ENGLISH TEXTS

TITLE OF THE ISSUE
The Transformations of Urban Dwelling

EDITORIAL

I must confess an initial temptation to entitle this editorial "A New Page for Residential Architecture", borrowing from Edoardo Persico's famous essay "*Punto e a capo per l'architettura*" ("A New Page for Architecture") published in the November 1934 issue of *Domus*. In the end I desisted, partly to avoid an unfair comparison with the great critic, and partly due to the effective diversity of the issues at hand. Nonetheless, with the same emotional determination underlying Persico's hopes for a change to Italian architecture in the past, it is our intention today to assert the need for a profound change to the residential projects found in our cities.

The themes confronted in this issue intend to provide a sufficiently broad outline of the most up to date problems in the residential sector, currently the object of research in Italy and, with greater commitment, throughout the rest of Europe. However, for the results of this research to be effective, they must be known to, and thus shared by those with the possibility to convert them into practice. This issue of "Rassegna" is intended, in particular, for public administrators, their technicians, and those who, with various roles and at various levels, are responsible in Italy for the organisation, management and construction of public and private residential structures, in particular those destined for disadvantaged groups of the population. We are currently in a period of unmistakably "epochal" mutations to the dwelling – comparable to very few in history – about which we are too slow to learn, and even lazier in responding, looking toward the future while staring into the past.

The issue begins with an essay by Anna Maria Pozzo, who exhaustively outlines, using verified numbers and data, the demographic situation in Italy and its consequences on the housing market. A detailed analysis of demand, articulated in different categories, is followed by a point-by-point description of Italy's new *Piano Casa* Housing Plan (Law 133/2009), considered highly innovative in terms of its procedures and public/private initiatives in the field of social housing. The question raised by the author, devoid of any rhetoric, when she inquires, "Is this the beginning of a new season of residential architecture?" appears to capture a note of optimism regarding the future. We cannot help but take heart: something appears to be moving in the field of residential design. We duly take note, and will return to this subject later.

The opening essay is followed by an interview with Italian and foreign experts, founded on three underlying themes: the *Idea of Dwelling, Strategies of Intervention for New Forms of Urban Dwelling* and *Current Research*. The interviews were conducted by Marta Calzolaretti, who has curated this issue with intelligence and a profound understanding of the issues at stake. The selection of subjects from Europe's leading countries allows us to offer a general understanding of the problems affecting both the present and the future of urban dwelling.

We asked these experts in the field to examine the problem of the dwelling in Italy from different points of view and based on diverse aspects, inviting them, according to their specific competences, to further investigate the underlying themes raised in the interviews and to provide us with in-depth information about what is taking place in other European countries; primarily with the intent of measuring the level of research in Italy, and its application in the real world.

The sociological side of this issue is confronted in a more direct manner in the section entitled *The Communal Dimension of Dwelling*.

The essay by Mariateresa Aprile confirms the content of the interviews: the affirmation of the validity of the principle of "community" in the design of human dwellings in the twenty-first century. With regards to the type of urban aggregation that we hope for, and its scale (district, neighbourhood), little is said. In reality, the city no longer requires expansions, but rather the redevelopment of its most deteriorated zones: the tendency to form socially valid "communities" can be pursued by exploiting the possibilities offered by available structures, by the site, and by pre-existing social conditions.

Carlo Melograni's contribution pushes even further: he reaffirms the necessity for a "graduated hierarchy of spaces in which to dwell, something that disappeared almost everywhere after the nineteenth century". He ventures a "dimension" in which to bring value to the principle of community: a dimension in which secondary schools (or analogous institutions) constitute a "centre of attraction for multiple relations". The school's auxiliary services, open to the public, thus constitute a space of encounter for a community.

Issues that we can refer to as more precisely urban, associated with the relationship dwelling-city, are examined by various authors in the section entitled *Strategies of Intervention for New Forms of Urban Dwelling*

The opening essay by Marta Calzolaretti uses specific examples to examine the general theme of transforming the existing and new expansions. She confirms the current trend to avoid residential expansions in still uncontaminated territories and to concentrate new interventions above all in diffuse peripheral areas, increasing density by inserting not only new residential structures, but also the functions and services that define the variety and complexity of an urban condition. An in-depth analysis enters into the merits of the numerous possibilities of intervention. The existing city now requires that residential construction play a supporting role in improving its functional and aesthetic conditions: redeveloping its structures, recomposing its voids, re-stitching its fragments (infill) and delimiting its edges. The author does not ignore the theme of new expansions, which "constitute a significant strategy for many European cities, and in particular many cities of Eastern Europe". The successive essays examine more problematic issues, which we can reassume – the authors will excuse me for the brevity of my citations – in a rapid list of their titles: *The Regeneration of Residential Districts in European Contexts* (Domizia Mandolesi); *New Density, Urban Redevelopment and Social Housing* (Rossana Battistacci); *The Urban Redevelopment of Abandoned Areas* (Alessandra De Cesaris); *New Urban Expansions* (Michela De Licio). Each is of significant interest and rich with recent and little known examples. I was struck, for its use of statistic investigation in a new

field, by the research described in the essay by Francesco Riccardo and conducted by the Department of Real Estate & Housing at the Delft University of Technology's Faculty of Architecture. The characteristics of the *aesthetic* and *energetic* redevelopment of building façades are selected based on statistical elaborations of preferences expressed by people asked to comment on different sample façades. This approach to the redevelopment of obsolete façades, practically unknown in Italy, is progressively more common abroad.

