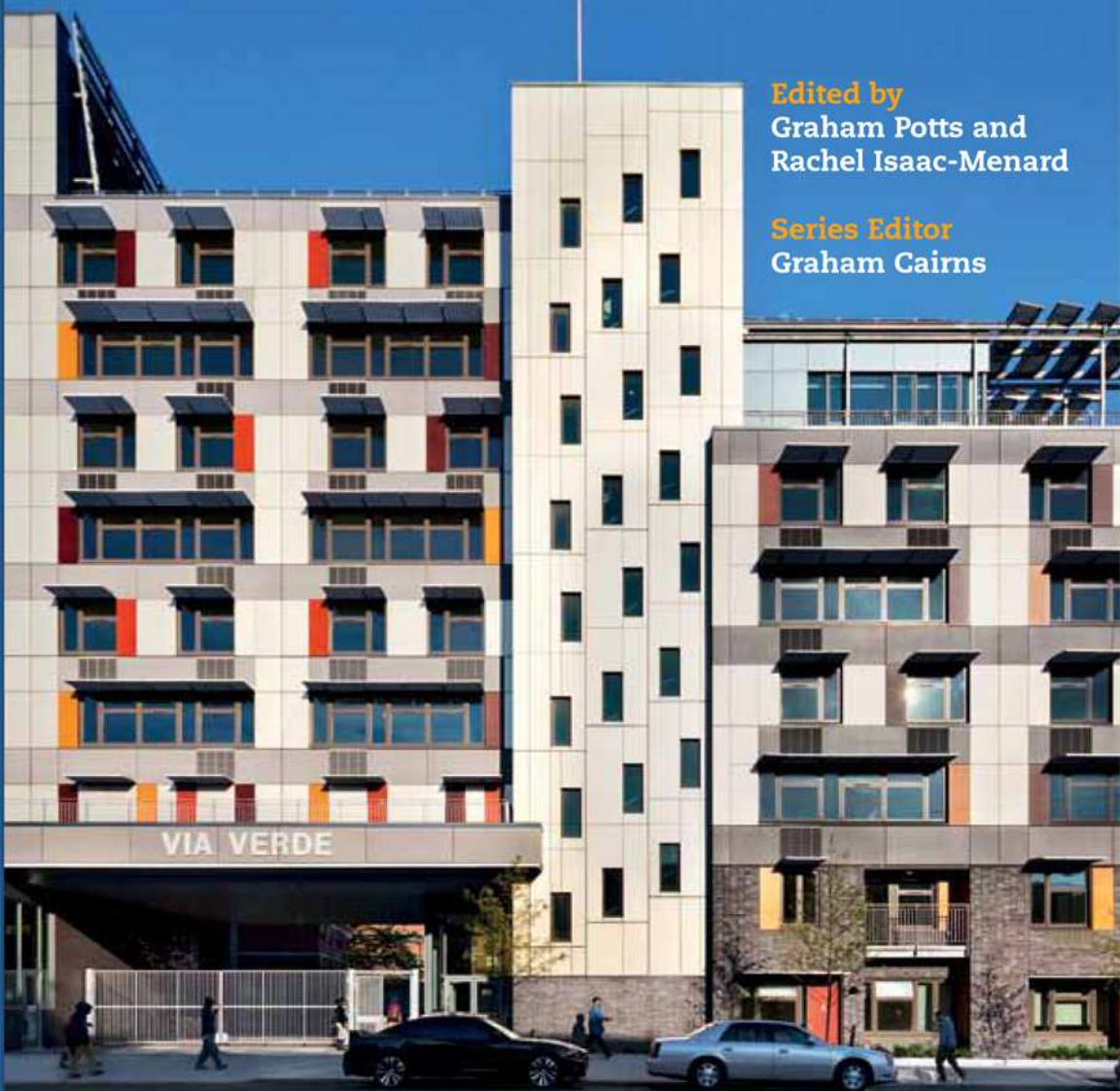


Housing the Future

Alternative
Approaches for
Tomorrow

Edited by
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Series Editor
Graham Cairns



