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Progetti, Prodotti e tendenze Designs, Products and Trends

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COPERTINA: LA SEDE, IN FASE DI COMPLETAMENTO, DEL MINISTERO DELLO SVILUPPO URBANO E DELL'AMBIENTE, AD AMBURGO, PROGETTATA DALLO STUDIO SAUERBRUCH HUTTON

COVER: NEW HOME FOR HAMBURG'S BEHÖRDE FÜR STADTENTWICKLUNG UND UMWELT/BSU (OFFICE FOR URBAN DEVELOPMENT AND ENVIRONMENT). DESIGNER SAUERBRUCH HUTTON

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LA FACCIATA AD ANGOLO DEL NOLITAN, ALL'INCROCIO TRA KENMARE ED ELIZABETH STREET; LE PARETI DELLE STANZE, IN VETRATE OPACHE A TUTT'ALTEZZA, CONSENTONO DI AMMIRARE LA VITA ANIMATA DEL QUARTIERE PRESERVANDO LA PRIVACY. ITETRIS APARTMENTS IN LJUBLJANA, BY THE ARCHITECTURE STUDIO OFIS ARHITEKTI. THANKS TO THE ANGLE OF THE WALLS, THE TERRACES GUARANTEE MAXIMUM PRIVACY FOR EACH RESIDENCE. THE PROJECT IS ONE OF THE EXAMPLES IN THE SPECIAL FEATURE ON SOCIAL HOUSING.

DAI GRANDI PROGETTI *urbani* ALLE *architetture* DEL FUTURO. DAI NUOVI *edifici industriali* ECOCOMPATIBILI AI PROGETTI DI *social housing*, IL SETTORE DEL CONTRACT *e* IN *continua evoluzione*



LA HALL DEL NUOVO **MAMA SHELTER** A MARSIGLIA, INAUGURATO LA SCORSA PRIMAVERA NEL QUARTIERE DI COURS JULIEN TRA I PIÙ VIVACI E POPOLARI DELLA CITTÀ. NELLE VETRINE UNA SELEZIONE DELLE PROPOSTE SHOPPING DELL'HOTEL, FUNNY E DESIGN ORIENTED. THE KATSURA RESTAURANT IN MARRAKECH USES THE HERO PLASTIC CHAIRS AND THE LANDSCAPE