Finally, the aspect of the transformation of the dwelling, suggested by the search for a more environmentally sustainable and energetically efficient organization, is dealt with in the section entitled *Residential Settlements and Energy Eco-Efficiency*.
I find it particularly interesting to compare the two texts by Alessandra Battisti and Fabrizio Tucci, which apply the general principles of eco-sustainability respectively to Mediterranean residential construction and settlements in Central Europe.

If, obviously, the final objective pursued in fundamentally diverse climates are comparable, the conceptual and technological instruments adopted vary. This is the sector in which research is perhaps working hardest and achieving its best results.
In comparison with the European scenario, amply documented by the authors in their texts, the Italian situation appears anything but satisfactory: quality interventions are rare, submerged by the incredibly vast and widespread quantity of residential constructions, disappointing and not oriented towards capturing the sense of a truly innovative transformation. We do not wish to abandon ourselves to the pessimism induced by the many promises for change, ignored or disregarded over time and, what is more, the current state of the peripheries in Italy's largest cities; we wish to believe in what Anna Maria Pozzo tells us at the beginning of this issue and, with renewed faith, to once again hope for a "new page for residential architecture".

M.R.

DEBATE

Housing Policy and the Construction of the City. The Italian Case-Study

Anna Maria Pozzo

The evolutions of family nuclei, the arrival of new inhabitants and an ageing population, together with dynamics in the world of employment (job insecurity/nomadism of youth) are changing the needs for dwelling.
A home owned by everyone, a mirage lasting from the post-war period to the present, has led to an average of 80% ownership, contrary to trends of development in Italy and the fragility of family nuclei, in need of flexible solutions to dwelling.
This condition is accompanied by simultaneous changes to the relationship between the dwelling and the neighbourhood and between the neighbourhood and the city, connected by new immaterial networks (information/telecommunications). The market adapts slowly to change. While social housing has modified its objectives (no longer dwellings for families, but specialised dwellings for young people, the elderly and immigrants), these changes are insufficient to face up to demands for quantity (800 thousand dwellings for 600 thousand families).

Sustainability changes the very conception of the home and the city, moving in three different dimensions: environmental, social and economic. An integrated approach to this theme changes the means of organising the spaces and functions of the home and the city. The theme of low-cost housing and assistance for the weaker classes assumes a central role, placing the focus on the comprehensive cost of the dwelling (rental costs plus running costs and heating/electricity).
Urban sustainability must also be informed by this paradigm of three approaches to sustainability: projects become more complex and integrated in all dimensions, involving a wide range of subjects.

New policies for the city and dwelling are based on a local approach. This condition, strictly related to issues of dwelling

and territorial management, has led to a diversification of experiences. New models of intervention are being created and incorporated in initiatives promoted at the national level. Italy's *Piano Casa* [Housing Plan], in all of its various dimensions, identifies new profiles of users and privileges an integrated approach focused on promoting the development of a new stock of rental properties. How are we to orient ourselves in terms of sustainability between a plan that promotes demolition and an increase in existing volume (the plan to re-launch the construction industry), and another plan (the *Piano Casa*) that hypothesises new settlements along the margins of the city?
How are we to activate opportunities for the redevelopment of degraded and mono-functional neighbourhoods, while avoiding the risks of a new period of expansion?

A Comparison of Evaluations and Prospects

Interviews with Lorenzo Bellicini, Hans Ibelings, Carlo Quintelli, Manu Rubio and Andrea Vidotto
Coordinated by Marta Calzolaretti

During the past decade the issue of Housing returned to being a strategic issue for urban areas across Europe. A relevant number of new housing interventions offer us an opportunity to assess the results achieved, and suggests the opportuneness of beginning a few critical reflections in light of future developments.
In the wake of the attentive documentation of the housing situation in Italy, presented at the beginning of this issue of the magazine, we chose to begin a discussion by asking a group of experts to respond to a few questions regarding themes we believe to be of fundamental importance.
The first theme relates to the significance to be attributed, at present, to the principle of community and the urban entity of the neighbourhood. An issue examined by sociologists and supported by vast national programmes, such as those found in England.
The second group of questions focuses on analysing the numerous

design strategies to be implemented, with the aim of realising new housing interventions in the contemporary city, ranging from the renovation of existing urban structures to new expansions.
The third group confronts the question of research and the innovation of housing and building typologies, with a particular focus on energy eco-efficiency.
The subjects interviewed were asked each of the following questions. Each set of answers refers in some cases to only a few of the questions; or, when the text is printed in its entirety, to the full range of questions. Specific answers are marked by the number of the question in the original questionnaire.

1. The Idea of Dwelling: Does it Still Make Sense to Speak of Neighbourhoods?
1.1 *In light of recent social, environmental and economic requirements, does it make sense to once again speak about neighbourhood and community?*
1.2 *What consequences might the present-day adoption of concepts of neighbourhood and community have in relationship to the existing city?*

2. Strategies of Intervention for New Forms of Urban Dwelling
2.1 *With regards to the three different methods of intervening in the city – the urban "continuum", urban redevelopment, and interventions of infill – in your opinion, which are most suitable, what strategies of action are to be pursued and what are the most effective models of settlement?*
2.2 *What are the principal issues that new interventions must respond to?*
2.2.1 *The search for a* mixité *of inhabitants and functions is currently recognized as an objective to be pursued; what are the most valid urban and architectural strategies for achieving this objective?*
2.2.2 *Is it correct to increase urban density – understood not only as the quantitative value of the relationship of* m^3/m^2*, but also as the concentration of different functions in multi-functional systems of settlement – as an alternative to the waste of collective resources created by sprawl? Can an increase in density be considered the occasion for a plurality of experiences and opportunities for improving the quality of urban life?*
2.2.3 *In spite of the profound transformations to personal and family life, do the majority of people still privilege essentially single-family housing models? Or do people now prefer to live in settlements with more "urban" features?*
2.2.4 *To what degree does the lack of public funds and, in general, the economic crisis, impact urban strategies and planning choices? Are new methods of financing capable of representing a positive opportunity for the renewal of Social Housing?*
2.2.5 *In your opinion, which experimental methods or forms of housing have produced the best results?*
2.2.6 *The urban structure of many new interventions of expansion is based on a gridded road network and a building system of urban blocks, which appears to refer to the fabric of the nineteenth century city. Does this signal a renunciation of the search for something new, or is this system truly the most suitable for responding to the needs of contemporary society?*

