

Recycle as architectural cre-a[c]tive strategy

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ABSTRACT: In the last years, architects have learnt (again) to look at city and architecture as a material that can be recycled, re-evaluating its life cycles and mutations.

New tools, methods, and strategies try to give new meaning to what already exists in our cities, new life to what is discarded or abandoned, eliminating as much as possible the process of architectural waste to stop the phenomena of land consumption.

Recycling means to put back into circulation, reuse architectural waste materials, give them back a new value and meaning that they have lost because of economic or social reasons; basically it means transforming architectural waste into prominent figures. This is a practice that doesn't tend to immortalize the image of architectural space by attributing to it the value of the immutability- as it happens in restoration; on the contrary, the change is the value.

The way cities work today is the premise to recognize and reevaluate the amount of ruins architects should learn to deal with, developing the idea of 'contemporary archeology' to keep together the memory and the willingness of belonging to our *zeitgeist*.

Recycle is necessarily scale-less, contextual and convertible. Every place and every case involves a different project: there is no just one method to approach it, the idea itself of recycling is the common denominator for architects that want to keep a role in the transformation of cities that requires flexibility and a 'soft' approach rather than the use of stereotyped techniques and tools or traditional ways of thinking.

In this context, architects do not need to define a new architectural language or a manifesto; their architecture should be able to react positively to urban, social and cultural conditions and turn them into cre-a[c]tivity, recognizing the value and potential of discarded, neglected and ordinary buildings as an architectural resource – rather than as waste – that paves the way to a renewed project culture and face the challenges of the XXI century.

KEYWORDS: Recycle, Architecture, Environment, Community, Design

INTRODUCTION

In the last decades the role of architects and urban planners does not seem to be globally very clear because the idea of city that they developed in the last century, the idea of how to live in and the idea of public space and environment is also globally in crisis.

In the XX century, architectural research has focused on expressive language - starting from the big utopia of Modernism and its *tabula rasa* - in order to provide a recognizable and international style that shaped many of the buildings and part of cities that architects have to deal with today. There was a concern in defining a common architectural language, whether a building could be defined progressive, functionalist, rationalist, post-modern, deconstructionist, or minimalist. Apart from the utopias of the '60s that focused more on the scale of territory instead of the architectural one, all the researches of the XX century concentrated on finding an architectural expression that could lead the discipline towards the future, including the uncanny architectures that characterized the last years of the XX century on which Anthony Vidler focused in his book (Vidler 1994).

The traditional condition of the city is very much challenging today: the XXI century has started with other urgencies and different keywords are worldwide spread to find new and updated tools for the architectural project in order to face new challenges of the century: communities, recycling and environment show that architectural and urban studies should focus more on the relationships between space and society in order to be part of the fast growing or shrinking of cities that occurred in the last 30 years.

In the last years architects have been trying to react to the traditional idea of city on the one side putting (again) the autonomy of architecture as a discipline at the center of their own interest without keeping often into consideration the findings of other disciplines; on the other side trying to debate on the political and

environmental issues and inserting them into an architectural project through ecological technical details with the risk of impoverishment and subjection of architecture to other disciplines. To avoid both risks, architects are asked not to give up the creative nature of their commitment. On the contrary, they should transfer their political and environmental issues into a continuous expressive research, into a 'device' that represents their own *zeitgeist*.

1.0 THE CULTURE OF THE ABANDONMENT

The urban, cultural and economic changes of the last years have left many buildings obsolete, not anymore suitable for the functional program they were built for. Even though the aesthetic of the ruins has always fascinated architects - inspiring a vast body of literature, texts and essays on the issue of memory and nostalgia of passing time - the abandoned and underused buildings, recent ruins with no role anymore, have a negative effect on many aspects of the city and its public domain.

