

RESILIENT ECOLOGICAL DESIGN STRATEGIES

R.E.D.S.2ALPS
DESIGNING A SUSTAINABLE FUTURE
TOWARD AN ECOLOGICAL
APPROACH | PROGETTARE UN
FUTURO SOSTENIBILE,
VERSO UN APPROCCIO ECOLOGICO

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ESSAYS, PROJECTS, AROUND CITY, TERRITORY,
LANDSCAPE, ARCHITECTURE, PLANNING AND
DESIGN;
IDEAS AND PROPOSAL FOR THE FUTURE
ECOLOGICAL DESIGN, LANDSCAPE URBANISM

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2015/N.2MR

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02

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ecology

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CHARLES WALDHEIM - HARVARD GSD
MAIN GUEST OF THE EDITION
R.E.D.S.2ALPS
DESIGNING A SUSTAINABLE FUTURE
PROGETTANDO UN FUTURO SOSTENIBILE

ARCHITECTURE ECOLOGICAL DESIGN CITY AND LANDSCAPE

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MONOGRAPH.**RESEARCH** 02

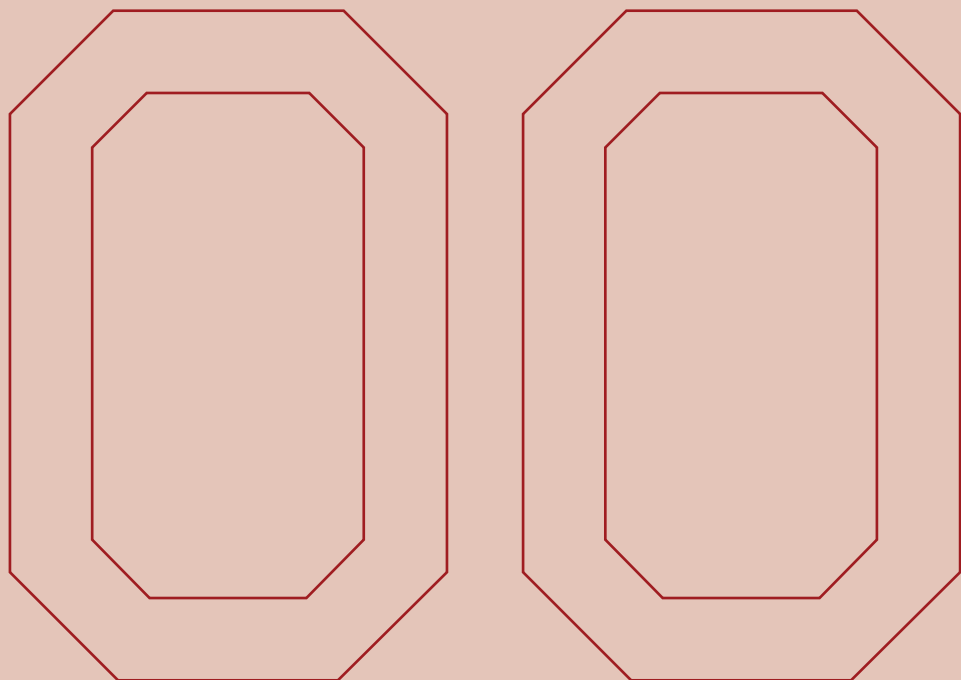
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Mosè Ricci

R.E.D.S.

With R.E.D.S. we are trying to establish an international network of researches, positions and projects able to break the barriers among the design disciplines and to explore sustainable and charming futures for our cities and landscapes. Our idea is to compare and to discuss studies and project produced in this field giving the opportunity to everybody to join the net and to present his position with an open call. This is the second symposium promoted by our ecological design organization. Our first meeting was in Rome and it was focused on ecological design. There were four point of view: open spaces, open systems, open sources and open scales.

This time resilience is the topic. According to a definition of The Merriam Webster Dictionary -that I like because it is immediate and very simple- we could say that resilience for our cities and landscape is the ability to become strong, healthy or successful again after the economic and the environmental crisis. Or, moreover, after the information technologies revolution.