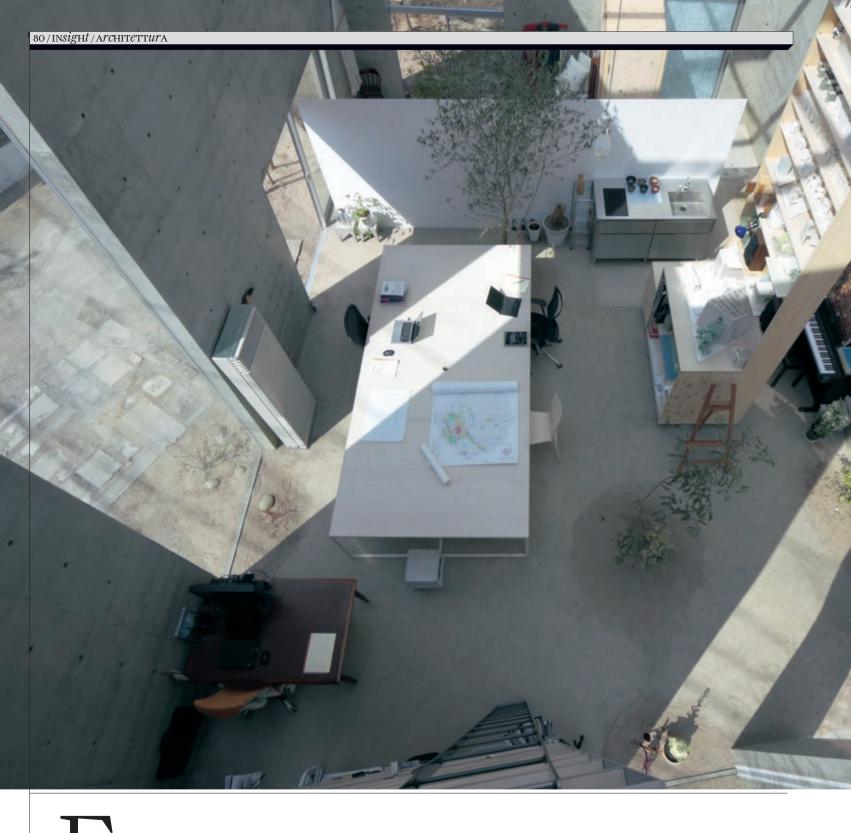


Lo studio di un giovane architetto giapponese, grazie al suo inedito rapporto tra natura e cultura, si propone come uno spazio di lavoro inedito. dal pavimento germogliano piante e, se si alzano gli occhi, si vede il cielo

L'ATELIET VIVENTE

di Alessandro Rocca foto di Takashi Fujino / Ikimono Architects





ucalipto, gardenie ed erbe medicinali, in cucina. Il Tenjinyama Atelier appena costruito a Gumna, in Giappone, non è una serra ma la sede dello studio di architettura Ikimono (che in giapponese significa "essere vivente"), un team di tre progettisti guidati dal trentaseienne Takashi Fujino. Il progetto del piccolo studio, come spesso accade agli architetti, è diventata l'occasione per esprimere un manifesto, una dimostrazione pratica di un modo molto personale di interpretare lo spazio. "Il

metodo" dice Takashi, "è semplice". Fare una scatola, per viverci dentro; aprire una finestra, per mettersi in rapporto con la città; coprire con un tetto trasparente, per guardare il cielo; piantare un albero, per fare ombra e lasciare un pavimento di terra, dove un seme possa germogliare". Parole poetiche che descrivono una casa che, nella sua semplicità estrema, è anche un luogo di esperienza e di scambio delle espressioni più normali, e più importanti, del mondo naturale, dal colore del cielo a una pianta che,

giorno dopo giorno, cresce sul pavimento nudo dell'atelier. L'architettura giapponese continua a stupirci e a inventare collegando la tradizione moderna, in questo caso rappresentata dal cemento armato, con riflessioni originali sui problemi dell'ambiente e del rapporto con la natura. I circa 60 metri quadri di questo studio non rincorrono certificazioni di sostenibilità attraverso l'isolamento e l'autosufficienza energetica perché la strategia, in questo caso, è opposta. A partire dalla tradizione della casa



LO SPAZIO SI ORGANIZZA SENZA MURI ATTRAVERSO LA DISPOSIZIONE DEGLI ARREDI. UN LEGGERO PANNELLO BIANCO RACCHIUDE UN PICCOLO VANO DI SOGGIORNO CON I SERVIZI. UN'ALTA LIBRERIA È STACCATA DAL MURO PER DEFINIRE LO SPAZIO DEDICATO AL PIANOFORTE.

UN GRANDE LUCERNARIO PER GUARDARE IL CIELO. PARTICOLARMENTE EFFICACIE NELLE NOTTI DI LUNA.

PAGINA A LATO. NELLO STUDIO IKIMONO LAVORA TAKASHI FUJINO, ARCHITETTO DI 36 ANNI, CON TRE COLLABORATORI. L'AREA DI LAVORO È UN OPEN SPACE CHE OCCUPA QUASI PER INTERO I 61 METRI QUADRI DELL'EDIFICIO.







giapponese, Takashi vuole che l'azione degli elementi naturali si compenetri con la vita e il lavoro dello studio perché pensa che queste energie vadano riconosciute e riportate al centro della nostra cultura. Sentimenti che sono evidenti, nel piccolo edificio, e che Takashi ha voluto raccontare anche in una poesia che inizia così: "In primavera, lo studio è invaso dal profumo dei fiori / L'estate si spegne all'ombra dell'albero / In autunno il pavimento è un tappeto di foglie / E, in inverno, i raggi del sole scendono fino a terra".