HOUSING THE FUTURE

ALTERNATIVE
APPROACHES FOR
TOMORROW

SERIES EDITOR
GRAHAM CAIRNS

First published in 2015 by Green Frigate Books

Green Frigate is an imprint of Libri Publishing

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ISBN: 978-0-9933706-0-1

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A CIP catalogue record for this book is available from The British Library

Book and cover design by Carnegie Publishing

Printed in the UK by XXXX

Libri Publishing
Brunel House
Volunteer Way
Faringdon
Oxfordshire
SN7 7YR

Tel: +44 (0)845 873 3837

www.libripublishing.co.uk

SECTION THREE: STUDENT DESIGN PROJECTS

The more theoretical engagements with housing, its social conditions, practical implications, inherent contradictions, seemingly intractable problems and economic models just described, all come from researchers engaged in academia. It is, as suggested earlier, from there that their particular strengths come. Free from the time and money strictures of practice the authors of these essays offer a broader contextual understanding of the problems faced by those seeking to improve the provision of affordable quality housing in diverse contexts. Despite their academic backgrounds however, many of these authors are also practitioners and, as a result, clearly address very real problems – even when their scholarly approach brings theory and social criticism into sharp focus. Perhaps more pertinently for what follows in this book however, many of these authors are also teachers.

In a number of the chapters in Section Two this teaching focus was actually the basis of the text. Some documented the work already done by students and the academics leading them in workshops, others discussed ongoing programmes of research that feed into design projects carried out by students, and some specifically laid the theoretical groundwork for the projects that follow in this section. From a pedagogical perspective some of the previous chapters and the subsequent projects are purely hypothetical – in that they seek to understand core issues and propose semi-utopic solutions that (knowingly) require a major restructuring of the economic systems at play in the design and constructions industries for them to come to fruition.

In some cases, this means questioning the profit motive, for others, it involves a level of financial support from the State, or similar sources, for the projects to be realised in the detail – or on the scale – imagined. For others, it is the pre-empting of social and cultural changes that seem to be on the horizon that make the projects in question utopic – or at least speculative. However, in all cases the projects developed and

presented here are framed in a clear understanding of the socio-cultural context that shapes, for good and for bad, the built environment. It is to the credit of their teachers that such issues are at the fore of the thinking of these students.

Within this schemata the projects presented in this section address issues such as the reuse and renovation of existing properties to meet the needs of a changing society. They also address the possibilities of rethinking the arrangements, living patterns and urban fabrics of historic residential areas in need of rehabilitation for modern habitation. In some instances, they look at the need to ensure active and interconnected communities in areas currently suffering from sustained loss of families and inhabitants, or the continued decline of their housing stock. These, and numerous other issues of social, theoretical and cultural import, are threaded through these projects that come from various countries and are set in several others.

The importance of foregrounding the work of these students in a book like this should not be overlooked. Facilitating and encouraging the next generation of architects and urban designers to have a clear focus on, and developed knowledge of housing is essential. After at least two decades of 'starchitecture' (in reality a lot longer than that, depending on how one defines the term), it is important that the next wave of designers of the built environment direct their criticism and skills to the issue of housing. It is as a reaction to the lack of opportunities for these new designers that do wish to address this subject, that this book has, in the final analysis, been put together.

The works presented inevitably have their weaknesses – they are the products of young minds searching for alternative approaches to housing design in an overwhelmingly conventional set of social contexts. Breaking out of these contexts whilst still proposing solutions that can, without excessive exaggeration or hope be realised, seems to underpin each and every project represented in the following pages. Some are ingenious and radical, others offer a lighter touch and a more Fabien approach to how one could move the debate forward around housing and the conventions of its design.