In just a few years the economic and environmental crisis has shown us an important form of abandonment in Europe that is influencing the life and economy of the cities. It is a sort of abandonment that is determined not as much by an urban population decline, but rather by internal mobility, migration from manufacturing centers, excessive building, marginal state of agriculture and stagnation of the building market. All of these factors deeply affect the behavior and the wishes of the inhabitants themselves. In short, what's new is being abandoned. It is the abandonment of an idea of growth and city, even before being an idea about its physical spaces. It responds to a strategy of survival, to the economic crisis and to the awareness of the environmental emergency. Its effects are evident, and across the territory they disseminate the image of a crisis-stricken city.

Italian cities have grown enormously in recent years. Between 1999 and 2009 approximately 300 million cubic meters per year were built up. It means 46 cubic meters per inhabitant. A building stock equal to about 70 apartments per square kilometer if we calculate the national territory minus the protected rural areas and woodland. Between 1999 and 2007 house values rose steeply (over 8 years, from +25% in the islands (i.e. Sicily and Sardinia), +30% in the North, and +60% in Central Italy)¹, as has the number of buying and selling transactions, and the number of real estate agencies, architectural firms and construction companies². And the landscape has felt the impact of development just as much as the cities have. Between 1990 and 2005³ a total of about 3.5 million hectares (a surface area as large as the Lazio and Abruzzi regions together) have been transformed. In Italy each Italian citizen makes use of 230 square meters of urbanized territory. There are more than 200,000 kilometers of roads, 6,000 kilometers of disused railways, and 27 million homes of which 20% vacant. Each year, starting from the late 1990s, about 244,000 hectares of ground

are consumed⁴. With a game in which everyone believed to win - owners who put their savings safe, building companies working, the administrations that survived with urbanization taxes, policy that was continually prized by the rhythm of the building cycle - it was perpetrated a bloody and unprecedented invasion of Italian landscapes.

Since the collapse of the housing market in 2007 all the Country hit by the economic and environmental crisis suffer abandonment and disposal often also for more recent works. The results of the Survey into the Property Market drafted by the Parliamentary Commission for Environment, Territory and Public Works, carried out in 2010, clearly outline the actual urban condition in Italy. In the years from 2007 to 2010 there were 120,000 unsold flats, around 40% of those built. In 2010 the investments in the property sector dropped by 7%, and new buildings by 32%. The buying and selling transaction fell (-15% in 2008 and -19% in 2009) and in the three-year period 2006-2009 the business volume of the property market collapsed by 33%. The same report highlighted that fact that in 2008 to purchase a house in the semi-central part of a large urban area an average of nine years of household income were required, as opposed to 3.4 years in 1965. The evictions for payment arrears went up by 25% between 2008 and 2009.

Moreover, there are 5.2 million empty houses out of 10 million unrented properties in Italy. "If we exclude the first homes and the relative accessories and the other properties whose use could not be reconstructed or that have not been detected in the income tax declaration form, around 17.5 million property units are owned by private families. Of these not even one third (that is, 29%) is declared as being rented. It is very likely that out of this very limited share there is the impact of evasion." Or the vacant houses⁵. In spite of the growing number of empty houses, in 2010 at least 230,000 families were living in a condition of cohabitation and 70,000 in precarious living conditions.

Even the numbers on the infrastructure reserve are significant. In Italy there are 20 million square metres of railway lines that are either disused or in the process of being closed down, of which around half (9.5 million) in metropolitan areas. In the meantime around 5,000 km of railway line have been divested, of which 2,600 km are still unused today⁶. There are 20,000 km of abandoned roads of which 2,600 unused. The Gioia Tauro Harbour, the Tiburtina High Speed Railway Station, the Bre-Be-Mi Speedway (and soon -we bet- the Expo) are only the most obvious examples of a policy that wastes always twice First insisting in building new fetishes of a passed modernity, and then wasting away the greatest historical and natural heritage all over the world. No enhancement devices or strategic investments are forecasted for that. The situation is the same in other European countries. In Spain between Madrid and Toledo there is a kind of new city for 300 thousand inhabitants completely made up the rubbish bins and lampposts and completely empty and unsold. And even in the wealthier countries of northern

4. Cf. CRESME reports for 2007-2014.

5. Source: Agenzia delle Entrate, Study entitled "Gli immobili in Italia 2010".

6. Source: FS Sistemi Urbani srl, 2011.

1. Source: processing and estimates CRESME/SI, 2010-2014.

2. Cf. *Il Mercato delle Costruzioni 2011, XVIII Rapporto Congiunturale e Previsionale CRESME. 2010-2015 l'avvio del VII ciclo edilizio*, planning and direction by Lorenzo Bellicini and Francesco Toso, Rome, November 2010.

