Towards Housing Recycling in the Urban Fabric

INTRODUCTION

[the city we are interested in]

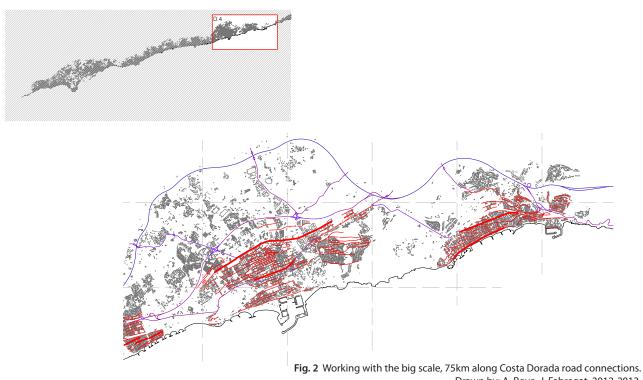


Fig. 1 Commercial fabric in Cambrils' harbour. Drawn by: A. Alvárez, O. Borràs, D. Carvajo, 2012-2013.

Over the last (or first) five years, from the academic year 2008-2009 up to the present, the Reus School of Architecture and its students have, almost unconsciously, built a testing laboratory for housing and the city. In these five years, we have tested and consolidated perceptions about the city and its configuration that were only intuitions at the beginning. We have also made substantial progress in the way we perceive where the city is headed, and this has enabled us to fine-tune the roadmap for the training of future architects, (*Fig.1*).

1. City-fabric: housing at the foundation of the complex city

We have always understood that the cities we live in and use are based on housing, which is the raison d'être and basic foundation of all urban planning, however large or small the scale. Housing is the substance of the city. However, for urban life to be possible, we need roads as well as public squares, parks and gardens to move around in. We also need facilities to host group activities, and areas for work (whether for industry, commerce, agriculture, etc.). So we believe that, although it is the citizens that give a city its raison d'être and therefore provide the opportunity to experience the city and live in it, a city only exists if it is complex. A complex city means that housing coexists with work, services, facilities and leisure. In this respect, we have no choice but to direct urgent attention to forms of specialised (in terms of housing, commerce, work or leisure) urban centres, which unfortunately continue to proliferate and invariably lead to soulless cities.



Drawn by: A. Royo, J. Fabregat, 2012-2013.

2. Planning and building the city

Cities have traditionally been created by means of two isolated phases: urban planning and construction. This has caused urban planners to place insufficient importance on the prospects for living and quality of life provided by the architecture that will comprise people's living spaces, particularly in the case of housing. And too often construction ignores the intentions of urban planning. However, it is intuitively clear that planning cannot be separated from building.

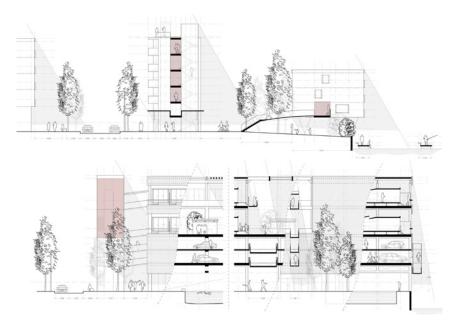
We have tried to test the continuity of the "city planning followed by building" process from an academic perspective, (*fig 2,3,4*). And like the paradox of the chicken and the egg, we question whether the beginning always establishes the chronology of the process first the city and then building. Perhaps if we thought about housing first, we would create better cities.

3. From comfort to large and small scale

We know that in order to create a city, simply building it is not enough. It has to be transformed into an "inhabitable" space. To do this we must begin by knowing the conditions for comfort that make up a domestic space, because the conditions presented by the space (the relationship with the light, sun, temperature, water, wind, etc.) give us possible grouping options. From these grouping options, we can seek out urban planning mechanisms, through which common spaces (streets, squares, gardens, etc.) determine the different arrangements and sustain the activities and needs of the people (sport, leisure, education, health, etc.).

Our acceptance of the assumption that the design of a city and the design of the spaces needed to live there are indivisible is derived partly from our understanding of quality of life as a continuous cycle that goes from public spaces, starting in the street, and covers all categories of collective space to bring us, finally, to the front door of every home. Therefore, quality of life is determined by controlling the parameters that define comfort, from urban life to domestic life.