The global financial crisis represents one of the main reasons of this short circuit; at the same time this seems to be an opportunity to re-define the methods and tools architects can develop to keep up their role in the society, re-evaluating what already exists not just as a copy of the original building, as it happens in restoration that aims to 'embalm' it, but as an opportunity for the architectural and urban studies to look and move forward. As Rem Koolhaas has stated

we then looked at the history of preservation in terms of what was being preserved, and it started logically enough with ancient monuments, then religious buildings, etc. Later, structures with more and more (and also less and less) sacred substance and more and more sociological substance were preserved, to the point that we now preserve concentration camps, department stores, factories, and amusement rides. In other words, everything we inhabit is potentially susceptible to preservation. [...] We are living in an incredibly exciting and slightly absurd moment, namely that preservation is overtaking us. (Koolhaas 2014,15)

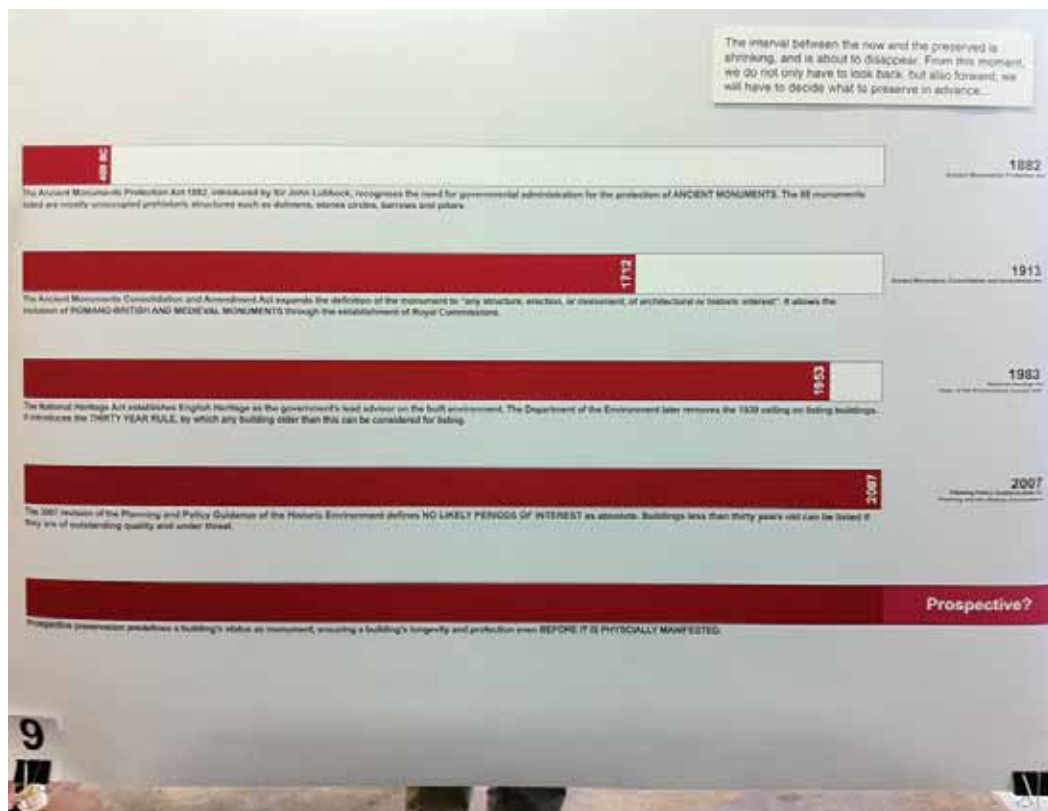


Figure 1: Time by time, each new preservation law has shifted the date of preservation for architecture closer to the present, in *Cronocaos*, OMA's exhibition at the 12th International Architecture Exhibition La Biennale di Venezia, 2010. Source: (Author 2010)

Sometimes it is more convenient to tear them down, sometimes it is less expensive to reuse and bring them to life, sometimes it is more culturally engaged to keep the memory and try to experiment, diversify and revivify not only existing buildings but also entire obsolete areas or disused infrastructures.

They all represent an important social, cultural and above all architectural resource, not waste: as a result, a new constructive and positive approach has to be taken up toward the existing stock.