"Fare una scatola,
PER VIVERCI DENTRO,
aprire una finestra,
PER stare in contatto
CON LA CITTÀ. COPRIRE
CON UN tetto trasparente,
PER GUARDARE IL CIELO".

text Alessandro Bini

A fact: 70% of the approximately 13.7 million existing buildings in Italy were made before the rules on energy efficiency in buildings were established (the first in Italy was in 1976), and one fourth have never undergone any maintenance or upgrading. The state of the art of building, however, has permitted construction of homes for many years that consume half as much energy, without excessive spending. Passive houses are also built, consuming 1.5 liters of diesel per square meter/year, as well as "Zero Emission" buildings where the annual energy balance is precisely zero. There are even buildings that have a positive balance, with energy production greater than what they consume. If anyone really wants to know what sustainability, energy savings and green building mean, they'll have to read a few statistics. In our country energy consumption in buildings represents over 40% of total national consumption. According to some studies it tops 45%. Do we keep the lights on too much? Do we wash our clothes too often? No. The main consumption is from heating and cooling, about 72% of the total; hot water accounts for 14%, appliances for 12%, while lighting consumes just 2%. Replacing old incandescent bulbs has a relatively low impact on improvement. Fine, then... so let's install lots of solar panels. A praiseworthy initiative, but even if we were to double photovoltaic energy production (it now corresponds to 0.5% of the total) it would not help much. Besides being a technically improbable goal, over the short term, it would just supply 1% of total consumption. And in this sense Italy is already very green: the third producer in Europe, fourth in the world, a few years ahead of the goals of the Kyoto conference. So what can be done? Plenty: we need to save. Which means building zero-consumption homes and revising almost a million leaky buildings. To intervene where consumption is highest means changing the situation of heating and cooling, using better insulation. In substance, to make the house like a thermos in the winter, so the heat stays inside, while adopting strategies in the summer to keep heat from entering. To limit heat transmission through the parts of the building, reducing unwanted solar radiation in the summer and dispersion of heat in the winter, we need to work on the choice of construction materials. Let's start from the ground up, with the screed, that horizontal stuff that makes a level surface on which to put your gorgeous tiles or wood floors. You can't see it, but it is fundamental for insulation. At Calcestruzzi – a company of the Italcementi group – they have made a screed that not only offers great thermal insulation, but also cuts down on the transmission of noise. The secret of Fonisocal Plus – the product's name – is a polymer aggregate made with plastic materials. This material is triply sustainable: it recycles plastic that would otherwise end up at the dump, it saves energy through insulation, and it contributes to acoustic comfort. An effective insulation involves maintaining the ideal temperature without losses from the walls. This is achieved by protecting the walls with a blanket. Imagine a nice wool coat. The technique consists in applying insulating panels to the walls with suitable fastening systems that, subsequently, are covered by precolored adhesive mortar. The panels can be equipped with a plaster-bearing substrate for traditional mortar finishing. Mapei, which has made energy conservation and sustainable development of its second growth track (the first is research, but now the two overlap), has created a whole range of materials – converging in the Mapheterm system - to weave this coat: panels of different materials and thickness, cement mortars for bonding and shaving, reinforcement screens and so on. It must be said that thanks to its simplicity of installation, this type of insulation is used now in most new buildings and almost all renovations. Then there's the roof. Two particular products. The first is to make a beautiful roof garden, which brings many advantages to the house and the surrounding urban environment: it reduces carbon dioxide, saves energy on air conditioning in the summer, and 25% of consumption for winter heating; it filters air pollution and polluted rain water, reducing the transmission of noise inside the building, while cooling the air through evaporation of water vapor, reducing the phenomenon of "urban heat islands". But to ensure waterproofing over time, it is essential to consider the use of a special membrane resistant to roots, like Defend Antiradice, produced by Index. The same company has designed products – for flat roofing – that are membranes with high-reflection surface mineralization, capable of cutting temperatures by half in the summer, like White Reflex and Mineral Reflex White. At Saint Gobain, on the other hand, they think about glazings (we should remember that lots of energy escapes through window frames). Plantherm 4s combines the classic performance of low-emission glass with a treatment for sun control in hot seasons, to reflect radiation outward. Clear glass, but capable of offering better thermal insulation and sunlight control. The ideal temperature and light in all seasons. (photographs by Henry Thoreau). - Caption pag. 71 The largest causes of energy consumption in our homes are heating and cooling systems, accounting for 70% of energy use. Followed by hot water, appliances and, finally, lighting.

