edited by | a cura di
G. PINO SCAGLIONE
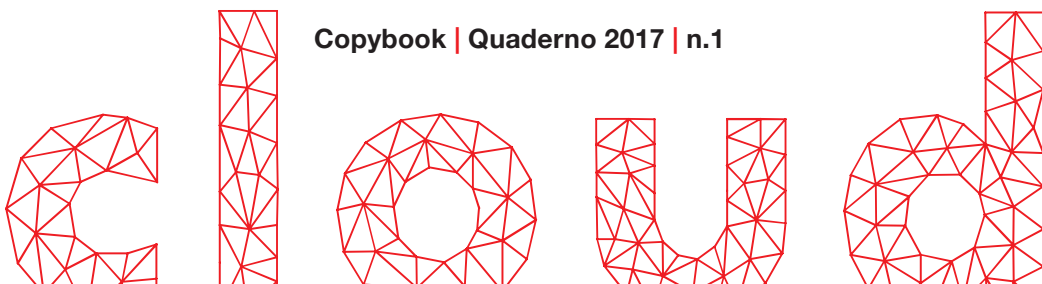
Resilient
Ecological
Design
Strategies
School

R.E.D.S.

POSIZIONI CRITICHE,
ANTOLOGIA, RASSEGNA
DI ESPERIENZE SUL
PROGETTO URBANISTI-
CO, DI ARCHITETTURA,
SUL PAESAGGIO, SULLE
INFRASTRUTTURE,
SULLA CITTA'.

CRITICAL POSITIONS,
ANTOLOGY, EXPERIEN-
CE REVIEW ON THE
URBAN DESIGN, ARCHI-
TECTURE, LANDSCAPE,
INFRASTRUCTURE, CITY.

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R.E.D.S.

NETWORK
IN PROGRESS

R.E.D.S.

R.E.D.S. platform

UNIVERSITÀ DEGLI STUDI
DI TRENTO

Dipartimento di Ingegneria Civile,
Ambientale e Meccanica

R.E.D.S.

Whats?

E' una rete internazionale di università che dal 2013 organizza conferenze per la promozione e implementazione del 'landscape and ecological urbanism' all'interno del mondo accademico. E' inoltre una piattaforma internazionale che promuove ricerca e iniziative, inlcuso pubblicazioni e workshop, che si propongono di esplorare scenari futuri orientati verso un approccio ecologico alla progettazione.

Is an international network of Universities that since 2013 has been organizing conferences for the promotion and implementation of Landscape and Ecological Urbanism within Academia. It is also an international platform that promotes research and initiatives, including publications and workshops, that aims at exploring future scenarios oriented toward an Ecological approach to Design.

COLLETTI CARTA DE ROSSI

GAUSA GASPARRINI MARINI

RICCI PUGNO SCAGLIONE

FAVARGIOTTI

R.E.D.S. POSITIONS I POSIZIONI

MEETING NATURE HALFWAY. ARCHITECTURE INTERFACED BETWEEN TECHNOLOGY AND THE ENVIRONMENT.

MARJAN COLLETTI, Professor of Innsbruck University.

The hefty weight of environmental responsibility increasingly put upon the discipline's shoulders drastically challenges many conventions of architectural design. Architecture can no longer ignore nature; on the contrary both realms must act as prosthetic devices towards the creation of synthetic ecosystems where the natural and the artificial domains coexist. The binary conditions 'architecture or nature' and 'architecture vs nature' are thus obsolete. Reacting to the disruption of cities, the de-synchronization of infrastructures and the debilitation of cities, we challenge the clichés that architecture solely deals with edifices (the 'built' environment), that building technology merely answers to the construction industry (inflexible manufacturing, over-normativity), and that the production of buildings cannot profit from other industries (biotechnology, robotic automation).

THE AUGMENTED CITY FOR A DIFFERENT PRESENT

MAURIZIO CARTA, Professor of Palermo University.

By 2050, the world's urban population is expected to nearly double, making urbanisation one of the most transformative trends and asking urbanism to give more innovative and effective solutions. Local populations and migrants, social and cultural interactions, environmental impacts and economic activities are increasingly concentrated in cities, and this poses massive sustainability challenges in terms of reimagining how to plan and manage housing, infrastructures, basic services, food security, health, education, decent jobs, safety and natural resources, among others. We don't have enough time to wait for the solutions, because the cities of the future must be built on the actual cities, bringing them in a different present more sustainable, creative, sensible and intelligent.