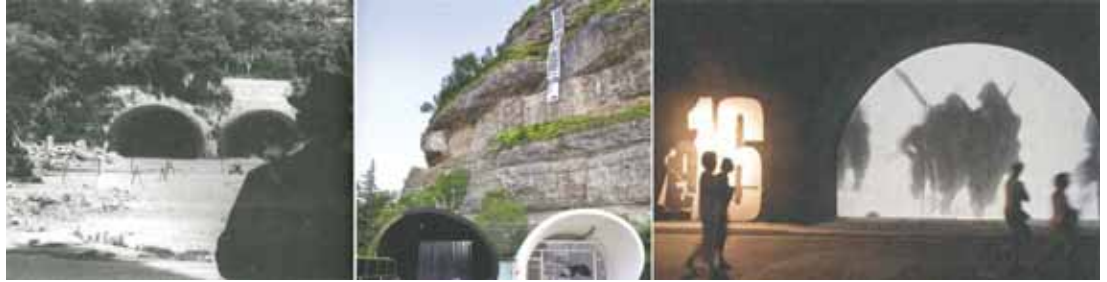


Figure 2: Elisabetta Terragni, Jeffrey T. Schnapp, Filmwork, Gruppe Gut, the Tunnels of Trento, Italy, 2009. Transformation of a disused urban infrastructure - two 300 meters tunnels - into galleries. Source: (Ciorra, Marini 2012, 28-30)

There is still a crucial production of uncanny buildings by architects - that get the attention of public interest - whose architectures somehow remind us all the heroism of the Modernism founded on the idea of *tabula rasa*; at the same time another architectural strategy is trying to focus on minimum intervention or un-volumetric architecture¹.

The issue of recycling is actually far from new: reuse, rehabilitation, reconversion exist from long time but it has started to be at the center of architectural and urban debate only recently².

This is the deeper meaning of recycle: re-building instead of building, parasiting the existing ordinary buildings³, giving them a new program and meaning through the construction of scenarios rooted in scientific hypothesis that on the one hand can overcome both the limits and weaknesses of current practices related to recovering or modifying existing buildings through pure technical interventions and on the other hand can accept the fast economic shifts and growth of cities without losing the opportunity to define the intrinsic values of architecture, city, landscape, and above all environmental sustainability, nowadays indispensable and crucial in every project.



Figure 3: Naumann Architektur, Pfalz, Germany 2008. The recycle of a stable for pigs (*saustall*) to a showroom: *s(ch)austall*. Awarded the 2005 Architectural Review Award for Emerging Architecture. Source: (Ciorra, Marini 2012, 156-158)

In the field of monument preservation, the value of the existing architecture and the priority of conservation are already a given. Society agrees on the value of the historic building that stands in stark contrast to the value placed on the "ordinary" buildings. Even such buildings, which are all often dismissed as worthless, have potential and qualities that can be brought to the fore through qualified and creative remodeling. (Petzet, Heimeyer 2012, 10-11)

It becomes urgent to think how to avoid the construction of new buildings and the large loss of land that threatens our environment and how improve the *status* of existing stock without using a mimic attitude; on the contrary, giving a new meaning to the abandoned materials applying new strategies of methodical organization.

2.0 THE RE-EVALUATION OF WASTE AS RESOURCE

The idea of city and architecture has changed a lot compared to the sense of urbanity which was commonly shared by the society until almost the end of the XX century. Today architecture as an academic and professional discipline is rooted not only in the monolithic spatial order architects used to know but also and above all in material and immaterial networks that push the discipline itself to search and find also virtuous alliance with other ones as art, sociology, cinema, photography, etc.



Figure 4: Music on Bones. In the 60's in Russia it was illegal to import Western music. The solution was homemade records pressed on exposed X-Rays called bone music. Source⁴



Figure 5: Zbig Rybczynski, "Steps", 1987. The audiovisual language is disassembled and reassembled by the movie director recycling the sequence of the steps of "The Battleship Potemkin" by Sergei Ejzeštejn with material shot by the Polish director. The history of the coded language of film is expanded using the new tools available to the modern filmmaker, linking past with present. Source: (Ciorra, Marini 2012, 16-17)

In the last ten years, new urban and architectural regulations in some European countries and some exhibitions hosted by important cultural institutions highlighted the idea that some architects have developed and shared about the city: the necessity that it should grow on itself rather than expanding beyond its current physical limits.