3. Research
3.1 *What role can research into housing play at the present time, when everything appears to be dominated by the strict laws of the market?*
3.2 *Is there a certain rigidity towards the renewal of housing models? Or is there a trend to privilege a purely formal renewal, while the basic problems related to new requirements, new users, new lifestyles, etc. remain unanswered?*
3.3 *What aspects of Housing constitute the centre of the most interesting research? Do you believe the time has come for a return to considerations of innovations to typologies of settlements, buildings and dwellings?*

Lorenzo Bellicini

1. Ideas on Dwelling: Does it Still Make Sense to Speak of Neighbourhoods?
1.1. In 2007, the CRESME Research Centre completed a complex study of the area around Turin. The survey, which evaluated current dynamics, the quality perceived by local citizens of the public policies and the processes of urban transformation that characterised the first decade of the new millennium, offered diverse interesting readings. One strong aspect is related to the choice of dwelling: a choice that depends not only on architectural quality (size, typological characteristics, the quality of finishes, etc.) and factors traditionally held to be priorities, such as economic factors or proximity to the workplace; rather the survey highlights how the urban context in which a home is located is at the top of the list of factors influencing choices. While the dwelling may be smaller in size, the context in which it is located becomes the primary value. This clarifies an issue confirmed in successive research in other Italian areas: the passage towards a different "unit of measurement" governing choices. Personal well-being/urban liveability is no longer, or at least no longer exclusively measured based on the quality of one's dwelling (the quality of individual existence); of greater importance now are precisely the neighbourhood, its vitality, the amount and quality of public and private services (shopping, recreational, cultural and social activities, transportation, collective public spaces) and social cohesion; in short, the ability to identify with the spaces we inhabit is progressively more often the determinant factor in choosing where to live.
In substance, market surveys restore the issue of the neighbourhood to the centre of urban planning. The "quality" of the context of dwelling, from safety to the quality of available services, from the care for public spaces to architectural design, from the identity of a site to air quality, is a theme that affects policies of urban redevelopment, public policies and models of offering in an entirely new way. Methods of selection modify demand, and the economic and real estate market crisis accentuates the factors of change. A change that may be positive: current demand seeks higher quality than in the past.
1.2. The coming years, those that will characterise the seventh cycle of building of the second post-war period - 2010 marks the end of the sixth cycle, which began in 1998 – will be witness to a profound reconfiguration of the market: the first years of 2000 were years of urban expansion; the model, in the end, was very similar to that of the 1950s and 60s; the scenario of the coming years will focus a great deal of attention on transformation and redevelopment, rather than expansion. The scarce quality of the expansion of the Italian city, even in recent construction, and the return of phenomena of abandonment and the degradation of historic centres, place the issue of redevelopment and of the "neighbourhood" as the habitat of a community at the centre of a new season of design. A new season that looks on the one hand towards nineteenth century urbanism and, on the other, at the development of models of intervention that are innovative on a range of levels: technology, energetic and environmental sustainability, public-private partnership, and the integration between building and services. Without forgetting the reduction of manufacturing/production costs.

2. Strategies of Intervention for New Forms of Urban Dwelling
2.1 In the coming yeas, the underlying question, as I have mentioned, will be that of transformation: transformation

includes issues of redevelopment, of completion, of new construction, of demolition and reconstruction. These are the shifting balances of the different segments of the market. What is certain is that the scenario for the next few years will feature a significant reduction in the role of classic land speculation: there will be less new constructions. Levels of production in the early 2000s were exceptional, driven by cycles of real estate speculation and an exceptional demographic boom caused by immigration and the historical conditions of Italy's population. We are now facing a very different scenario.

Between 2006 and 2010 building production was reduced by almost half. In the next few years, new constructions will pursue a scenario of offerings guided by five challenges: new forms of 'affordability', where the cost, and thus the price, of a home will be reduced from the exceptionally high levels of the early 2000s; elevated levels of 'energy technology' in buildings and settlements; the ability to manage forms of public-private partnership; the integration between building and services, founded on an idea of management, and not only on the idea of "building to sell". These issues rotate around the question mentioned earlier: the quality of dwelling and the quality of the neighbourhood. Cities in transformation – we can speak of a 1980s model – on the one hand, and a return to single-family dwellings – a 1970s model – on the other, in part a result of the so-called *Piano Casa*2 [Housing Plan] to be implemented between 2012 and 2014.

2.2 To these many questions I will try and provide some answers:

2.2.1 *Mixité* is and will continue to be one of the keys to the design of urban planning interventions: firstly because public and private interests are ever more present in transformation projects – we can mention the new models of social housing that begin with the *Fondo residenza* [Housing Fund] supported by the *Cassa Depositi e Prestiti* – while the public sector tends to provide answers to social needs, the private sector tends to privilege the most profitable interventions. As a result, the model is an integration of various levels of offering, of homes for sale and various levels of rental costs. The English model is one example.