We need an urban paradigm shift: the Augmented City, as a spatial/cultural/social/economic platform for enhancing our contemporary life, individual and collective, informal and institutional, expanding the urban space generated by the effects of innovation. The Augmented City redefines dogmas of urbanism that we often thought of being more static and rule-based, recovering its prospective, incremental, responsive and creative approach, because it is:

a) SENTIENT, using a wide range of sources for acting by a knowledge dimension to answer several people's questions and to solve several problems.

b) OPENSOURCE and no more a pre-compiled code of spaces and functions. It's is a collaborative and incremental process of meeting places and housing, social infrastructure and places of co-work, and it needs for a civic-tech-urban structural alliance in the Sharing Society we live.

c) INTELLIGENT, generating an enabling ecosystem based on the hardware of better urban spaces, on the software of the active citizenship, but overall on an urban operative system for an advanced and responsive city planning and design.

d) PRODUCTIVE because next cities need to reactivate their economic dimension
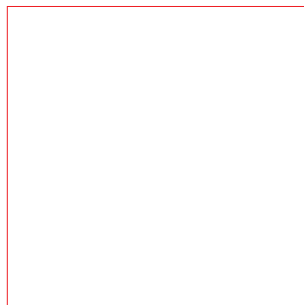
framing the powerful makers movement within a new the creative/productive urban ecosystem for improving the manufacturing renaissance in the cities based on the new artisan economy.

e) CREATIVE, improving the cultural dimension through the integrated use of culture, communication and cooperation as resources for an active city that can generate new forms and pattern able to stimulate the human creativity and able to stimulate a different growth based on identity, quality and reputation.

f) RECYCLICAL, based on recycling processes and led by circular principles. It asks for a paradigm shift for transition cities that not only re-duce, re-use, re-cycle their tangible and intangible resources, but design a new circular metabolism.

g) RESILIENT, that means accepting the task for adaptive, circular and self-sufficient cities for winning the climate change challenge, producing and distributing effectively the resilience dividend as effective instrument of urban ecological equalization.

h) FLUID, rethinking porosity and fluidity as projective paradigms in the connective dimension for urban regeneration projects that derive by water their charge of identity.

i) RETICULAR, defining the process from a traditional ecosystem and gravitational model to a new and more effective reticular one, based on metropolitan super-organism and rur-urban archipelagos.

j) STRATEGIC, asking for an incremental dimension, an adaptive approach and a time-oriented action, able to activate several cycle to regenerate districts, cities and lands.

The Augmented City grows with exponential progression doubling its components, connections and impacts, seeing in last year to one incredible and disruptive acceleration. Now we are surrounded by millions of practices in spread of sensors and intelligent devices, in collaborative design and return of urban manufacturing, in explosion of creativity and increase of resilience, several experiments in recycling of everything, fluidisation and networking of cities and adoption of incremental and adaptive strategies, as described in this book. As the famous Indian Emperor Gupta, we are at the crucial point of having to manage the "second half of the chessboard" in the innovation's progression not to succumb to the explosion of practices. So we need a theory, a new urban paradigm able to understand, connect and manage the role of cities and communities in the Neo-Anthropocene. Because the Augmented City isn't the city of the future, but it's the city of a different present.

THE URGENCY OF THE MORPHOLOGICAL PROJECT
ANTONIO DE ROSSI, Professor of Politecnico di Torino
Not yet other refoundation, but rather a overturning. The design is not as a sort of formal and figurative prophecy that seeks come true, but as the place that through the morphological dimension favors the recomposition of different interests and the great ecological and economic issues of contemporaryity. The Morphology therefore not only as an end, but also and above all as a means and instrument. Today, the design of architecture and territory seems to be increasingly marginalized by the real processes of space transformation. Faced with the crisis of the representation system, the emergence of increasingly fragmentary points of view, the only possible solution seems to be to rely on automation of procedures and best practices, to the rhetorics of smart and eco-sustainability. The theme of the building of physical space, with its hardness and economic and environmental implications, is excluded and concealed. But this does nothing but increase the dynamics of the crisis of contemporaneity.

The morphological project, on the other hand, is potentially the place that allows not only to look the conflicts, but also to look more over the different interests and intentiontality towards a re-composition of glances and sense. It is through the lens of morphology that the contrast between economic interests and environmental issues, between individual and collective interests, between transformation and planning practices, between innovation and recycling can be measured and mediated. But this requires a radical redefinition of the ontologies of architectural cultures and modern design.