3. Source: WWF Italia, *2009 l'anno del cemento*.

Europe, the problem is very much present. The Dutch Pavilion at the Venice Biennale in 2010 was an empty room with the threat of plastic hanging from the ceiling of all the empty buildings of Ramstadt incumbent on the head of visitors. Biennale of 2012 always the Dutch Pavilion was called Reset and the German Reduce, Reuse, Recycle. In the 2014 Biennale Portugal is the Country that dramatically raises the same issue.

In the perspective of a decrease in the urban growth the point of view of people dealing in architecture and the city changes radically. In the meantime, reduction, reuse and recycle seem to be the only sustainable social strategies capable of expressing innovation, or generating consensus and producing beauty in the crisis age city.

The recycling rhetoric very often speculates on the ethics of the process. Recycling means putting back into circulation, re-using waste materials which have lost value and/or meaning. Recycling protects the environment. It is a practice that allows to reduce waste, to limit the presence of garbage, to reduce disposal costs and to contain the production of new goods. Recycle means creating new value and new sense, to start a new cycle, another life. The propulsive content of recycling lies in this concept. It is an ecological action that operates on sense and pushes forward the existing into the future by transforming waste into prominent figures. In other words, as architects we do not do research on recycling because it is a good and right action. We study that because today for an architect to recycle is to design.

Also there is a thin thread that binds inextricably urban materials recycle and smart systems. Perhaps the real cause of the abandonment that involves so increasingly the living spaces and the landscape of the west of the world are the computers, smart phones, tablets, interactive television, the new app ... and all the sophisticated devices and technologies to erase distances and times and to share information, decisions and actions. Each of us can find thousands of similar examples that demonstrate how people always need less functional spaces to live and work because many of the uses that occupied spaces solids in the city have been transferred or will be transferred in the virtual spaces of the Net. Pushed by the economic emergency and by new environmental awareness little by little using all kind of sharing information devices we are transferring in not material spaces functions and activities that we needed to make in the solid spaces of the real world until yesterday (shopping, watching, meeting, hitching..).

This is the point. The simultaneous action of three key factors -the economic and the environmental crisis, the revolution for sharing information technologies- is deeply changing our lifestyles and the way we imagine and shape our future. So that all our design knowledge suddenly appears to be inadequate even to interpret current inhabiting spaces situation or to represent a device capable of generating environmental, social, economic qualities and new beauty. The information technology revolution displaces our modern cer-

tainties. It makes seem all the theories and practices to which they refer suddenly out of time. They seem epiphanies of a logic that belongs to another era, theoretical models and behavior designed to manage a solid three-dimensional space that is no longer the only possible place for our projects.

It is not strange. Important technological innovations or new findings have always completely changed the way in which people think, interact, or build their inhabiting spaces.

But if all this is about to happen or it is already happening is clear that some essential paradigms of modernity as the union between form and function in architecture and in urbanism or as the organization of the city in functional parts have lost their significance. Our problem now is the opposite. Linking uses and forms does not make any sense since we can do almost anything everywhere trough the information technologies devices. Our problem is to give sense and new narrative to existing empty or denied forms. And to transform these in charming and performing landscapes and architecture.

How will this new conditions involve and change design theories, practices and project devices? How can we impulse resilience by design?

All of this is what REDS2ALPS is about. We matter what the future brings!

Monograph.RESEARCH
R.E.D.S. 2 Alps
DESIGNING A SUSTAINABLE FUTURE
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PUBLISHED by
PUBBLICATO da
LIST Lab
www.listlab.eu



ISBN 9788898774425

PRODUCTION | PRODUZIONE
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38068 Rovereto (TN) - ITALY
T: +39 0464 443427
www.greentrendesign.it

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DISEGNO GRAFICO
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Cover Picture | Foto di copertina
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Printed and bound in the
European Union, 2015
Stampato e rilegato in
Unione Europea, 2015

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