2.2.2 The increase in urban density is one of the responses to disperse settlement, though the challenge in the coming years will be that of increasing density, calibrated with levels of services. We must also consider that in the next few years the pressure for new housing will be significantly reduced from the levels of the early 2000s. In substance, there will be a more balanced market, similar to the second half of the 1980s and the first half of the 2000s. Thus increasing the density of settlement is one answer, if it is implemented in a balanced manner.

2.2.3 Italy, like the rest of Europe, is characterized by a significant quantity of single-family dwellings. While it is certain that they were not the protagonists of the boom of the 2000s, in any case they represent a relevant quota of housing in Italy. This confirms the central role of the province in the Italian economic-social system. The *Piano Casa2*, which offers the possibility to enlarge single/two-family dwellings by 20%, as per the various regional articulations governing its implementation, will offer a long-term incentive for the rebirth of this segment of market demand. CRESME is forecasting a potential 350,000 new 70 m^2 homes.

2.2.4 The new season of the *Fondi Immobiliari per l'edilizia sociale* [Social Housing Funds], in their currently complex form, represent an important opportunity for the offering of dwellings in Italy. They have the potential to represent a new and important possibility. However, we must examine the final results of this experience. The premises are very interesting, though perhaps the major risk is to be found at the level of innovation. The risk is that of a new model of intervention that offers the same products as before, in terms of urban planning and construction. The changes only affect procedures, organization, economic objectives, complexity and the formalisation of relationships between actors, while we continue to produce buildings equal to those already available.

2.2.5 Remaining in Italy, our country is rich with surprises and we can draw up a list of interesting examples of various typologies of residential building interventions. However, the overall situation is negative. I believe that a number of issues for reflection can be mentioned: the design of new settlements that tends to reproduce the built fabric as a complex block of a single articulated building – as if it were 'part' of a historic centre – and not as a vast number of boxes-buildings; ideas of settlement in territorial energy districts; the construction of a strong thematic and territorial identity at the base of any project; the management of settlement, throughout its lifecycle, as a basic component of any design decisions; the equilibrium between buildings, parks and services. Here the most interesting examples take us back to the neighbourhoods of the late 1800s and the early 1900s.

2.2.6 I do not believe that new construction refers to a nineteenth century urban planning model; while it is true that the model was that of the city block, this block was not the anonymous collection of boxes-buildings that we are now so familiar with: there was a scale, a greater degree of refinement and more care for details than we find in many contemporary interventions. Buildings simultaneously offered more homogeneity, and more complexity in their design.

3. Research

3.1 The crisis accelerates processes of market reconfiguration and leads demand to seek more quality than before. Most importantly, innovation assumes greater value. The available supply no longer satisfies all models of demand. Today, those who are capable of proposing innovative, quality solutions, something that can be obtained only through research, will undoubtedly benefit from a greater competitive *atout* than others, earning more space in the market. In substance, the crisis offers new chances for those capable of innovating.

Hans Ibelings

In the Netherlands, there is a beautiful diagram from the late 1940s that summarizes of a vision of communities and neighbourhoods called 'wijkgedachte'. This means something like 'neighbourhood concept' and it was based on English models of community planning developed in the 1930s. This diagram is remarkable because it is an inversion of the conventional city. The city centre is drawn in the periphery of the diagram; the centre of the diagram is occupied by the home of the typical, traditional family of husband, wife and young children. The title of this diagram is 'the family is the origin of the urban society.'

Behind this diagram there is a view of society in which people spend a large part of their daily lives in or near their homes, the only exception being the husbands who leave the neighbourhood everey workday to go to an office in the city centre. For many unclear reasons, this is still very much influential on our notion of neigbourhood, even though family life is not as tight as it used to be, with the average size of a household being too small to talk of a family, with large

numbers of singles. Also the life of people is not as concentric as it used to be, or was supposed to be, in the past. Many people commute between suburban residential areas and equally suburban business parks, and the time spent in or near home is much smaller than fifty or sixty years ago. The increased mobility has given people such a range of action that the sense of place and belonging has profoundly changed. What J.B. Jackson has written about American societies, that life becomes much more structured by time instead of place, is also true for Europe and many other parts of the urbanized world. Communities exist, but the do not necessarily fully overlap with neighbourhoods. This is against the logic of architects, who for very good reasons try to match the life of people with built substance. By now it seems that quite often life and buildings are existing independently. In other words, designers can build neighbourhoods but they have very limited power to influence that an environment that looks like a neighbourhood actually becomes a community.
Churchills saying that we shape our building and thereafter they shape us, is not necessarily true in an individualistic age in which we shape both our buildings, and our lifestyles. There is another argument why this gap between building and life could eventually become bigger and that is the likelihood that in the future there will be much less building activity, and hence less possibility to shape anything at all, especially in Europe. For quite some time, new buildings were needed to accommodate a growing population and greater prosperity. Now that population growth is stagnating and in some regions even shrinking, the need for new buildings will greatly decrease. This may very well lead to a significant change in architecture and the building industry. Whereas most architects are now busier with designing new buildings than renovating existing buildings, this is likely to change significantly in future. Renovations and transformations are likely to become the most important source of orders for architects and builders.
There is an increasing awareness in many quarters - including project developers, who are the most important drivers behind the ongoing construction of new buildings besides the government sector - that the decreasing rate of population growth could very well mean the end of the automatic linkage between growth and progress. In an interview with a Dutch newspaper, project developer Rudy Stroink for instance explained why he thinks it is necessary to switch from thinking in terms of 'building big' to 'small-scale thinking.'
Stroink says, '"Small-scale thinking", which I am a proponent of, is very much in contrast to the post-war thinking displayed by most engineers. After World War II, project developers, government agencies, investors and engineers all worked together to rebuild the Netherlands. It was a gigantic challenge, and some great things were achieved. Cities quickly expanded, and rebuilding efforts were directed in large part by the government. The underlying idea was: don't think too much, just build more. This approach still dominates the thinking of Dutch builders even though the population growth has been slowing down for some time and will soon actually come to a halt. As I see it, the game has changed. We shouldn't be busy building ever greater numbers of buildings; instead, we need to transform existing buildings. The present stock of homes and buildings is roughly adequate for our needs. Now we need to modify them to meet present-day needs.…That is what I mean by small-scale thinking. In a sense, we need to become gardeners and improve what we already have.' To illustrate his argument, Stroink explained that if all the building plans in the Netherlands were to be