In 2004, in France two important facts paved the way to a new approach towards the existing stock. On the one hand the State expressed the willingness to change the image of the city through a significant public program that presupposed the demolition and reconstruction of towers from the 1960s and 1970s. On the other hand the lack of public housing pointed out the increasing necessity to construct rapidly new buildings. In this context, the Ministère de la Culture et de la Communication, Direction de l'Architecture et du Patrimoine appointed Druot, Lacaton & Vassal that through a study - PLUS Les grands ensembles de logements Territoires d'exception – remarked that the demolition was not necessary and showed how the transformation of the existing towers could be suitable for the needs of the residents from both the aesthetic and economic point of view.

In 2006 at the International Architecture Exhibition La Biennale di Venezia, 'Cities, Architecture and Society', the curator Richard Burdett used sixteen case study-metropolises to underline the urgency of appropriate urban answers to the problem of demographic pressure. In this Biennale two shows pointed out in a complementary way the urgency for a recycle approach of the existing stock.

The first one is a research project best known as 'Shrinking Cities', edited by Philipp Oswalt.

It seems at first to simply point to a phenomenon: the decline of urban population and economic activities in certain cities. [...]. There is also growth in the process of shrinkage: it results in excess spaces, buildings, and obsolete properties (Oswalt 2006, 12).

The second one is the German Pavilion, 'The Convertible City', that supports and encourages the reuse of existing buildings triggered by the new urban regulation that limit the construction from scratch; an urban policy that aims to limit the land take - promoted first in 1998 by the then Federal Environment Minister Angela Merkel⁵. The new legislation has generated an architectural debate focusing on underused building stock to solve the problem of land use. Most of the existing buildings do not belong to extraordinary history but rather they represent 'dead bodies' in the city life. The exhibition shows many projects by architects, landscape architects, urban planners and artists focusing on new scenarios for architecture through a new flexible approach to the problem.

In 2009 the former French President Nicolas Sarkozy launched 'Le Grand Paris', an urban and architectural consultation for a new global plan for the Paris metropolitan region. The ten selected architectural teams worked on the theme of 'building the city on the city', thinking on how to better use the land that is already built-up and keeping the limit of the expansion of the built environment. From the urban and architectural point of view, the Grand Paris marked an important step in the critic towards the government policy of recent

years that has aimed to change the city by demolishing and rebuilding, or developing new land. On the contrary, the ten teams provided scenarios in which interstitial and underused areas - in particular those ones near railway tracks or along the waterways - were taken into consideration and densifying, recycling, repurposing were the main actions.

In 2010, again at the International Architecture Exhibition La Biennale di Venezia, the Dutch Pavilion, 'Vacant NL', displayed the potential for innovation offered by vacancy and the value of vacancies as a future opportunity of urban transformation. In the booklet of the exhibition Saskia van Stein states

Not only the transformation of the use and function of a space; the time has come to think more intelligently about the spatial consequences of our actions. But also the transformation of concepts and values. We have to take a new understanding of our economy into consideration, a new way of thinking by complementing hard cash with 'softer' values⁶.

It implies a change in tools, methods, role and attitude that architects should take into consideration when they debate on architecture and urban development in order to catch the structural meaning of vacancy, above all in some areas and countries.

In the same year another exhibition at MoMa in New York 'Small Scale, Big Change. New Architecture of Social Engagement', showed eleven projects that reveal the necessity for architecture of the XXI century of being not only less 'spectacular' but above all more socially engaged in order to find, at every scale of the project, a positive synergy to provide the best program, aesthetics values, and resource optimization: architects not only as designers of buildings but also as moderators of change.



Figure 7-8: Frédéric Druot, Anne Lacaton, and Jean Philippe Vassal, Transformation of Tour Bois-le-Prêtre, Paris, France, 2006–11 displayed at 'Small Scale, Big Change. New Architecture of Social Engagement' exhibition. New loggias, built as self-supporting structure, are added on three sides of the building. The transformation of the residential tower shows the legitimacy of the thesis architects disclosed in their study PLUS in 2004. Source: (Ciorra, Marini 2012, 26-27)

In 2011, the exhibition 'Recycle. Strategies for Architecture, City and Planet' at MAXXI Museum in Rome marked a major step in the timeline of the issue. The curator starts off from the idea of recycling as a creative and innovative 'device' in a transversal and interdisciplinary way; not just simply reuse of disused buildings but a strategy for architecture to face the challenges of the XXI century. The exhibition - that includes many works also by artists, photographers, media producers – points out that

the recycling strategy would appear to be an approach that allows us to keep together memory and radical innovation, a sort of small socio-expressive utopia that can guide us in a reconstruction of territories and theories at the same time (Ciorra, Marini 2012, 25).

