more complex. 90% of the materials are reused: 108 wooden planks for the trusses, 2 basketball hoops, 12 school boards, steel tubes and 2 trusses. The wooden planks are appropriated and assembled to create the trusses and joined with metal joints. The basketball hoops serve as a support for the trusses. Finally, the construction is covered with the boards and sheet metal. The bases of the basketball hoops are enclosed in cement beds that strengthen the support system.

The last category of interventions, that creates separate objects from waste objects is a wider one and includes a variety of material manipulations. It can be perceived, however as a process that is "freer" than the previous ones, in terms of support systems, durability, capacity and thus the material chosen can be the most accessible, proximate and easy to work with.



LEVEL OF EXPERTISE

Despite the fact that, as buildings, neither the Puzzle House, nor the Rhombi House have complex construction systems, the design, as well as the construction, can only be result of professionals' involvement. The first was mainly constructed by the architect along with a hired team, while the second one was also constructed by its designers. For Aulas Abiertas, Recetas Urbanas organize workshops that prepare the community for the participative construction of the project. In this context, basic knowledge on the usage of tools is transmitted from the architects and other experts to the users.

Apart from the last, object-to-object, category, none of the above projects could have been executed without the use of machines and the supervision of experts. In Entre Canastas, a crane was used to lift the trusses. To all mentioned above, it is worth adding the complexity of obtaining the permits and knowing the legal framework to intervene a public space.

Nonetheless, such experience is valuable for the future development of similar processes. In the case of the Puzzle House, after the decision for disassemble and removal of the intervention, the participants and neighbours tried to preserve it. This indicates that the dynamic of the community had been altered and the grade of initiative had been increased. The Puzzle House was removed but the closet strategy had become a common knowledge.

The most important outcome, however, is that the architecture practices collect these experiences and offer them back to the community in as a kit of actions to develop their own processes of transforming space. Recetas Urbanas often refer to this as the act of auto-construction: an action opposing the existing leys ruling city planning and the growing inversion strategies and at the same time offer the pleasure of constructing a place for one-self, the pleasure of the bricolage.



DESIGNERS & EXPERTS



SHARED KNOWLEDGE

PARTICIPANTS PERSONS/COLLECTIVES INVOLVED

In *Puzzle House*, the main participants were the design group and a team hired to assemble the parts. In a similar way, the *Rhombi House* was constructed by a group of 9 persons formed by the design studio.

In the project *Entre Canastas*, as in every Aulas Abiertas project, the whole community of students, teachers and parents was involved, along with some local institutions, such as the school IES Fernando Sagaseta) with its carpentry department.

The object-to-object process is again much simpler, it can be conducted from one or more persons, depending on the work load and the construction demands.

1



2

THE DESIGNERS,
IES FERNANDO
SAGASETA
CARPENTRY
DEPARTMENT
AND
113 VOLUNTEERS



3



DESIGNERS
GROUP
AND
2 VOLUNTEERS



DESIGNERS
GROUP OF 9

TRANSFORMATION/3RD LIFE

Architecture – object seems like the most complex category out of the three. However, the metal joints that are used, the standardization of the wood pieces, the lack of cement and glues and the detailed design, add flexibility to the construction system and facilitate the disassembly. Observing the strategies of converting furniture into open spaces, through *Entre Canastas*, one does not face less complexity. The number of persons needed for the construction is large, as well as the number of pieces that have to be adjusted to form the new components. Actually, having to do with a smaller scale and a variety of waste objects requires more complex solutions. Smaller scale objects, on the other are rarely used various times. The components are smaller and more elaborated, the objects are displaceable, ephemeral and less rigid.



**THE PARTS ARE SCREWED TOGETHER,
WITHOUT THE USE OF CEMENT**



**METAL JOINTS,
CEMENT BASES FOR STABILITY**

Conclusions

Reutilization strategies are proven to be a powerful tool for designers and users in the process of claiming and transforming the public space. Though the interventions of the last category are the most **user-proximate**, as they can be constructed with various materials and processes and do not require a complex design, they also seem to be the most ephemeral and the less potent to be subjected to various transformations over time. The most **architecture-dependent** category, on the other hand, which requires time and planification, as well as a higher grade of expertise, is able to reuse objects in various manners and indefinite times.

For this, the post-experimental procedure conducted by some architectural practices, which includes sharing the processes and visions of those participatory projects, can reveal useful patterns on how each community of architects and users can collectively change their cities' experiences. This sharing of knowledge that is already being converted by some practices into a "kit of actions" and specific proposals, should be therefore amplified and universalized, as a response to the irrational construction of spaces with the use of new materials that come from the same old destructive operations, for the ecological and responsible prolongation of architecture in time. There are already several platforms that intent to collect projects, ideas, manuals on this topic.

Through this new material culture, architecture becomes a common, not only regarding the making and constantly transforming public space, but also the ways of thinking it.