carried out, we would need 30 million inhabitants to actually use them, which is almost double the present number.
The issue which Stroink touches on in a Dutch perspective and situates in a timeframe of six decades and in the light of the current economical crisis can also be viewed in a much broader context, as a pan-European phenomenon going back to the start of the Industrial Revolution. That was when population growth started to accelerate and urbanisation started to take off as a result of people migrating from rural areas to the city. It was also the start of a long period of building expansion, which now finally seems to be coming to an end.
Improving, transforming, adapting, reusing and recycling of the existing stock will probably become a much more important job for designers than the development of large scale residential districts and vast housing projects.
If the conditions are indeed changing as fundamentally as I presume, this could mean that a new strategies of research in housing are demanded, which are less focussed on the development of new typologies, construction systems, urban planning, and much more on how to deal with architecture in an age of 'post-production.', to understand the new conditions of urban culture in relation to housing, in ever more individualized societies.

Carlo Quintelli

1. Ideas on Dwelling: Does it Still Make Sense to Speak of Neighbourhoods?
1.1 More and more often, that is if we do not wish to renounce, *a priori*, the implicitly communal value of the city, as suggested by a number of evil architectural theoreticians. The problems of sustainability must determine an equally innovative approach to design, of which architecture can also be used as an interpreter, privileging the relationship between the nature of human behaviour and the particularity of spatial forms. If we wish to translate this possibility in terms of settlement, into an idea of neighbourhood, amongst others, we cannot help but return to this idea, given its contribution to social growth throughout history. However, we require a profound evolutionary leap that refuses modellistic replicas of modernism or of the past, modernised only in terms of their image, as simulations of a generic survival of identity. Above all, we must avoid adhering to merely technological responses.
1.2. The design of the city, that wishes to activate the reciprocity of these two concepts, cannot help but begin with an innovative approach to architecture, operating within the historic specificity of a given context. An approach that may appear paradoxical, though dialectically necessary in order to avoid on the one hand producing architecture without substance of design, as part of a formalist drift based on a poorly understood idea of modernism. On the other hand we must avoid archiving the idea of the city exclusively as a phenomenon of historical-morphological continuity. Once again, individual works of architecture and the architecture of the city must find a form of significant, functional and figurative relation. Only in these terms can communal strategies rediscover the meaning of their actions in real space (before the web), and according to a trans-scalar condition progressively more capable of creating relations between the many scales involved.
2. Strategies of Intervention for New Forms of Urban Dwelling
2.1 These methods can be utilised case-by-case, without

technical ideological prejudice, simultaneously or alternatively, in the design interpretation of the organicty of the urban environment and of the architectural parts of which it is constituted. Having said this, if we truly wish to identify an ethical categorical imperative during this period in history, I believe we must renounce any form of consumption of open land. We must design only that which has already been urbanised.

2.2

2.2.1 I doubt the effectiveness of *mixité* if we do not provide it with a prevalence. The disappearance of functionalist specialism need not necessarily render us indifferent towards standardised and replicated homogeneity. Given that, in many cases, redevelopment does not mange to activate relations based on differences or fails to achieve its target of functional critical mass. I believe instead in a mixité that assumes, on its own, a functional prevalence and thus a role in settlement, as a factor capable of ensuring both its own play of relations, as well as those involving the city and the territory.

2.2.2 At this time in history, elevated density is a progressively more necessary premise of design. The theme of diffuse settlement is now almost anachronistic, and perhaps for this reason so successful, favoured by an often involuted sensitivity, still incapable of perceiving the need for densification in communal space as an effective response to problems of urban inhabitability. This, however, requires a profound revision of typological dwelling instruments and the characteristics of related services. Only through effective actions of demonstration can we overturn current prejudiced attitudes, highlighting the advantages for liveability under conditions of concentration, rather than dispersion.

2.2.3 There is a strong prevalence of individualist settlement of family nuclei. The role of architecture is that of interpreting the new needs and the new configurations of families based on a more modern and diversified definition. However, this must be achieved by pursuing a shared urban strategy, without which any single intervention becomes unrealistic.

2.2.4 With regards to social housing, I see no real policy of public investment in this sector. The comparison with the rest of Europe is eloquent. It is something else entirely to speak of forms of market price-control through private interventions of assisted housing, developed exclusively for medium- to low-income families. The situation is worsened by the growing unreality of large, non-priority projects, or those of scarce utility (The Strait of Messina Bridge), which drain resources from general infrastructural development, projects for hydrogeological stabilisation and public housing, or the requalification of urban services (beginning with our schools).

2.2.5 In Italy, we must once again examine the *INA Casa* programme, and a number of other experiments, from Gallaratese to Corviale and Zen, the latter two of which were the object of disastrous programmes of inhabitation. Holland, Germany, France, etc. have dominated the panorama over the last thirty years, with the exception of a few rare examples, with respect to which we risk being labelled as interpreters 'in style'.