The topic catches on and in 2012 two other exhibitions coincide. The first one is set again by Germany in its Pavilion at the International Architecture Exhibition La Biennale di Venezia, 'Reduce, Reuse, Recycle. Architecture as Resource'. The interest in what already exists – above all the ordinary buildings - and how to revivify them is once again the *fil rouge* that keeps together many projects displayed in the show.

There is a surplus of architecture. Downsizing and minimizing have become key planning issues, and even in areas with growth, the issue at hand is not about tabula rasa and new construction, but about regeneration, conversion, aggregation, and extension - not only of individual buildings, but of the urban fabric as a whole. How to deal with existing architecture is both culturally and economically crucial to our future; ambitious environmental targets can only be achieved by improving what is already there and by renewing existing infrastructures. (Petzet, Heimeyer 2012, 9)



Figure 9: KARO Architekten, Open-air Library, Magdeburg, Germany, 2008-2009.

The open air library was established just for two days in 2005 in an abandoned industrial district using beer crates as building material (left). The initiative evolved until the opening of a civic library in the same site in 2009 (center). The façade elements come from a demolished department store (right). It is an example of both relying on low-cost approach to make big project and building with residents that take the ownership of the space. 2011 Brit Insurance Design Award, Category Architecture. Source: (Ciorra, Marini 2012, 182-183)

The second one in Paris in the Pavilion de l'Arsenal, 'Re.architecture, Re.cycle, Re.use, Re.invest, Re.build' shows thirty projects by fifteen invited European teams that have been working both on small interventions and urban strategies. In both cases leftover or in transition spaces and territories are used as an opportunity to generate social activities and a dynamic and attentive approach towards the contemporary city and architecture.



Figure 10: The main exhibitions on the theme of recycle, from left: the German Pavilion, *Convertible City*, Architecture Biennale in Venice, 2006; the Dutch Pavilion, *Vacant NL*, Architecture Biennale in Venice, 2010; *Recycle. Strategies for Architecture, City and Planet*, MAXXI Museum, Rome, 2011; the German Pavilion, *Reduce, Reuse, Recycle*, Architecture Biennale in Venice, 2012; *Re.architecture, Re.cycle, Re.use, Re.invest, Re.build*, the Pavilion de l'Arsenal, Paris, 2012. Source: (Author 2012)

3.0 RECYCLE AS AN ARCHITECTURAL CRE-A[C]TIVE STRATEGY

In the last years, architects have learnt (again) to look at city and architecture as a material that can be recycled, re-evaluating their life cycles and mutations. New tools, methods, and strategies try to give new meaning to what already exists in our cities, new life to what is discarded or abandoned, eliminating as much as possible the process of architectural waste to stop the phenomena of land consumption.

Recycling means to put back into circulation, reuse architectural waste materials, give them back a new value and meaning that they have lost because of economic or social reasons; basically it means transforming architectural waste into prominent figures. This is a practice that doesn't tend to immortalize the image of architectural space by attributing to it the value of the immutability - as it happens in restoration; on the contrary, the change is the value.

The scheduled duration of the building - in which the project aims to define the construction process as well as its management until the disposal and recycling - causes an epistemological leap both in the theory and

practice of architecture because from the beginning the project takes into consideration the subject of the end of life (of materials, components, the building itself): not stability and persistence over time but 'positive weakness' and change.