THE CITY IS BROKEN p. 72

text Alessandro Bini

"Do you know the really amazing thing?", Mario Cucinella suddenly asks. "It is the fact that if this great crisis suddenly ended today, right now, and major financial injections were made to the system, the crisis would get even worse. It would really be the abyss". The conversation took place via telephone. The tone of Italy's greenest architect, as usual, is low but decisive, assertive. You are so pessimistic? "There tone of Italy's greenest architect, as usual, is low out uccusive, asset uve. Date so pessimistic: The is no question of pessimism. What is missing is a strategy, an overall and long-term strategy about the city, though it is crucial for development and growth". Bad government? "I'm afraid so, Locally we have impressive flaws, many cities do not have a plan at all, or work by improvisation. The changes in the market in recent years have been significant and now we lack the tools to give responses to new needs. The people responsible for setting the rules are often incompetent". The recently approved Development Decree states that «the renewal of decayed urban areas and the growth of the city as motor for the real estate sector should be implemented through the innovative features of the City Development Plan and the Contract of Urban Revitalization». What do you think? "I think it's a good thing, especially since the various institutions involved in the Plan will be coordinated by a control room run by the Ministry of Infrastructure. This should make for the strategic orientation I was talking about. We need to take care of our cities, to heal wounds, to fill the gaps and rebuild what is now dead". What do you mean be regeneration? "We have used our land area far too intensively. We have forgotten that it is like a piece of paper, with edges. By filling up the land without any programming, we are using it all up. The solution is simple: we can go on building, but we have to do it in a more intelligent way, replacing what doesn't work and what is not sustainable". In this regard, a couple of months ago you presented the masterplan for regenerating a large area of Catania, which many had called a bleeding wound in the city center. The idea is to mend of the gash of Corso dei Martiri della Libertà, one of the most important streets, in a state of decline for 60 years. How is the project organized? "This is an area of approximately 80,000 square meters, where we tried to create a kind of urban park, maintaining the city's slippage from north to south. We envisioned the transformation of this area of the city into a promenade that stretches toward the sea, by combining different parts into a single harmony typical of the Italian cities, where people and services coexist in a healthy environment that incorporates the typical themes of this reality, the fire of Aetna and the sea water. So we have planned terraces at different levels, a garden, and shopping passageways, though they are nothing like a mall. Furthermore, we tried to maintain harmonious relations between the existing and new volumes. So it is a large promenade with small oases of water, a theater, a space for artistic events and areas for housing". - Caption pag. 72 On these pages: the masterplan by Mario Cucinella for the new San Berillo area in Catania, a project of healing and regeneration of Corso dei Martiri della Libertà, in a state of serious decay. No shopping malls, but a functional mixture of parking areas, a theater, a market, hospitality structures and shops. Corso dei Martiri della Libertà is one of the most important streets in the city, connecting the historical center to the railroad station. The overall area covered by the operation measures about 80,000 sq meters.

INSTANT HOUSE p. 74

text Antonella Galli

Temporary dwellings and structures will be increasingly demanded in the near future, when the mobility of the so called 'city users', new metropolitan nomads, will become a major element, to which cities shall have to respond innovatively, such as with buildings and residences that can be built, disassembled and reused quickly. Who better than young designers and neo-architects can conceive suitable solutions to this issue? These are the people who the InstantHouse competition is aimed at, devoted to temporary architectures and promoted for the last four years by FederlegnoArredo in collaboration with Politecnico di Milano for Made Expo, an event that will be held in Milan on 17 - 20 October, where a review of the best projects will be held. This year the competition will specifically focus on Temporary Housing, and