As indicated previously, we do not pretend that these projects represent anything like a *comprehensive* sample of the work student architects and planners are doing on the issue of housing globally. They do however, represent a sample and, more importantly, represent an attempt to promote housing as an issue of central importance to this generation who will, in the very near future, be responsible for developing and implementing the house designs, residential planning solutions and urban design proposals that our societies will have to live with, and in, for the coming decades and more.

EUSEBIO ALONSO GARCÍA

Universidad de Valladolid

ESCUELA TÉCNICA SUPERIOR DE ARQUITECTURA DE VALLADOLID

The Technical Superior School of Architecture of Valladolid (ETSAV) is the section of the University of Valladolid (Spain) dedicated to architecture. It has undergraduate, graduate, doctorate and postgraduate courses and is split into the following departments: Department of Architectural Construction; Earth Engineering and the Mechanics of Continuous Media; Theory of Structures; The Department of Theory and the Department of Urban Planning and Architecture Representation. It was established in 1968 as the only public school of architecture of Castilla y León and was expanded in 1980 and 2010. It has approximately 1,300 students and 100 teachers engaged in practice and theory. The School offers complementary training of students in countries outside Spain with fifty-two agreements with European and American institutions. Concomitantly, the School opens its doors to foreign students.

Pedagogy is based on a complete humanist education with a proper balance between the technical and the artistic aspects. Special emphasis is placed on propaedeutic knowledge, project management skills, design and technical ability, and an understanding of construction and urban developments. The training offered provides additional opportunities for professional development in heritage and archaeology, interior design, scenography, museology, graphic design, landscaping, bioclimatic and energy studies, sustainability and construction management. The aim is the development of graduates competent in design and in directing projects – whether they be rehabilitation, new build, urban planning projects or any of the other types of projects associated with the overarching disciplines of the School.

Research in the School is conducted through the following centres and initiatives: The Wood Chair, Earth Group, University Institute of Planning, the Photogrammetry Laboratory, the Laboratory of Architectural Landscape, the Heritage and Cultural Centre, and the Laboratory of Ventilation HS3. It also has several recognized groups

of investigation (GIR) including: The Analysis and Representation of the Architectural Heritage; Architecture, Art and Science; Architecture and Cinema; Architecture and Energy; The Laboratory for Research and Intervention on the Architectural Landscape, amongst others.

Within this broad research framework, the School approaches the issue of housing from the perspectives of different specialisms – each determined by the particular department addressing the issue. At least one semester per year is assigned to residential questions in each department. This means housing is dealt with in terms of analysis, representation, case studies, history, the relationship between housing and the city, theory and legislation. Projects deal with the issue in different contexts resulting in design proposals operating at different scales of intervention, that engage with historic fabrics, and which seek to understand the new contemporary ways of living. It also involves the study of the structural, construction, energetic and bioclimatic systems. The projects included here reflect this scenario and come from the workshop of international students and academics outlined in Chapter Seven for the renovation of peripheral areas in Valladolid, Spain.

Project A: STREET EVERYONE

Vicent Agustí Visedo, Sofía Cuadrillero Rueda, Ana Garrido García,
Nicolás González Arboleya, Alba Zarza Arribas

This proposal is aimed at clarifying the relationship of the neighbourhood of La Rondilla with the city centre of Valladolid and at clarifying the spatial structure of both. Despite its proximity to the centre, La Rondilla has no relevant relationship with the city and is, in itself, a labyrinth for those who do not know the area well. In addition, road traffic hinders the enjoyment of the few public spaces it currently has. This proposal attempts to improve the district in relation to its connection to the centre, improve its public spaces, and provide a reference point to the district.

The project is premised on the creation of a pedestrian axis at the ends of which are located two car parks that will largely eliminate the presence of cars on the streets. It also incorporates the creation of a new centrality in the area with the design of a new square. The proposed new axis, Cardenal Torquemada Street, connects the city from the Church of San Pablo with the Plaza Ribera de Castilla, it connects downtown with nearby public and green spaces, and will strengthen the businesses that currently gather around this area.