METHOD



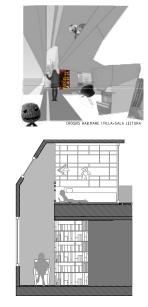


Fig. 3 From street to home, a renovated neibourhood in Marseille. Designed by: M. Virgili 2012-2013.

Fig. 4 Domestic life. Regenerating you house. Designed by: H. Hernández, 2011-2012.

The above premises have resulted in a form of academic project that has led us methodologically to the housing and city laboratory, in which a central theme has permeated the students' work from the beginning of the course to its completion.

1. A single discipline: planning the city and planning its construction

The teaching opportunity offered to us by the Reus School of Architecture was to combine the disciplines of urban planning and architectural projects. This has enabled us to put into practice the idea of eliminating barriers between the city and its architecture. To this end, student work encompasses the continuity from large-scale discussions to urban structures and road networks to large systems and the macrofabric, the work on the collective space itself, which goes from the street to the home and, finally, to the domestic space, in which housing is the primary component, (*fig. 3*). This is done without ever losing sight of the fact that urban planning decisions determine housing, and that housing ultimately closes the circle of comfort that begins with the city, (*fig. 4*).

2. A bidirectional course (not a one-way system)

This is a course that goes back and forth, non-linearly. It is a journey that brings us back to the point of origin, to where the city begins, to the home. During the first four-month period, from the body to the city, which is based on intimate experience of the domestic space (*fig. 5*), we propose an initial reconstructive journey from the home to the city. In the second four-month period, from the city to the body, we propose a journey in reverse, from the city to the comfort of the home, (*fig.6*).

Through our daily work, we have tried to test the links between different scales of work in order to perceive how city planning determines housing and vice versa - how we can generate the fabric from which the city is made from housing and the ways in which it is arranged. The idea of continuity between housing and the city is always explored and put into practice by means of this method of bidirectional learning.

Indeed, if a planned city is sustained by a global, far-reaching vision, the origin of the city begins with the legend of crossed paths providing an opportunity for exchange, giving rise to the first settlements and, thus, the first housing...



Fig. 5 Learning from body scale, a day wokshop. Designing dresses for Barbie, (J. Martínez 2009-2010), anb body measuring (Cartanyà, Pérez, 2009-2010)



Fig. 6 Working with Milan railway network voids. Designed by: J. Cadiach, A. Soler, M. Oliva 2010-2011.



Fig. 7 Urban microsurgery at Marseilla. Designed by: C. Oulucha, G. Olivé, M. Franch, 2012-2013

3. Moving away from urban intrafabric towards urban microsurgery

In the housing and city laboratory, we have been testing the hypothesis of urban regeneration by means of "intrafabrics" (urban fabrics within the urban fabric), seeking opportunities for transformation offered by empty urban spaces resulting from the urban process itself. We have identified spaces that have been made obsolete by urban dynamics, nearly always because their use has lost its relevance, at least in that location. We have therefore mostly addressed empty spaces of industrial origin, but also abandoned infrastructure such as railways that, surrounded by a consolidated city, assert their urban nature, (*fig.6*).

This brings us to today where the basic concern, due to the economic exhaustion of the growth model, has led us to work directly on the recycling of existing fabrics, by means of the physical regeneration of the landscape already inhabited, or by means of the physical transformation of industrial landscapes, repurposing unique architecture to make them habitable, and redefining new urban configurations, (*fig.7*). We have realised that questioning the growth of cities makes us work much more precisely, allowing us to work to regenerate urban fabrics and seeking small opportunities that will help us recycle, and in doing so, recover urban dignity.

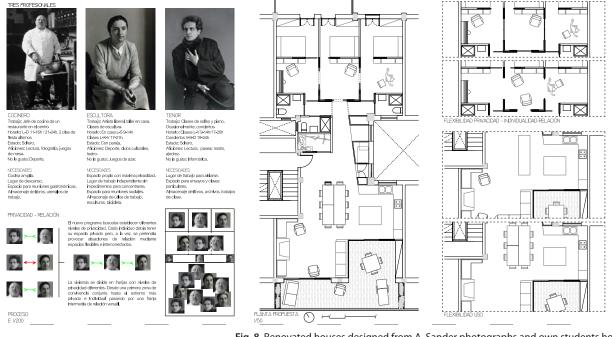


Fig. 8 Renovated houses designed from A. Sander photographs and own students home. Drawn by: José Luís Tresaco, 2011-2012.