in particular on the project of temporary urban dwellings for researchers and visiting professors within the framework of the Sustainable Campus project at Politecnico di Milano. 418 applications of students and young degree holders have been registered for the competition, 256 of them foreign and 153 Italians, divided into 255 groups for a total number of 150 universities from everywhere in the world: "The projects stood out for their quality and original character", said Andrea Negri, President of Made Eventi and member of the jury, "the top three projects, but also the many mentions that we assigned, represent a significant cross section of young people's ideas and creativity". The first prize went to the Italian Andrea di Marino, (Luigi Vanvitelli Faculty of Architecture, Aversa), who designed a model of modular housing structure, to be positioned on a walkway covered by a wooden structure. The second prize was assigned to Julia Jordan and Margitta Wagner (University of Applied Sciences Wurzburg-Schweinfurt) for an urban structure that integrates portions of a park. Third prize was deserved by Linfan Liu (The State University of New York at Buffalo) and Gregory Serweta (Cornell University), for the project of a double-height square which includes housing. Thanks to Moretti Interholz, a company owned by Moretti Costruzioni which is specialized in glued laminated timber, a 1:1 scale construction of the winning project of the 2011 competition can be visited at Made Expo: its name is Recinto Rurale (Rural Fence), a service facility to be used on Expo 2015 itineraries, designed by Fabrizio Fiscaletti, new degree holder at the Aldo Rossi Faculty of architecture in Bologna (Cesena annex). - Caption pag. 73 Left, the elevation of the wooden pedestrian gallery, with configurable temporary houses attached, submitted by Andrea di Marino from the Luigi Vanvitelli Faculty of Architecture, Aversa, who won first prize in 2012 for the InstantHouse Temporary Housing competition by FederlegnoArredo with Politecnico di Milano. Previous page, bottom, plans and elevation of one of the temporary houses designed by Andrea Marino. Below, the project by Julia Jordan and Margitta Wagner, from the University of Applied Sciences Wurzburg-Schweinfurt, second place, with an urban structure integrating green areas.Right, the project which ranked third, a double-height square with housing by Linfan Liu (The State University of New York at Buffalo) and Gregory Serweta (Cornell University). - Caption pag. 74 Above and in the following page, plans, elevations and rendering of Recinto Rurale (Rural Fence), the 2011 winning project by Fabrizio Fiscaletti (Aldo Rossi Faculty of Architecture of Bologna, Cesena annex), that will be implemented by Moretti Interholz in Made Expo. It is a glued laminated wood structure which includes an inner square and some attached rooms, which function as temporary dwellings, conference rooms, kitchens, to be freely arranged around the main volume.

LIVING ATELIER p. 78

text Alessandro Rocca

photos Takashi Fujino / Ikimono Architects

 $\label{thm:equiv} Eucalyptus, gardenias\ and\ medicinal\ herbs\ in\ the\ kitchen.\ The\ newly\ constructed\ Gumna\ Tenjinyama$ Atelier, Japan, is not a greenhouse but the headquarters of the architectural firm Ikimono (which in Japanese means "living being"), a team of three designers led by Takashi Fujino. The design of the small studio, as often happens with architects, has been taken as a chance to outline a manifesto, a practical demonstration of a very personal way of interpreting space. "The method - Takashi says – is simple. Make a box, to live inside it, open a window to get in relationship with the city, cover it with a transparent roof, to watch the sky, plant a tree for shade and leave a dirt floor, where a seed can germinate". Poetic words that describe a house that in its extreme simplicity is also a place of experience and exchange of the most normal and important expressions of the natural world, from the color of the sky to a plant grows, day after day, on the bare floor of the atelier. Japanese architecture continues to amaze and to invent, connecting to the modern tradition, in this case represented by reinforced concrete, with original reflections on the problems of the environment and the relationship with nature. The approximately 60 square meters of this studio do not pursue sustainability certification through the insulation and energy self-sufficiency, because the strategy, in this case, is just the opposite. Starting with the tradition of the Japanese house, Takashi wants the action of natural elements to interpenetrate with the life and work of the studio, with the idea that these energies must be recognized and brought back into the center of our culture. Feelings that are evident in the small building, and that Takashi expresses with a poem that begins: "In spring, that are evident in the sinan bounding, and that radash expresses with a point mat origins. In spring, the studio is invaded by the scent of flowers / Summer fades in the shade of the tree / In autumn the floor is a carpet of leaves / And, in winter, the sun's rays fall to the ground". - Caption pag. 79 The large glass walls and the roof in transparent material offer close contact with perception of natural daily and seasonal rhythms. Facing page: from the earthen floor a lemon eucalyptus tree grows, filling the studio with its fragrance and, in the summer, protecting the architects from the sun's rays. - Caption pag. 81 The space is organized without walls, thanks to the arrangement of the furnishings. A light white panel encloses a small living area with rest rooms. A tall bookcase is detached from the wall to make room for a pianoforte. A large skylight to look at the sky, particularly effective on moonlit nights. Facing page: in the Ikimono $studio\ Takashi\ Fujino, an architect\ aged\ 36, works\ with\ a\ staff\ of\ three\ persons.\ The\ work\ area\ is\ an\ open$ space that occupies almost all of the 61 square meters of the building.