Not a trivial shift in the direction of attention to the processes, actors, participation, which in the last few years has demonstrated all its ineffectiveness, but a revival and strengthening of the centrality of the morphological question, as long as it is capable of going beyond the many autoreferencing that continue to determine the crisis of architecture and its values in today's world. Without this new centrality of the morphological project, the crisis of politics and the environment, the incremental logics that dilapidate economic and territorial resources, will continue to prevail.

URBAN CHA(LLE)NGES
MANUEL GAUSA, Professor of Genova University.
We assist today to a decisive change of paradigms that have direct translations in our lecture and interpretation of our contemporary urban structures and in the conception of the city as a new kind of complex informational field of multiple human, cultural, economic and spatial, relations and interactions.
From this point of view and like a summary decalogue we can point out how:
1– The city is today a multi-city
2– Is not read as a set of forms (static), but as a system of levels (dynamic);
3– Is not defined as a place but as a hyper-place, a place of places and in places;
4– Is not imposed in the territory, but is moving in (between) the territory;
5– Its territory is that of its landscapes. The landscape is the other "building" of the city.
6- Planning implies, today, scheduling possible open scenarios. Scenarios, however, qualitative, processed and oriented; Sensory and informational; Abstract and sensitive at the same time. time.
7- The design leaves way, like this, to the strategy. The drawing on the action map. The layout on the net. The formal object to the informational process.
8– The challenge of the city is also, not to expand or to grow, but to reinforce itself. More than building it comes to recycle; More that to occupy, to articulate.
9– The identity of the city is not rooted in preserving its "essence", but in renewing values, make up the deficit, boosting potential and strengthen the assets. Bet on a strategic vision, open to a creative and sensitive innovation and to the inherited assets too (heritage, landscape, atmosphere of life and sensory spaces, etc.).
10– Its identity is not essential or fundamental but conditional. It depends on the ability of the same urban system to preserve and reinvent itself, at the same time; to give a new qualitative and strategic impetus.
11– This strategic orientation can´t find support in old closed formations (absolute

planning), but in open formulations (differential process) with a new kind of launched and sustainable dynamics:

12– The new equation "CITY + DEVELOPMENT + ENVIRONMENT + SOCIETY" declines today as a combination of 4 IN: "INNOVATION + INTERACTION + INTEGRATION + INFORMATION" or if you prefer as:

"Technological Economic development (innovation) + Environmental sensitivity & reactivity (interaction) + (Inter)urban & spatial holistic interconnection (integration) + Socio-cultural & creative knowledge affirmation (information)"

The sustainability of any system implies, in fact, empathy, synergy and innovation (development, sensitivity and progress).

His future rooted in its ability to innovate and to improve its present.

Engaging a new proactive and propositional research of its own conditions, information(s) and volitions.

Abstract by a different books of LISt Lab and Actar; 2010/2016.

DROSS CITY

Carlo Gasparrini, Anna Terracciano, Professor and Researcher of Università di Napoli

Una latitudine aggiornata del significato e della geografia del dross "Dross" e "Waste", scarti e rifiuti, ma più complessivamente metabolismo urbano e criticità ambientali, non sono questioni inedite nel dibattito urbanistico e nelle esperienze delle città. Hanno costituito campi di lavoro della modernità e, più di recente, occasioni stimolanti e potenzialmente fertili per il futuro della città contemporanea[2]. Attraversano gli ultimi due secoli, spesso sottotraccia, a partire dalla cultura igienista ottocentesca delle nuove reti tecnologiche e del risanamento urbano. Sostengono alcune scelte paradigmatiche di importanti piani della prima metà del Novecento, come quelli di Colonia e Copenaghen di Fritz Schumacher e Steen Eiler Rasmussen negli anni '20 e '40. Alimentano il bisogno di sostituire un "obsoleto" "urban planning" con l'affermazione di una "urban biology" nella visione di José Luis Sert degli anni '40. Contribuiscono ad introdurre il concetto pionieristico di "Metabolism of cities" di Abel Wolman[3] alla metà degli anni '60, variamente ripreso e declinato negli ultimi cinquant'anni. Quelle questioni hanno poi trovato uno spazio e una centralità adeguati entro la più ampia questione ambientale che ha fatto irruzione negli ultimi anni nelle agende di tutti i paesi occidentali, sospinti da una preoccupazione per la "malattia" che dalle città si è trasferita all'intero pianeta.