2.2.6 We can opportunely adopt both preconstituted and new models, only when we interpret the specific conditions of an urban context.

3. Research

3.1 The current market, having run the course of the great speculative bubble, must now reconsider its logics based on a new level of quality. It can no longer avoid research. Above all, the public administration must return to its productive role, offering guidelines for dwellings and the city, investing in research and design ideas, promoting new models of the culture of dwelling, financing important projects, modernising and simplifying legislation. Even more important is the valorisation and divulgation of a new culture of design in the field of housing, beyond occasional, not to mention partial offerings, such as those found in the Padiglione Italia at the last Venice Biennale.

3.2 The formalist assumption of models of dwelling, primarily extraneous to the contexts involved, eludes the primary role of the design of architecture: offering critical-prepositive responses, and authentic representations, to the physiology of socio-cultural needs of dwelling. If architecture is only an instrument of communication and urban marketing, the consistency of real needs inexorably falls into the hands of building opportunism and uncontrolled settlement.

3.3 Those responsible for the dwelling, be they public administrators, builders, architects, surveyors and engineers, students-architects or, last but not least, end users, would indicate that technologies, in particular eco-sustainable, are the central theme of research. In reality, the spatial combination of settlement, building and dwelling, remains the primary instrument for ensuring the functional liveability and identity of the spaces of inhabitation. If technology wishes to offer a truly useful response, it cannot avoid a configuration based on the technique of composition, assisting with the configuration of the physical space of architecture, without which we cannot realise any true and long lasting connections with the inhabited environment.

Manu Rubio

1. Ideas on Dwelling: Does it Still Make Sense to Speak of Neighbourhoods?

1.1. Today more than ever. On the one hand, our network society facilitates access to a global society, though without the need for contact between people or "users", and working in essential social structures may now be much more important than a few decades ago.

On the other hand, working with energy - collected, distributed and transferred - and waste and resource management means that working with a system at the neighbourhood level produces significant energy savings.

1.2 We cannot generalize the concept of "existing city"; in many European centres the current city maintains these structures as a model of organization, both in historical urban centres and peripheries.

This does not mean they do not present problems, but I think they are a space of opportunity for sustainability and social cohesion.

Furthermore, as I mentioned in the previous point, the opportunities for energy efficiency are vaster when we operate at the neighbourhood level, with the possibility of generating flows of energy distributed among non-coinciding uses, we can take advantage of opportunities for renewable production, adapted to the characteristics of buildings, etc.

2. Strategies of Intervention for New Forms of Urban Dwelling

2.1 I believe that urban renewal presents the most interesting and sustainable model, at least for the city structures we manage in Spain. However, the most intelligent approach is that of using the appropriate tool in each case, in accordance with the particular needs not of an entire city, but rather of the units of implementation determined by the common denominator of homogenous parts of the city dealing with

similar challenges or problems.

Urban renewal should be affirmed as an integrated system for the rehabilitation of both built structures and public space, for the improvement of infrastructures and connectivity within a context of identity and respect for the memory of the city.

2.2 In my opinion, they must address the major problems and uncertainties of the society that hosts them.

2.2.1 It is not only a matter of architecture, as buildings by themselves do not solve people's problems, nor are they the only means of determining whether a part of the city functions or not. Private initiative, free competition, trends, decisions regarding taxation, licensing and activities, road design, connectivity, etc. are all important.

I believe that by beginning with urban planning regulations we can provide the structures of the city with tools for generating a *mixité* of uses, but they must be developed together with neighbourhood associations, merchants, entrepreneurs and those responsible for mobility, energy and waste management.

The definitive urban development of public space and the hierarchy of roads, as well as the creation of pedestrian islands are fundamental, though above all we must not seek to create something where there is no need or interest.

Other determinant factors are time and politics. Cities and their inhabitants have a memory and it takes time to establish routes and spaces for the local community. These urban processes are routinely associated with political opinions or governance of the city, and politics travel at another speed, with other needs to be satisfied in order to retain a loyal constituency, election after election.

2.2.2 I very much like the idea of intelligence/square meter. I do not believe there is a unique solution for all cases, but rather a need to apply a significant concentration and density of intelligence/square meter. I believe that concentration effectively presupposes evident savings in terms of infrastructures, as I believe that vertical construction obtains, using suitable methods, a number of more convenient results with regards to costs and repercussions on land use, though I must say more:

I believe that the evolution of housing through highly advanced systems of generation, co-generation and elevated energy efficiency, which come close to self-sufficiency, should allow us to locate these homes anywhere, without fear of dispersion, simply by renouncing a connection with general supply networks and the welfare that this entails.

On the other hand, I am progressively more convinced about the idea of property in the sky and not on the ground, such that residents can be owners of a built space, separated from land on which it is located. In this manner, the opportunity to exchange, purchase and sell space will be much greater, rendering the physical occupation of the city more flexible, while the decisions regarding land use, infrastructures and the management of networks will be the responsibility of the public administration.

2.2.3 As I mentioned before, time is a necessary factor in accepting formal changes; at least in the domestic environment, we seem to more naturally accept the evolution of home appliances, automobiles and all manner of technological gadgets and connectivity that change the classical structure of the home.

In social housing we often generate models that are more responsive to the needs and tastes of those who will never live in them, and whose livelihoods are closer to those of their architects than those of their users.

Yes, there is a sufficient gap for formal investigation, however associated with the quality and coherence of the general

structures of the built and urban environments, and always responding to people's real needs. People who must share the spaces of dwelling, the elderly, students, single-family parents, etc ...