${\bf HANDSOME\,AND\,INDEPENDENT\,p.\,82}$

text Valentina Croci

Zero energy consumption? A utopia made possible thanks to research on passive houses and bioclimatic construction, and to more affordable technologies. It all starts with the thermal insulation of the building, all the way to 'absolute' insulation, i.e. with no thermal bridges between exterior and interior, obtained with thermal insulating materials but also with the design of the exposure of the building, controlling the solar radiation and shading. A big contribution to insulation also comes from the latest generation of window frames, with triple glazing and low emissions. Ventilation in passive houses is controlled, with heat recovery for passive heating. In this way these buildings consume very little power. But to also make them self-sufficient, it is possible to introduce the principles of bioclimatic architecture. The goal is to minimize the use of mechanical systems and non-renewable energy sources, using solar panels and heat recovery systems from the ground, then converted into energy with geothermal. As in the case of the Striatto residence in Mariano Comense, a passive masonry house with CasaClima certification, consuming 10 kW/h per square meter per year, compared with 60-80 in buildings of the highest energy classes. Energy efficiency is achieved by optimizing the thermal exchanges between the building and the environment, as in the Di Gioia house in Bisceglie (Bari), a single-family residence that qualifies for the CasaClima Gold + certification, designed by Studio Pedone (Pietro, Leo & Massimo Pedone and Annamaria Perruccio). The building incorporates the colors of traditional Apulian architecture, while updating its formal vocabulary. It is composed of two interpenetrating volumes, in continuous relation to the outdoor environment: a low glazed volume with slight level shifts to house the living area, and another two-level, more compact, L-shaped volume, The structure has a reinforced concrete frame, filled in with thermal porous bricks buffered with an insulation system in natural cork, 10 cm thick, and highly breathable plaster. Construction systems of reduced transmittance and high thermal mass, to increase the thermal inertia of the building. The low energy requirements are supported by active systems, such as an air/air heat pump, a system of controlled mechanical ventilation with heat recovery, and finally a photovoltaic system organized on the roof. A Mediterranean villa with local character has also been created for the Syntes house in Pinto (Madrid), designed by Dosmasunoarquitectos (Ignacio Borrego, Nestor Montenegro and Lina Toro), whose shape comes from the study of natural ventilation, which is problematic due to the exposure in the summer months. A plinth with a semi-underground part is orchestrated with courtyards that provide natural lighting and cross-ventilation. Interstitial arcades, as on the streetfront, shape the form, always with the goal of maintaining the right interior climate. For this reason, a mantle of ivy will produce, once grown, a bower on ties placed above the courtyard, while on the walls it will help to maintain the temperature. The Madrid-based studio conducts research on bioclimatic building, no matter what the architectural scale. The residential complex at Carabanchel (Madrid) has 102 social housing units, built thanks to a new technique of aluminum formwork that has optimized time and cost. Again in this case, questions of exposure and construction materials were carefully studied to increase thermal inertia. Galvanized sheet metal, microperforated and coated with polyurethane spray, contribute to the insulation of outer facades. And a system of solar panels on the roof, concealed from view, contributes to meet energy needs. - Caption pag. 83 Above and on the facing page: the Di Gioia house at Bisceglie (Bari), designed by Studio Pedone, has received CasaClima Gold + certification, as a Mediterranean passive house. Photo Sergio Camplone. Below: view of the facades on the courtyard