The new street will become the principal focal point of the project and the neighbourhood. It is understood as a route, a place to enjoy and occupy, and a place of coexistence and social interaction between neighbours. Structurally, it is a folded concrete slab that creates a new topography for the street and generates places to stay or areas for services. These spaces can be banks, playgrounds, toilets, kiosks, urban beaches, or gardens, and can be complemented by the introduction of vegetation or the addition

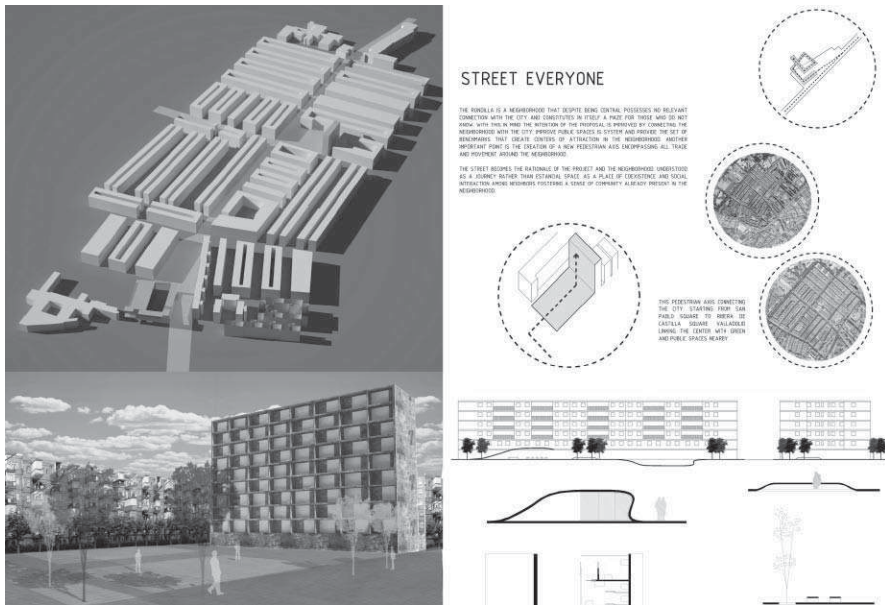


Figure 1. Site model. Strategies of intervention. The new square of the neighbourhood. A versatile shaping system.

of flooring with different textures. The new district square is located at the crossing of this new axis with Cardenal Cisneros Street. Here, some old buildings are to be demolished and replaced by a high-rises that are intended to free up space at ground level for the new square.

Project B: BREAK / LIBERATE /RECOVER

Raquel Álvarez Arce, Laura Barrientos Turrión, Iago Pérez Fernández, Álvaro Pérez Uzuriaga

This project proposes three actions on three scales: the house, the block, and the district. The proposal is to release the lower blocks of the housing units so as to break the rigidity of the neighbourhood and retrieve a public space of quality for La Rondilla.

The strategy employed produces spaces and habitats seen as more adapted to 21st-century living. It involves the fragmentation of the block so as to reconfigure the public space of the neighbourhood, the private neighbourhood spaces, and the home. It allows for the penetration of adequate lighting into different parts of the houses and creates spaces that have a common relationship to the block – away from the current narrow approach streets. It creates a natural sequence from the privacy of the house to the public realm of the street and the neighbourhood.