Nei contributi più rilevanti degli ultimi decenni, ci siamo mossi tra le microstorie del "Wasting away" di Kevin Lynch[4] e le storie extralarge dei grandi e fotogenici "drosscape"s nordamericani raccontati da Alan Berger[5]. Ma il tentativo più esplicito di proporre una dimensione interpretativa di scala urbana per il territorio degli scarti e dei rifiuti resta quello di Lars Lerup[6]. La coesistenza dinamica, la contaminazione e il conflitto tra luoghi in fase di sviluppo ("stim") e luoghi rifiutati ("dross") costituisce un riferimento tuttora rilevante per le narrazioni del metabolismo urbano.

Eppure questo campo di lavoro è sostanzialmente assente nei piani e nelle politiche urbane nazionali a meno di timidi programmi settoriali sganciati dallo spazio della città e dai suoi attori. "Drosscape", "wasteland" e "brownfield" sono comunque termini ricorrenti da anni nei racconti dei territori compromessi nelle città del pianeta. Ma i significati che sottendono esprimono situazioni molto diverse. Il termine "drosscape" contiene un concetto di "dross" come scarto[7], che ha una latitudine più ampia del "wa-

ste" — se considerato in un'accezione limitativa di "rifiuto" — e più ampia anche di un campo di osservazione strettamente circoscritto ai suoli inquinati e abbandonati della dismissione industriale. Allo stesso tempo contiene il suffisso del termine paesaggio ("scape") che estende la profondità dello sguardo aldilà della mera descrizione dei fenomeni di alterazione delle terre e dei suoli ("land" o "field") compromessi, aprendo alla multidimensionalità dell'interpretazione e del progetto. L'estensione di campo operata nell'esperienza nordamericana inaugurata da Berger consente di configurare un'articolata tassonomia[8] che insiste sull'associazione "drosscape"-processi di deindustrializzazione particolarmente pervasivi ed estesi negli States[9].

Abstract, "DROSS CITY," metabolismo urbano, resilienza e progetto di riciclo dei drosscape, a cura di Carlo Gasparrini e Anna Terracciano. Edito da LISt Lab, 2016. Note tratte nella sequenza originale dal volume,

2. C. Gasparrini, "Editoriale. Oltre la sostenibilità", Crios n. 9, 2015; 3. A. Wolman, "The metabolism of cities", Scientific American, n.213, 1965 4. Cfr. K. Lynch, "Wasting away", cit. ; 5. Cfr. A. Berger, "Drosscape. Wasting Land in Urban America", Princeton Architectural Press, 2007. Cfr. anche A. Berger, "Designing the Reclaimed Landscape", Taylor and Francis, 2008 e A. Berger, "Systemic Design can change the world", SUN, 2009.

6. Cfr. L. Lerup, "Stim & Dross: Rethinking the Metropolis", in "Assemblage" n°25, MIT Press, 1995 7. Cfr. A. Berger, "Drosscape. Wasting Land in Urban America", cit. ; 8. Vuoti residuali nei tessuti ("landscapes of dwelling"); depositi temporanei ("landscapes of transition"); spazi infrastrutturali interstiziali ("landscapes of infrastructure"); discariche ("landscapes of obsolescence"); centri commerciali abbandonati ("landscapes of exchange"); basi militari e altri brownfields ("landscapes of contamination"). Cfr. A. Berger, "Drosscape. Wasting Land in Urban America", cit.

FUTURE UTOPIA. TWELVE CITIES IN SEARCH OF THE FUTURE

Sara Marini, Professor of IUAV Venezia.

Future is Twelve Cities in Search of. Future is to Ask Yourself Where We Are Now. Future is an Utopian Vision, is a Power for a not Schedulable Life. Future as Practice. I Can Only Say One Thing About the Future: What I Wouldn't Want it to be. Future is Visions, Visions of Future. Future is the Space of Expectations. Future is Architecture and Prophecy. Future is also Accidents: the City of Failure, Without Landscape; the Laboratory-City, Recycle and Repair. Future is the Hegemony of the Present: a New Aesthetic of Reality, the History of the Monkey and the Path. Future is Reform or Revolution. This is the time of the museum; the future too is made the object of classifications. There are three clear paths towards it: the first tends to take stock of the self-willed avant-garde movements; the second proposes methods to intercept the future; the third hazards a guess and hypothesizes future trends. The first path gives way to nostalgia, the temptation to start from scratch, the need to learn unrepeatable stories from the past. The second trajectory leads to the centrality of method, of abstraction, of the all-knowing and despotic number elaborated by a computer programme, where formulas and parabolas dominate regardless of viruses or anything that is not measurable. The third path offers references (to a time to come), longings, desires to look in one direction. In honor of the ideal or, better said, the idea3 intended as a vision and critical stance, we will list twelve cities that have been, are now, and will be, no matter when or how. The twelve positions themselves act as receptacles of stories and fragments, and their order is established solely on the basis of the meaning of the list4 and, at the same time, of their visualization through drawings or words. They are stories gathered in no particular order seeking to assert syncopated lines in a system that establishes itself only through points.