Fig. 9 New family units settleed down in Tortosa , students work with P. Menzel photos imagining new homes for these families and their objects, 2010-2011.

4. Research into new forms of the city, new forms of living and new forms of the family unit

Awareness of time compels us to take a critical look at the past in order to understand the present, because it is the only way we can find out how new forms of housing are imagined. We therefore propose an experimental research method to explore new forms of living, new forms of aggregation and, consequently, new forms of the city.

This is because we know only too well that new residents are not traditional families. In addition to the new forms of the family unit resulting from modern social processes, migratory phenomena have given rise to very different family customs and structures. This means that housing designed for ways of life that had been repeated generation after generation is no longer valid. Therefore, thinking about the capacity to absorb this diversity, rather than about the diversity itself, we have imagined new forms of housing capable of accommodating this multiple and flexible new condition.

This interest in new forms of living has led us to work intensely on determining what this new housing has to be like, its capacity for adaptation, alternatives to conventional uses, the emotional and intimate relationships that the home itself facilitates or protects, etc., continually overcoming the resistance to alternative ways of living. And therefore, to force this, we have always added to the program different types of family units to work with as clients and inhabitants of these new dwellings units (fig. 9).

CASE STUDIES

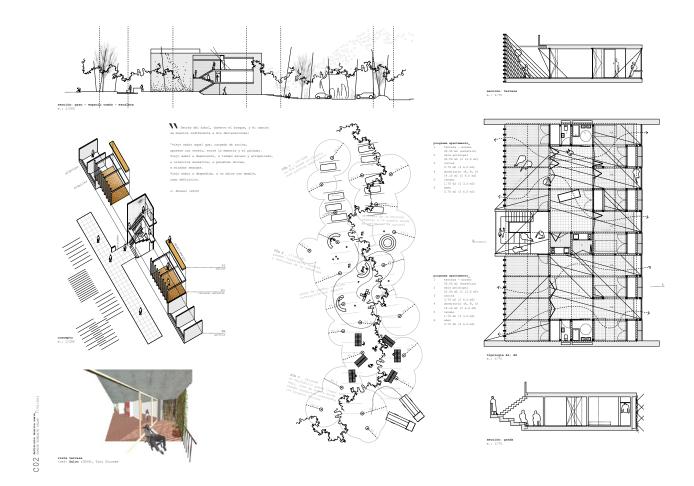


Fig. 10 Regenerating tourism areas on the Costa Daurada, Vilafortuny area. Project by C. Gonzalvo, 2012-2013.

Without losing sight of our immediate daily reality, we understand that from an academic and educational standpoint we must also work with similar or equal sociological and geographic realities that can provide enough nuance to allow us to visualise different ways of creating cities. Therefore, in contrast with the immediate environment of the school's area of influence in Reus, we have been working with European cities of a certain size to bring in the needed counterbalance and generate reactive mechanisms.

In the local area, we have worked on intrafabrics of an industrial nature in rural settings (Riera de Gaià, La Riba, Flix, etc.), more peripheral empty spaces in Tortosa, and the regeneration of tourism areas on the Costa Daurada (from Sitges to Cambrils) in response to the necessary transformation of the zone from an area for temporary residence to one for year-round living, (fig. 10).



Fig. 11 La Riba, a paper industry town, with gaps and mills to work with. Project by E. Segura, 2011-2012.

In Riera de Gaià, the work involved transforming the main thoroughfare of the town's urban centre, occupied by a factory that has moved for clearly operational reasons. In Flix, in a magnificent meandering section of the Ebro River, we sought to transform the area of influence of a hydroelectric power station. In La Riba, a town organised around the paper industry with small mills structured according to the way the river is channelled, it was necessary to consider the coexistence between the gaps left by the progressive modernisation of industry and the urban reality, (*fig.11*). The case of Tortosa was very different, because the more peripheral gaps detected were the result of sometimes uncontrolled growth, and the work involved defining limits rather than occupying empty spaces.