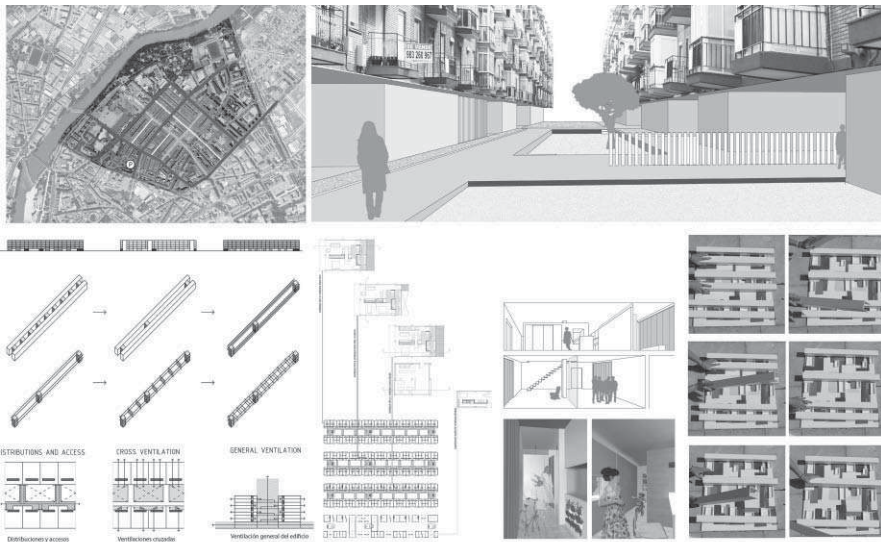


Figure 2. Site plan. View of the encounter space. Plans, sections, interior views. Ground floor tapestry.

The ground floor relationship between the current blocks and the street is very rigid and solid. This proposal frees up parts of the ground floor to make a more flexible arrangement and breaks the current visual homogeneity. The new ground floor plan permits movement in more directions connecting areas that were previously isolated. This interconnectedness applies to the interior of the housing blocks as well, and is achieved through emptying of the central strip of the block. The emptying of the inner part of the blocks allows the rearrangement of access points and the nuclei of interaction, which can be reduced in number because of the use of bridges and galleries. These provide spatial interest to these new areas of interaction and communication.

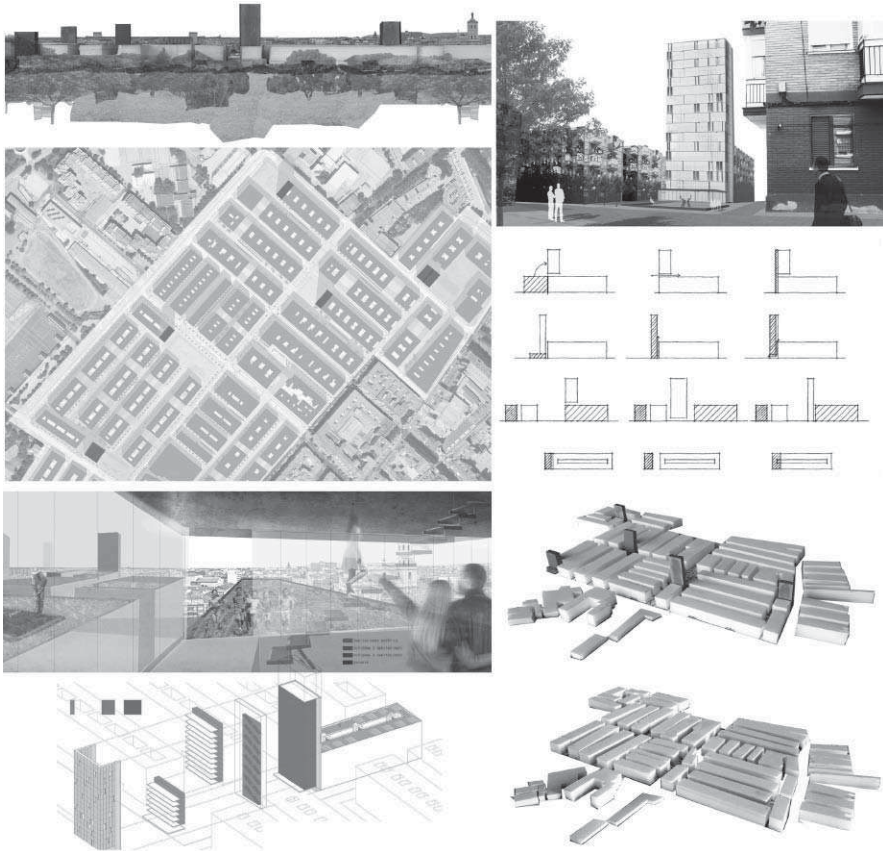
The location of functions on the ground floor is determined by the parameter of sunlight: dwellings are located under direct sunlight, and work spaces (workshops, retail outlets etc.) are placed in areas that get north or reflected light. The new entrances are positioned to both reduce the number of gateways required and to provide privacy to the most exposed homes. In turn, these are redesigned so as to be capable of accommodating new types of family living in the 21st century. They do this by having large flexible areas divided by furniture, rather than solid elements. The positioning of the kitchen and bathroom serves as a filter between the living area and the central space of the block, thus creating a transition that resolves problems of lighting, ventilation, and privacy that would otherwise exist between the living areas and the public gateways. This is reinforced by the housing access which is configured and is accessed directly or through the bridge, allowing a balance between functionality and privacy.