I Nostalghia, II Amnesia, III Copy and past, IV Supermodernity, V About the moon, VI Reality, VII About temporariness (disposability), VIII Propaganda, IX Sine terra, X Stop, or power that restrains, XI About isolation, XII Imperceptible change: are twelve cities in search of the future.

FLOWING KNOWLEDGE

Mosè Ricci, Professor of DICAM/Unitn

Interdisciplinarity is not the calm of an easy security: it begins effectively...when solidarity of the old disciplines breaks down –perhaps even violently via the jolts of fashion– in the interest of a new object and a new language. *Roland Barthes, 1971*[1]
Thomas Kuhn in The Structure of Scienti c Revolutions [2] explains how in the early stages of scientific revolutions -when major disciplinary paradigms are in crisis and are about to change- it is possible that two extreme theoretical positions contrast each other. One wants to substantially confirm the principles of the discipline. It tends to claim the specificity and uniqueness of the discipline in its traditional and absolute essence. The other uses curiosity as new knowledge devices. It wants to challenge the established principles, pursue the paths of change, exploring other cultures and other worlds, acquire new disciplinary contributions, have different points of view on the future.
A paradigm in the Kuhn idea is: "the logical relationship between the main concep-ts that dominate all the theories and all the discussions that depend on them". As a result of being the "first unmoved mover", the paradigm must necessarily be shared by a community of scholars. Not by chance, only the more mature disciplines have a stable paradigm. In that form, in normal science, a paradigm is the conjunction of experiments, based on models, that can be copied or emulated. The prevailing para-digm often represents a specific way of seeing reality or the limits on proposals for future investigation, which is something different from and beyond generic scienti-fic method. Along those lines, a scientific revolution is characterized by a change in paradigm. In the world of urbanism, architecture and landscape, a new paradigm is a new way of doing things that has a huge effect on the living spaces. A new paradigm draws its roots from the idea of a paradigm shift in science, in which technology or new findings completely change the way people think about or interact with so-mething. In the design disciplines the idea is the same; a whole new way of looking at lifestyles, living spaces and their changings. However they happen. It is a major challenge for the architectural culture. What is the destiny of architecture (as the com-plex of the design disciplines) in the revolution of sharing information technologies? In an age that seems to consider with least with absolute priority the development of the Net and of the connecting devices? If today -and in the future more and more- the focus of cities development is no longer the growth but the resilience and environ-mental quality? When not the new constructions, but the ef ciency and resignification of existing ones become the central issue of building sector?
Nothing surprising. In the history of architecture and the city the great technological changes has always produced major changes in the styles and in the forms of living and consequently in the way in which is conceived any design action. One of the main principles of modernity was to consider architecture as the best possible spatial syn-thesis between form and function. Today, with the information technology revolution, we have the opposite problem. Namely to give meaning, narrative and uses -even temporary uses- to residual and abandoned spaces that have already given forms. And turn them into attractive and ecologically efficient living places.
This phase of modernity disposal demands new paradigms (such as new points of view on the future) and a new project idea of physical space. It is a challenge that puts the existing value with conceptual devices that work on the slip way and new life cycles of living spaces. A challenge that considers the environment as a project and the landscape as infrastructure that produces ecological value and the future of the city as a collective project and not authorial.

Abstract by LISt Lab "Monograph.Research" Magazine, 2015/2016; Text originates from a joint reflection with Ilaria Carlo and the other curators of the conference on the main topic to be proposede to the scientific debate on Flowing disciplines. 1. Roland Barthes, «De l'œuvre au texte», Revue d'esthétique, 3e trimestre 1971, repris dans Œuvres complètes, t. II, op. cit., p.1211-1217; 2. The Structure of Scientific Revolutions, University of Chigago Press, Chicago, 1962.