The most recent local experience led to the greatest change, as we worked with a very large area, almost eight kilometres long, from Cambrils to Sitges, consisting of a series of municipalities that form a near-continuous city. The tourism focus of the area has turned it into a linear "ghost town" that empties in the winter and fills up again in the summer. We have tried to test the belief that the growth spurt has ended and to look into how this intermittent city can become permanent. To this end, we have identified small-scale interventions that offer a means of transforming the existing fabric, proposing repurposing buildings for permanent housing that were originally designed to be occupied only occasionally, and providing structural meaning to the area by means of roads and systems in this city in transformation.

The European nature of the laboratory has led us to work on large intrafabrics such as the Vienna Ring; the area surrounding Boavista Avenue, a main thoroughfare in the city of Oporto; the empty railway spaces in Milan; the industrial fabrics that will rebuild the relationship between the city of Munich and the Isar River; and, more recently, the logistical and industrial landscape in a state of degradation within the area of influence of the Port of Marseille.

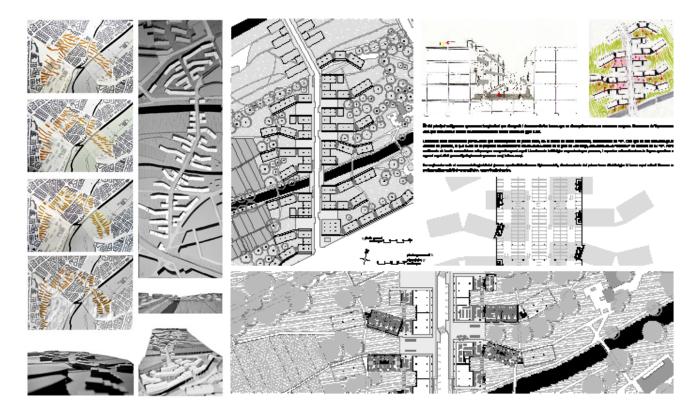


Fig. 12 Munich, rethinking how the city interacts with river Isard. Project by J. Pijuan, 2011-2012.

For the Vienna Ring, we were faced with a piece of heritage from the mid 19th century, so the project involved offering an alternative to this extension that unites the two Viennas (inside and outside the city walls), which had been separated by the glacis that protected the wall of the new Vienna. Oporto served to find reasons to consolidate Boavista Avenue from the centre of the city towards the west, where the city structure loses urban intensity towards the sea. Milan was a magnificent example of finding spaces for transformation in the interior of the city, certainly due to its tremendously strategic geographical location, in which the rail network is a physical installation with many lines, stations and, in particular, train depots. The transformation in progress to rethink these large empty urban spaces was a very interesting example of finding intrafabric ways to re-create a city that is so full of urban wounds. We also needed to work on the impact a river has on a city, and Munich, traversed by the Isar River with an entire urban liturgy based on the water (which we also found in Milan) allowed us to rethink how the city interacts with the river (fig. 12). The Isar River has been an afterthought in urban planning and largely ignored by the city in the past, with the exception of some industrial pockets which have taken advantage of its marginalised condition. Our last case study was Marseille in which the city's port origin allowed us to retrace the port's historical transformation process. We detected areas which, due to logistical needs as the port moved north, have given rise to many districts that could be subject to a more "surgical" transformation with much more precise actions including the transformation of specific industrial architecture into housing. This enabled us to test the boundaries of urban recycling.

In keeping with the bidirectionality of the programme as a whole, the different courses began with the local example, moving from housing towards the city, and ended with the European example, moving from the city to housing. Our "dance" partners in this work were therefore Riera de Gaià and Vienna, Flix and Oporto, Tortosa and Milan, La Riba and Munich, and finally Sitges-Cambrils and Marseille.