Project C: LANDMARKS

Sergio Abril, Miguel Ángel Cerro, Javier Mínguez, Soledad Moreno, Carlos Paredes

The neighbourhood being addressed in this project, La Rondilla, is characterized by homogeneity and density. There is no sense of orientation. It is impossible to determine reference points. This proposal is to form open spaces in the dense network of the city by creating squares and public spaces that are currently absent. In key points of the district some parts of its buildings are to be removed, namely, at points of entry, and at its main axis crossings. It is a strategy aimed at creating the possibility of having some urban landmarks in the existing homogeneous residential neighbourhood.

Figure. 3. The new skyline and the site plan. The new tower: shaping strategies. Views and axonometric. Proposed site model.



These landmarks are to be structures that will have a different character from the existing fabric, and will be linked to the gaps, or public spaces, carved out of the city. These gaps are almost hidden to the pedestrian because of the labyrinthine structure of streets, so it has been decided to 'perforate the city' and form access routes through the ground floors of buildings at key points. This new pedestrian structure overlaps with the existing traffic ways of the city, which are limited to specific areas by making some routes exclusively pedestrian. Parking is located in car parks and buildings on the periphery.

New towers are proposed to create a new skyline, reflecting a new urban image and celebrating new public and collective spaces. These buildings will permit the collective use of their roofs as spaces of public encounter and as urban orchards. Other buildings can also have community spaces on the roof. Incorporating vegetation, urban gardens are created for the inhabitants of each block. The strategy is to 'append' the landmark to the existing block; to facilitate links between the ground and the roof; to successfully join old and new constructions; to create new roof gardens; and to open the ground floor space to more common usage rather than limiting it to residential functions.

At ground floor level the plan is to be composed of three distinct bands, communication systems and terraces, services systems, and housing. The housing unit itself is to be a flexible system that allows for the restructuring of old housing typologies based on two- and three-bedroom models.

Project D: INHABITED ROOFS

Jacobo Abril, Gema Hernández, María Laspra, Ana Prada

Our critique of the neighbourhood of La Rondilla in Valladolid focuses on the social housing blocks of the area. The projects address the lack of public spaces and services for the community, dark interiors to many of these buildings, poor spatial dispositions inside and out, and weak links from the interiors to the exterior. Doorways and pathways in the blocks are poorly lit, dwellings overlook small courtyards, and streets are narrow and long. They also lack the multiple access points that would give greater opportunities for neighbours to interact.

These inherited difficulties inspired us to create the public spaces that these houses never had, and to prepare them for current urban conditions. We propose to create this public space of encounter between neighbours wherever it may be possible: on lower floors, roofs, intermediate levels, and interior courtyards. We want to generate a structure of collective spaces, articulated with appropriate connections, and adapted to facilitate greater civility.

We propose different initiatives to solve these problems.