IL FUTURO DEI MATERIALI

Nicola Pugno, Professor of DICAM/Unitn

E' probabile che il materiale del futuro sotto certi aspetti non esista, ma ci sono materiali emergenti, ognuno dei quali ha caratteristiche peculiari. Il grafene è molto promettente, tanto che il megafinanziamento europeo denominato graphene agship vuole portare nell'industria questo materiale nel giro di dieci anni. Il grafene è ideal-mente cento volte più resistente dell'acciaio, ma questa competizione non è corret-tissima, perché dipende dalla scala dimensionale. Da una parte si parla di acciaio a grande scala, dall'altra di grafene a piccola scala. Se voglio fare degli oggetti macro-scopici con il grafene, la resistenza diventa molto più piccola. Non solo. Cito anche altri materiali resistenti, come quelli "bio-ispirati", i materiali bionici e molti altri. Bio-nico è per esempio un materiale fatto di sete arricchite da nano materiali. Un domani potremo pensare di avere delle magliette di seta in grado di accumulare energia dal sole e poi rilasciarla in maniera controllata.
Questi materiali possono fare anche altre cose e non solo proteggerci dal freddo o dal caldo. Sono materiali con una natura multifunzionale, ma noi facciamo ancora un po' fatica a essere multifunzionali. Invece in natura mischiando materiali diversi troviamo anche altre e nuove applicazioni. Bionico per me è un materiale che è processato in modo naturale. Ad esempio, un baco da seta al quale viene inserito del grafene va in simbiosi con la seta, e il risultato è un materiale molto resistente detto appunto bioni-co. Il grafene nasce, come molte altre tecnologie, da processi di-versi. In natura si tro-va la grafite che se esfoliata può portare al grafene. Altri esempi di materiali bioispirati sono dei materiali che si autopuliscono e anche che si autoriparano come delle vernici, "a prova di vandalo": se si fa una riga su una macchina questa si riparerebbe da sola.

It is likely that the material of the future in certain respects does not exist, but there are emerging materials, each of which has peculiar characteristics. Graphene is very pro-mising, so much so that European cofinancing called graphene agship wants to bring this material into the industry in ten years. Graphene is ideally a hundred times more resistant to steel, but this competition is not very correct because it depends on the dimensional scale. Abstract by LISt Lab "Monograph.Research" Magazine, 2015/2016.

INFRASTRUTTURA FUTURO INFRASTRUTTURE

G. Pino Scaglione, Professor of DICAM/Unitn

La sfida degli anni che verranno, per i luoghi, per le infrastrutture, per chi abita e si muove sul pianeta, sarà ancora più sorprendente e densa di innovazioni.

Il tema degli spostamenti, del muoversi, del collegare, del progettare e ripensare infrastrutture, strade, ferrovie, linee metropolitane e funivie, sarà fortemente orientato dalla tecnologia, dalla Smartness, ovvero la capacità di sfruttare le intelligenze artificiali e i dispositivi per usare al meglio e in tempi più rapidi i nostri modi di spostamento.

Tutto questo ci obbliga -oggi per il futuro- ad una serie di riflessioni ancora più articolate, e che riguardano il ruolo che avranno nei prossimi anni i progettisti, gli urbanisti, tecnologi e ingegneri, i designers, quella estesa schiera di protagonisti del mondo della riflessione e progettazione, della ricerca e innovazione, intorno allo spazio che cambia, si dilata e si estende nelle sue forme virtuali, piuttosto che fisiche, e che rimandano ad una immagine di infinito, di qualcosa che non ha soluzione di continuità. L'autostrada del Brennero, con cui abbiamo negli anni costruito un Laboratorio "InfrA22scape" riassume l'importante esperienza di collaborazione con la nostra università per mettere a sistema un nuovo modello di "Infrascape", sensibile ai paesaggi attraversati.