CONCLUISONS

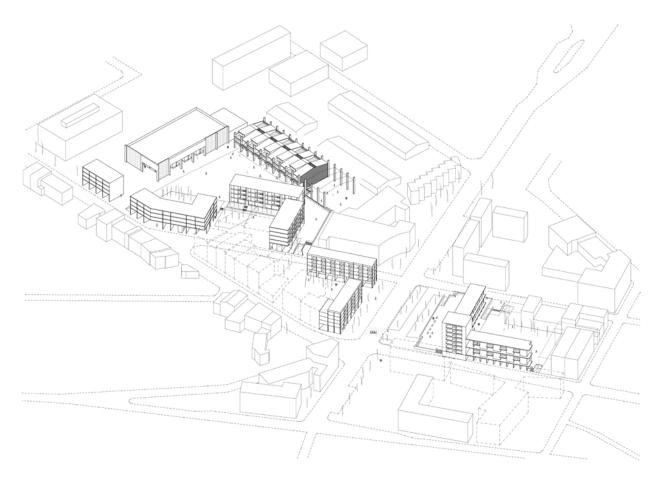


Fig. 13 Towards zero growth in Marseille, readapting industrial buildings and stores for living, "intrafabrics" opportunities. Project by A. Soler, 2012-2013.

1. Towards zero growth

The crisis of the capitalist system or, in other words, the crisis of infinite growth, has shown that not only is there no money to continue growing, but that there is simply insufficient reason for further growth. Therefore, we need to rethink whether cities should begin to incorporate sustainability by moving towards zero growth. This has led us to work from the perspective of "intrafabrics", in which we see gaps in the urban fabric as opportunities for internal growth, and to reduce the commitment to urban regeneration in the form of "microsurgery", (fig. 13).

The tests have led us to conclude that all legal and traditional urban planning systems work when the intention is unlimited growth, but are heavy and cumbersome when taking on the complexity of the regeneration of the urban fabric. The tools therefore need to be changed to facilitate more precise urban interventions. Above all, we must change the way we understand the behaviour of cities. They must be understood as living organisms - organisms that have lived and constantly grown up to now, at least in Europe, but which have undeniably reached a certain degree of maturity, have come into adulthood, and need a lot of care to prolong their lives, *(fig. 14)*.

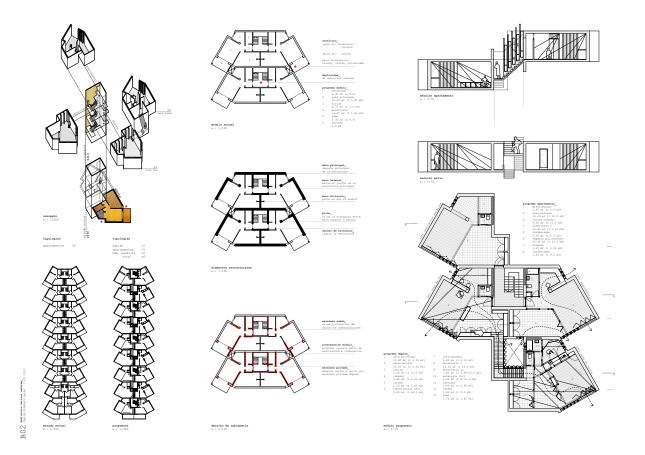


Fig. 14 From vacational appartments to permanent houses in Costa Daurada, Project by C. Gonzalvo, 2012-2013.

2. Complex city - complex citizens

Over time, we have learnt that a city's primary raison d'être is its combination of uses or, in other words, its ability to continually multiply its own multifunctionality. The value that lies in superimposing uses is what gives the city its complex nature, and is a mainstay of urban life. Exclusion or specialisation has led, in contrast, to a "rickets-like" process, whereby some organs grow more or more quickly than others due to an imbalance, and in which a mature urban life is virtually impossible. Consequently, we always deal with the city with the intention of giving it these levels of complexity, beginning with the road network to support public and private mobility, and ending with an urban fabric that can sustain the entire spectrum of needs from open areas to facilities, with mainly housing (but also services) in between. Learning to transform fragments of specialised cities into complex cities is therefore certainly one of the challenges we have been taking on, aware that the future guarantee of urban life requires permanent remodelling and updating of uses and programmes for these fragments that are not yet cities. This recycling work, this work of physical regeneration, will turn specialised cities into "city-cities".

Today, the complex city is populated by increasingly complex citizens. The awareness that comes with democratic maturity, the fact that citizens no longer automatically repeat the same forms of family life as previous generations, and the opening up of our borders to citizens from all over the world have made our society much more sociologically heterogeneous. This mix of citizens, the new users of the city, gives them a leading role in the urban project from the very start. From this perspective, the city would not be possible without their participation; the interaction between citizens and their city is imperative.