The theoretical value of recycling is in the shift of the idea of architecture itself: architecture is not only a synonym of stability, a building for eternity, or a project as an authorial decision anymore but it is constantly changing, a temporary program and it involves designing as a process shared by many. In this way it is possible to build an urban environment that is the portrait of the society that lives there and at that time. This is an open way to catch the speed of contemporary changes or needs of the society in the post industrialized era. In this context, it is important to distinguish the real ecological urgency from the 'greenwashing' market-oriented strategies and to understand what sustainability really means as architects in order to transform ecological issues into architecture without losing the potential of design, and at the same time recognizing the landscape as

an important part of the quality of life for people everywhere: in urban areas and in the countryside, in degraded areas as well as in areas of high quality, in areas recognized as being of outstanding beauty as well as everyday areas

as stated in Preamble of the European Landscape Convention. The way cities work today – mainly under economic and political forces that architects cannot manage themselves – is the premise to recognize and reevaluate the amount of ruins architects should learn to deal with, developing the idea of 'contemporary archeology' to keep together at the same time the memory and the willingness of belonging to our *zeitgeist*. Recycle is necessarily scaleless, contextual and convertible. Every place and every case involves a different project: there is no just one method to approach it, the idea itself of recycling is the common denominator for architects that want to keep a role in the transformation of cities that requires flexibility and a 'soft' approach rather than the use of stereotyped techniques and tools or traditional ways of thinking that do not fit well in the fast-changing contemporary world.

In this context, architects do not need to define a new architectural language or a manifesto; their architecture should be able to react positively to urban, social and cultural conditions and turn them into creat[iv]ity, recognizing the value and potential of discarded, neglected, and ordinary buildings as an architectural resource – rather than as waste - that paves the way to a renewed project culture and face the challenges of the XXI century.

REFERENCES

- AA.VV., 2010. *Maintaining Biodiversity By Protecting The Environment*, Dessau: Federal Environment Agency (AAVV 2010).
- Aymonino, A., and ., Mosco, V.P. 2006. *Contemporary Public Space. Un-volumetric Architecture*. Milan: Skira (Aymonino, Mosco 2006).
- Ciorra, P., and Marini, S. 2012. *Recycle. Strategies for Architecture, City and Planet*. Milan: Electa (Ciorra, Marini 2012).
- Koolhaas, R., 2014. *Preservation is overtaking us*. New York: GSAPP Books (Koolhaas 2014).
- Marini, S., 2009. *Architettura parassita. Strategie di riciclaggio per la città*, Macerata: Quodlibet (Marini 2009).
- Oswalt, P., 2006. *Shrinking Cities. Volume 1*, Ostfildern-Rui: Hatje Cantz (Oswalt 2006).
- Petzet M., Heimeyer F., ed. 2012. *Reduce, Reuse, Recycle. Architecture as Resource*, catalogue of the German Pavilion at 13th International Architecture Exhibition La Biennale di Venezia 2012. (Petzet, Heimeyer 2012).
- Rietveld R., Rietveld E., Bey J., Mackic A., Visser B., van de Wiel E., Zoeteman M., 2014. *Vacancy Studies. Experiments and Strategic Interventions in Architecture*, Rotterdam: Nai010 (Rietveld et al. 2014).
- Vidler, A., 1994. *The Architectural Uncanny. Essays in the Modern Unhomely*. MIT Press. (Vidler 1994).

ENDNOTES

- ¹ Aymonino, Aldo, and ., Mosco, Valerio Paolo. *Contemporary Public Space. Un-volumetric Architecture*. Milan: Skira, 2006.
- ² Ferlenga Alberto, "Recycling and Corrections", in *Recycle. Strategies for Architecture, City and Planet*, ed. Ciorra Pippo, and Marini Sara, Milan: Electa, 2012.
- ³ Marini, Sara, *Architettura parassita. Strategie di riciclaggio per la città*, Macerata: Quodlibet, 2009.
- ⁴ "How Soviet Hipsters Saved Rock 'N' Roll With X-Ray Records", last modified June 23, 2014, <http://www.fastcodesign.com/3032206/how-soviet-hipsters-saved-rock-n-roll-with-x-ray-records.html>
- ⁵ AA.VV., *Maintaining Biodiversity By Protecting The Environment*, Dessau: Federal Environment Agency (UBA), 2010.
- ⁶ Van Stein S., "Temporality at Use", in *Vacant NL. Where Architecture Meets Ideas*, the booklet of the Dutch Pavilion at the International Architecture Exhibition La Biennale di Venezia, 2010. The research project has been carried on and published in Rietveld R., Rietveld E., Bey J., Mackic A., Visser B., van de Wiel E., Zoeteman M., *Vacancy Studies. Experiments and Strategic Interventions in Architecture*, Rotterdam: Nai010, 2014.