Ma occorre essere coscienti che sarà fondamentale andare oltre, pensando che alcuni anni fa Winy Maas con Skycar -uno studio molto originale e innovativo, condotto in collaborazione con l'Università del Wisconsin- ci ha proposto di guardare a modelli di superamento -oltre l'infrastruttura- degli attuali sistemi di collegamento urbani e territoriali. Oltre l'automobile quindi, oltre la strada: sospesi, aerei, volanti.

credo, alla luce delle mie esperienza di ricerca e progetti sperimentali, che occorre soprattutto osservare con attenzione i segni -già evidenti- della fisionomia, forma e futura struttura dei paesaggi urbani e di quelli infrastrutturali, del loro mutamento, sempre più marcato, oggi e domani soprattutto, che saranno legati alla sempre maggiore necessità di tecnologia intelligente, la quale a sua volta richiede progetti interdisciplinari che sappiano muoversi sia sul binario della soluzione dei problemi, legati ad esigenze quotidiane, ma al contempo sulla nascita o rinascita di una nuova estetica di ciò che all'apparenza appare solo una questione tecnologica. Il medesimo ragionamento che si applica oggi ai processi di costruzione edilizia, attraverso le certificazioni, e che rischia di spostare il problema tutto sugli aspetti energetico-edilizi, si può applicare alla tecnologia per la città e la mobilità: non è solo un problema di efficacia dei servizi, ma anche una questione che riguarda la qualità urbana e paesaggistica dei singoli manufatti e di sistemi e relazioni complesse.

Abstract: The challenge of the years that will come, to places, infrastructures, for those who live and move on the planet will be even more surprising and dense with innovations. The theme of moving, connecting, designing and rethinking infrastructures, roads, railways, metropolitan lines and cableways will be strongly geared towards technology, Smartness, or the ability to exploit artificial intelligence and the devices to make the best use of it faster ways to move.
Abstract by "Spostamenti Intelligenti", LISt Lab, 2016.

R.E.D.S. COMMUNITY PUBBLICATIONS SEMINARS WORKSHOP
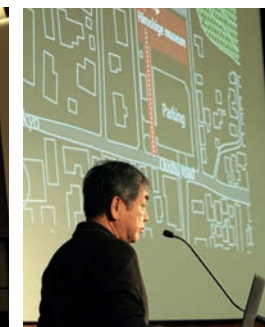
THE TRANSFORMATION OF OBSOLETE AIRFIELDS AS NEW PRODUCTIVE LANDSCAPES

Sara Favargiotti, Assitant Professor of DICAM/Unitn, Research Affiliate, Office for Urbanization, Graduate School of Design, Harvard University

Key words: Airports On-hold; Infrastructure Resilience; Airport Landscape; Post-Logistic Infrastructures; Urban Regeneration

Over the last one hundred years, the world—with significant impacts in North America and Europe—has built thousands of airports and airfields. Given the history of rapid growth of air travel but also due to the cities expansions, many airports have become obsolete; many have been abandoned, either because they are too small, in the wrong places, no longer needed by a military use, or cause to the functional obsolescence of the structures. It is a condition widespread in the world that will not slow down soon. Rather this phenomenon might increase if we also consider hundreds of inner city airports that will not exist in approximately ten years. What to do with these flat, concrete, highly complex sites, often urban spaces, once they are no longer needed for air travel?

Orange County Great Park (Irvine, California), Crissy Field (San Francisco), Maurice Rose Airfield (Frankfurt, Germany), Tempelhofer Park (Berlin, Germany) are few of the numerous projects that show the reconversion of an existing airfield into an new part of the city: a re-naturalized park providing new economic and social activities. Generally, the growing population, the high demand for new dwellings or their physically centrality in the city simplify their reconversion in new urban developments or urban parks. To view the airport as something that can be reloaded means to consider its rhythms, its life cycle, and its metamorphoses. These re-interpretations of the airport landscape allow us to conceive the airport not only as transport infrastructure but also as natural reserves for city developments or as spaces for landscape reclamation.

Describing an airport as a landscape is already an important conceptual break through: just claiming it as a landscape, not just as a simple engineering or architectural project, but within a more coherent framework (Waldheim, 2013). Some destinies may be opened and they generate unexpected uses with an urban approach toward resilient infrastructures. Worldwide successful strategies and compelling cases propose the transformation of airport sites for a variety of new uses—from public parks to ecological corridors, from energy farms to new urban districts—around the world over the past quarter century. Airfields turn into resilient reserves by new urban resources: they transform and improve the quality of urban life becoming a place to live instead of a place to leave.