Learning from this complex mixture of citizens, we have discovered that new family units will help us find new ways to live that translate into new types of housing and that, at the same time, this diversity will help enrich cities and make them more complex, (*fig. 15*).

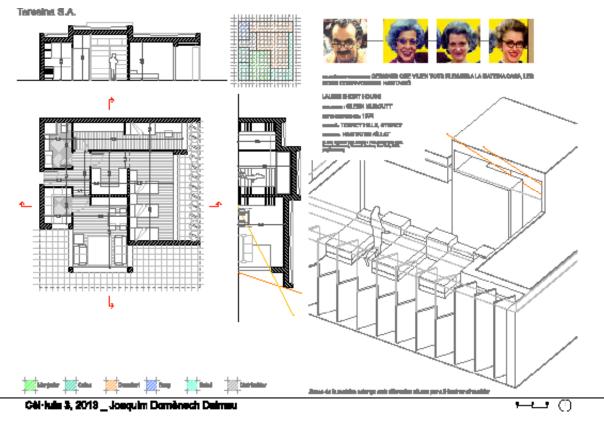
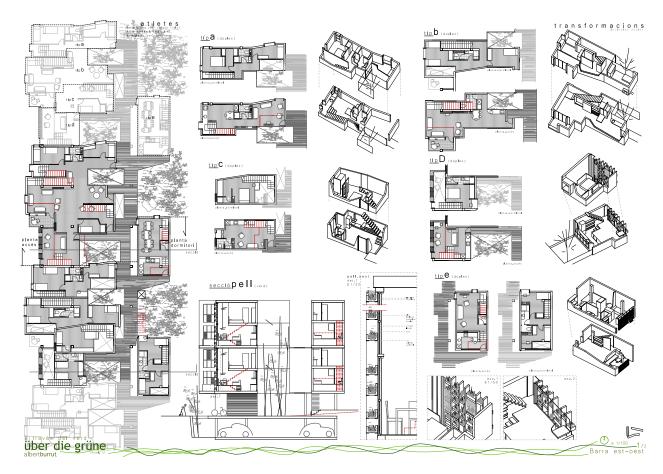


Fig. 15 New types of living for new family units, students work with their favourites sitecoms. Homes designed by J. Domènech, 2012-2013. (Under), new dwellings at the river Isard side in Munich, designed by A. Borrut, 2011-2012.



3. City architecture to housing or vice versa

Working openly with students in both disciplines – architectural projects and urban planning – simultaneously or otherwise, means that the continuity of the process, whatever the direction, will not have disciplinary gaps, as all scales of the work are subject to reflection. Behind the indoor spaces of every house, there is an urban strategy that takes us from large infrastructure, through public and collective spaces, to the front door of our home. So, strategies for housing clusters have as many requirements with regard to the organisation of the city as they do for the domestic quality of the housing units. Furthermore, the definition of intermediary spaces is much more accurate (as opposed to border areas or stairways not being anyone's responsibility), as the sequence of learning continually traverses all levels of urban planning and organisation. This continuity has helped us construct a central, guiding theme that takes us from urban comfort to domestic comfort, (*fig. 16*).

The conventional disciplinary segregation between architecture and planning makes highly complex proposals more difficult. Therefore, continual work and making use of the components that comprise a city make that city more complex and give it a greater capacity to mature.

For the scale of change to occur from large to small or small to large, we have found that the effects are much less predictable than they would seem a priori. Curiously, the journey from housing to city, which means that the city is created on the basis of the housing unit, is somehow less evident, and has led us to often enviable results when compared with the logical path, from city to home.

Reus, March 2013

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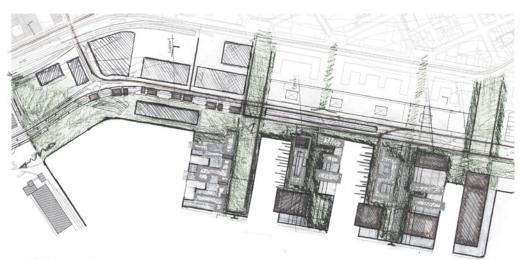


Fig. 16 Urban planning and architectural projects as a good tool to learn how to offer a good qualitiy life. Marseille harbour skecth, drawn by M.Virgili, 2012-2013.