In many cities it has been necessary to drastically regulate the acceptance of models that, by simulating a false image of innovation, concealed a real fraud with regards to minimum acceptable levels of lighting and ventilation, where the promoters saw the opportunity to produce homes cheaply and with a realistic chance of higher sale prices by following the dictates of a certain trend.

2.2.4 In general, at present, I tend to believe that if an activity does not generate benefits for anyone, it will cease to exist or will simply never be constructed. This is a shame, but we cannot forget that cities exist above all as a result of the concentration of human activities, that are both cultural and economic.

The search for activities and opportunities associated with housing and the investigation of the economic fabric necessary to satisfy local residents, as well as mixed public/private formulas, are capable of achieving excellent results in this direction.

It is not unreasonable to imagine that businesses and entrepreneurs can collaborate in the construction of the city in exchange for managing portions of infrastructures, networks, energy, etc.

2.2.5 I believe there is still a long way to go and we cannot speak only of the current period, without studying and extracting the positive consequences of the history of urbanism and architecture. There have been many more interesting and revolutionary experiences in other periods of European history.

The correct key for me at present is that of working with housing as an object of energy production and social and environmental sustainability; I believe that those who are working in this direction are on their right track.

In Madrid, the *Empresa Municipal de Vivienda y Suelo* (Municipal Housing and Land Company) has presented one of the most incredible and internationally admired social housing programmes, although the most important element is their involvement in integrated energy efficiency in construction and studies of social cohesion.

2.2.6 I absolutely refuse to believe that this model is a solution. I believe that in the last 10 or 15 years these growths have been the result of an amalgam of situations, within a favourable economic context, with a large concentration of land in a few hands and a political situation conducive to promoting the qualification of land use.

These urban projects seem to respond solely to criteria of maximum return on investments, paid off in square meters and the desires of the figure that stands to benefit from the vast commercial surfaces, almost always single-brand, in each development.

The destruction of public space and streets as spaces of relation is dramatic.

I believe that in the coming years we must also consider reform plans within these growths, in order to convert them into reality; although in some cases this will be difficult.

3. Research

3.1 I believe it is a mistake to consider the market as an enemy; utilizing a play of words and meanings, the market is the base of the historic city; we owe the existence of the city to a space of transaction between people, goods and ideas and in all likelihood the most interesting cities or neighbourhoods in the world demonstrate a frenetic activity related to commerce.

We must work with an understanding of these rules, and take

advantage of them.

I am unable to conceive of a form of a city that is wholly public, or subsidised, or free… it is simply unliveable and scarcely sustainable.

Another important aspect is that the market supports many facets, there are ways to find outlets for products that address quality rather than cost; we see this constantly and there is no doubt that society is willing to accept goods that insist on criteria of sustainability, and to place them above others that offer only an apparent economic advantage.

An education regarding the demand for quality and environmental respect is essential, though it will always be subordinated to the existence of a certain social sustainability that allows citizens to worry about other parameters, as well as satisfying their primary necessities.

3.2 To me the purely formal appears to be an accessory and of little interest; the investigation of building systems, materials, energy efficiency and the flexibility of the spaces of dwelling are much more interesting to me.

In some way, new requirements, habits and lifestyles will develop and end up changing and adapting the structures that house them, without a doubt. However, we must also note the fact that even today we are attracted to inhabit spaces from other ages that are highly ranked and where adaptation to the current uses of the old structures are more interesting and exciting than the occupation of an ad hoc space.

3.3 I have no doubts about this, as I have mentioned above. I can summarize in: flexible structures, with high energy efficiency, where the majority of energy is provided by systems integrated within the design itself, and therefore low cost, assisted by networks of services at the neighbourhood level, that offer the possibility to assign and share renewable resources between buildings, inserted within a shared space of streets used for interaction, with an elevated level of public connectivity.

The image or models that this may generate are nothing other than the successive possible steps based on the rules of the game.

Andrea Vidotto

1. Ideas on Dwelling: Does it Still Make Sense to Speak of Neighbourhoods?

While it obviously it still makes sense to speak about neighbourhoods and communities, the rush towards a positive response, with its progressive fideism and awareness of the value of the three aforementioned needs, should be reinforced by a specification: small neighbourhoods for limited communities. In fact, under current conditions, it is scale that renders the concept of the neighbourhood problematic, and that of the community even more critical with respect to the neighbourhood. Community requires shared acceptance, at least when a number of elements – even vague, oscillating and unstable – of collective responsibility are visible or perceivable in the positive effects they provoke in the portion of the built environment we refer to as a neighbourhood. This shared acceptance is manifested in levels of recognition and identification, determined by scale.

If we then ask ourselves just what a "neighbourhood" is, we must first of all specify its characteristics, based both on the history of realisations as well as on our personal experiences of the city. A "neighbourhood" for 30,000 or for 3,000 residents? How have relations with services

changed? What does a "service" become in the contemporary city?

2. Strategies of Intervention for New Forms of Urban Dwelling

2.1. There is no single recipe. The city, in all of its different parts and conditions suggests the opportune solutions, case by case, to those capable of reading and interpreting it. Satisfying needs of social, environmental and economic sustainability requires strategies of intervention in which the indicated methods are co-present. Personally, I am highly convinced of the effectiveness of operations of urban redevelopment, which means intervening in built and un-built areas.

We can refer, for example, to well known Roman examples: in Tor Bella Monaca it would be possible to redevelop the buildings of a few districts (connection with the ground, facades, new volumes on rooftops), to reorganise the area and offer a greater specialisation in the use of open spaces, to proceed with new residential constructions in areas correlated with abandoned services, in order to re-stitch and densify.