Existing roofs are to be transformed into places of encounter, spaces for relationships, and spaces for community activities such as small promenades, gardens, and sports facilities. Also, the connections and access points of the partially submerged lower

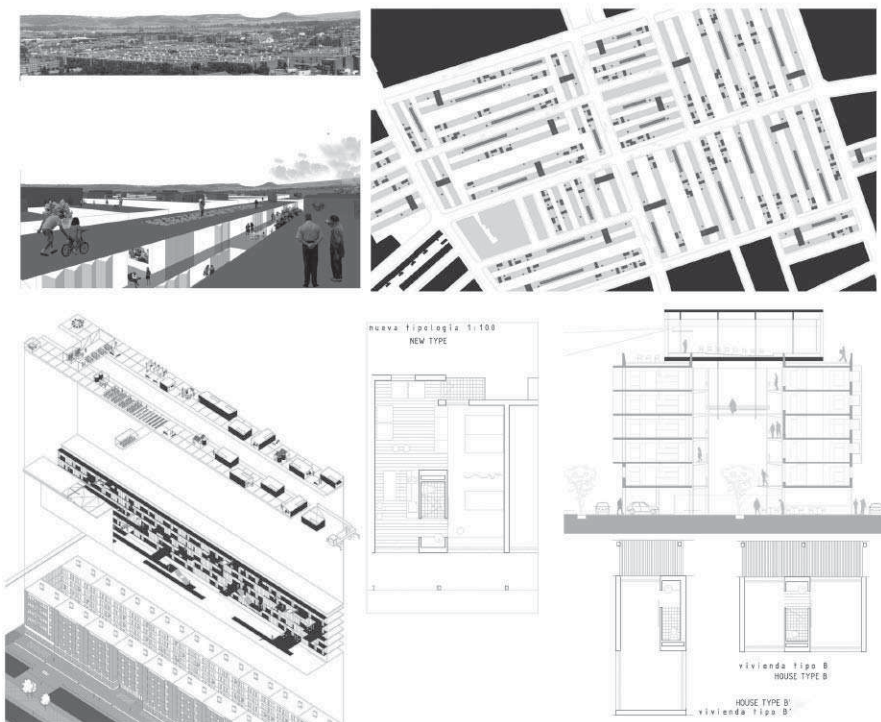


Figure 4. Inhabited roofs. The old and the new roofs. Sections and plans.

level houses are to be opened and increased in number to improve their connection with the rest of the block houses and streets.

The small courtyards are grouped into large central open spaces in each block of flats. The old stairs that divided those courtyards are to be abolished and replaced by more open stairs located in new strategic positions. These will resolve the connection between street, houses, and roofs, in a smoother way.

Along with these new stairs, new voids on the ground floor of the blocks are proposed to provide alternative connections between streets. At intermediate levels, and alongside these stairs, are small areas for meetings and encounters between neighbours. Overall, accessibility is to be improved with more access from new stairs, through gateways, and across galleries that all facilitate communication between each of these spaces and the roofs. In short, we propose the re-articulation of standard spaces into new public and collective spaces that allow multiple meeting spaces and the generation of community activities.

Housing The Future – Alternative Approaches for Tomorrow offers three perspectives on the problems of housing today with an eye on tomorrow. It brings together world-leading practising architects with academics from seven countries and teams of international students. World leaders in the field of residential design, such as UN Habitat Award winner Avi Friedman, present built projects whose design criteria and aims they lay out in text. Academics from the UK, the USA, Spain, Germany and elsewhere follow these project descriptions with extended essays from a more theoretical perspective but remain focused on the realities of practice. Finally, ideas on current housing problems from the next generation of designers are brought together in student projects from Europe and North America. With an introduction by Dr Graham Cairns, this book highlights the practice of residential design internationally at a time when affordable housing provision is seen as a critical issue by designers, planners and policy makers alike. This book is the first in the 'Housing the Future' series.

Graham Cairns, series editor, is based at Columbia University, New York and is Honorary Senior research Associate at the Bartlett School of Architecture, UCL. He is principal editor of the scholarly journal *Architecture_MPS* and director of the research group AMPS (Architecture, Media, Politics, Society)

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