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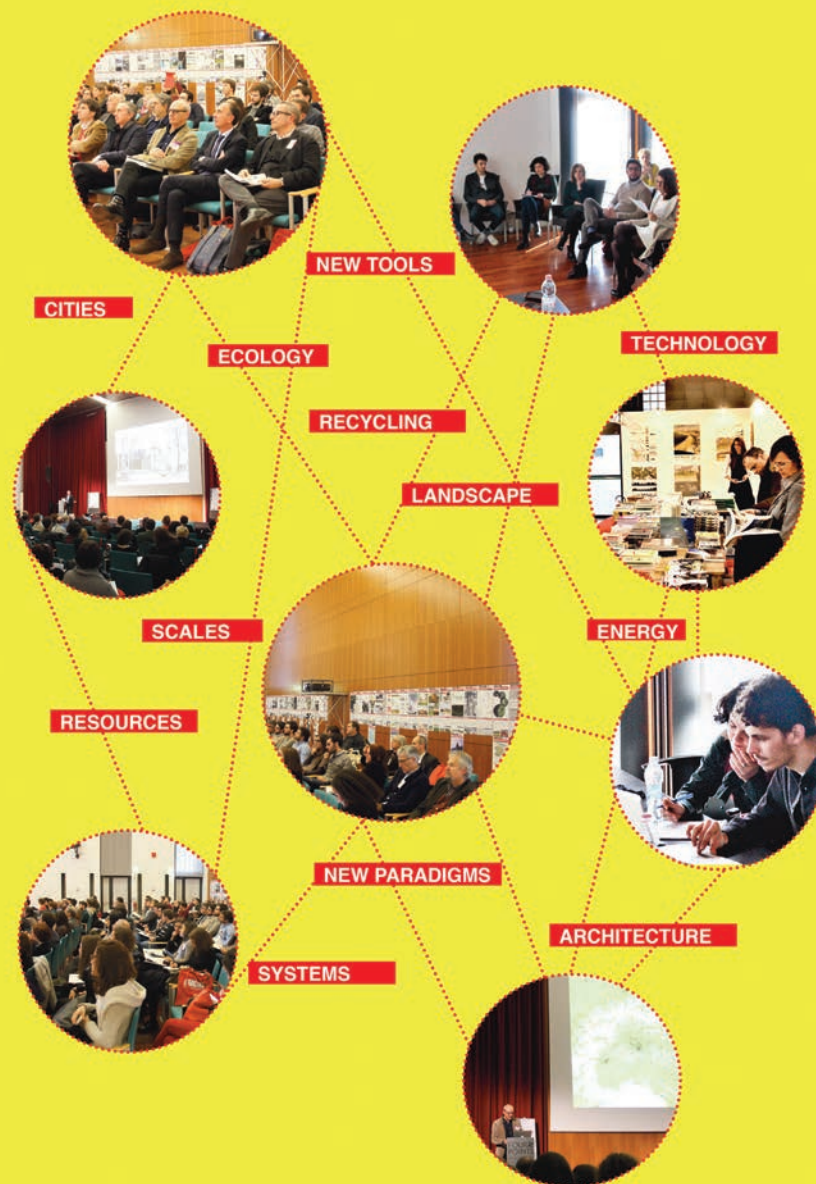Bolzano, Klimahouse Fair   Bozen, Klimahouse Fair

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FUTUREINFRASTRUCTURE_ TRENTO

FUTURINFRASTRUCTURE offers an interdisciplinary platform to debate, confront, share and produce know-ledge on the territorial, architectural, environmental and economical di-mension of infrastructures and their futures internationally. Students, professors, and practitioners will address topics related to landscape, ecology, sustainability, innovation, climate change, and resilience as collaborators for defining the future meaning of infrastructures at the various scales. FUTURIN-FRASTRUCTURE offers a moment of interaction between experts, scholars, professors, and stakehol-ders from all over the world. Invited speakers and local professors will present projects, researches, and strategies as accelerators of change in sustainable territorial systems. FUTURINFRASTRUCTURE aims to address, through different scales and methodologies, the renewed relationship between infrastructures and landscapes, urban settlements, productive habitat, environmental systems, alternative energy, such as new visions and strategies to give infrastructures a role engine of terri-torial development.

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REDS in the program of Matera 2019 is an important occasion for an international visibility of the research network.
The proposal is linked to the city, heritage, culture, ties between history and urban landscape, architecture. The theme is therefore bound to legacy, and the word "LEGACY" sums it up.
The initiative will be realized with the collaboration of the Foundation and the structure of Matera2019, the University and Architecture School of Matera, with other University natio-nal and international.

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Is an international network of Universities that since 2013 has been organizing conferences for the promotion and implementation of Landscape and Ecological Urbanism within Academia.