2.2. Working with unsuccessful projects represents an opportunity, though the substitution of disputable management with virtuous practices is not so simple. We must develop an approach that unites levels of local participation with the exemplification of expected results – advantages and economic conveniences – even in terms of real estate.

Urban quality is constituted of many ingredients, and the pathologies of a neighbourhood are nurtured through appropriate and shared projects, and through actions of institutional control, exercised with intelligence and firmness. The new is simpler, for both architects and builders.

The gridded system of streets and city blocks remains effective. However, we are not obliged to use square geometries or golden sections. Even solutions of close-set houses, a pattern that creates courtyards in the guise of pedestrian streets, favouring possibilities for encounter, configure welcoming urban environments. Various European cities offer brilliant examples.

Requirements for the positive outcome of courtyard spaces include functional integration, solutions for connections with the ground and the proportions between the height and width of enclosed space. All mediations between interior and exterior, including the sequence and hierarchy of accesses, affect our perception of the safety of collective space. Courtyard spaces that are too vast render difficult not only their management, but also their visual recognition; spaces that are too narrow require an excess of discipline and self-control on the part of local residents, who feel their individual space to be compressed. In both cases, residents react in self-defence: screens, diaphragms, fences, and displays of possession.

What helps is an overlap between different typologies and sizes of dwellings; the four stories can be realized by combining the habit of overlapping floors, with the introduction of duplex units. How does all of this change when the units rented or owned? When streets are lined exclusively with apartments, or also with shops? The specialisation of the qualities of street space is fundamental, and in the absence of services it can be obtained – on par with building setbacks – through the differentiation of roadbeds in relationship to traffic (more or less slow), the modelling of the road's path, variations in section, the layout of parking, the provisions of seating and rest areas for pedestrians and different finishes, from materials to artificial

lighting fixtures.

All of this is well known, though it requires projects refined in all their aspects, from costs to the efficient collaboration between a wide range of competences.

What returns to the fore is once again the question of community. What can favour its formation? In relation to physical space it is necessary that shared responsibility, at the very least, highlights the advantages, and ensures they prevail over inconveniences.

What aspects of rational habit and what emotional aspects act in the expressions of dwelling in such a strongly non-homogenous country as ours? In some ways it is easier to speak of urban peripheries and the public initiative that we would like to see develop, yet the disappearance of accepted plans and enlightened compromises leaves us without instruments. Thus it may help if the use of the few available resources pursued more financially fantastic approaches, less selective in their objectives. A number of differentiated experiments may serve as proof. In the event of errors, the contained scale of the inveterventions would avoid irreparable consequences.

3. Research

Research also serves the market, because investors and builders will inevitably have to face up to the new needs and new models of dwelling to which they must begin to respond. It is also obvious that it is easier to offer responses that act only on the surface, through the commercial assimilation of new languages of sustainability.

Activities of research may help to identify critical situations, elaborating methods for offering appropriate solutions and indicating suitable instruments for their implementation. However, in an operative field such as construction, research is substantiated through realisation. The verification of experimental building programmes is possible as part of a shared vision, based on the converging interests of who invests, who builds, who manages and who inhabitants. The guidelines of the regional *Piani-Casal* [Housing Plans] that articulate nationally approved legislation must favour innovative designs such that they explicitly declare their efforts to resolve new problems.

RESEARCH
The Communal Dimension of Dwelling

The Idea of Community in Contemporary Residential Settlement

Mariateresa Aprile

It is well known that the definition of urban space, and that of public space in particular, may be traced back to the need for social interaction. The forms of social interaction have mutated in recent years and this, necessarily, influences practices of dwelling and, consequently, the means of constructing local space.

During a period of global communication, the rapid transfer of data and rapid movement, individuals once again concentrate in small groups, in urban sub-communities not necessarily identifiable with spatial-territorial dimensions and defined by a network of acquaintances and friends. Sociological analysis, above all referred to new generations and new means of organising urban space, denote a return to the idea of community that appears to be the result of two opposing motivations: on the one hand the need to share and belong to an entity, on the other the fear of the outside world. Sharing and individualism act in the urban territory in ways that while contrasting, reproduce forms of community, both closed and open. Today, a community has new and significantly different characteristics than historically codified ones; the attention to the way in which social interaction takes place renews interest in the spaces in which it takes place, and thus the neighbourhood in which a community acts.

Is it still opportune to speak of a community in the design of the space of dwelling? There are many questioning whether new social forms can be identified with forms of community and whether, above all, they can be identified with the design of a neighbourhood. Instead, the ever more conspicuous references to community, in programmes and projects for dwelling, demonstrates that an attention towards community may lead to new forms of urban dwelling.

Does it Still Make Sense to Speak of Neighbourhoods?

Carlo Melograni

Beginning with a re-reading of Chermayeff and Alexander's *Community and Privacy*, the text offers a reflection on the possibility of identifying a scale of reference for the realisation of new parts of the city.

The author tests the hypothesis of using secondary schools as a centre of attraction for multiple relations, and thus as a dimensional parameter for new settlements.

A nucleus of secondary schools is capable of becoming a centre of interaction, not only for adolescents. A suitable network of connected facilities functioning on a fulltime basis, even outside of regular class hours and during vacation times, open not only to students, but also to those living in the immediate vicinity. Such a structure, articulated in distinct parts and, to a certain degree autonomous, may represent a key to rediscovering the unity between architecture and urban planning: proceeding not only from the general to the detail, but also in the opposite direction, from a study of individual elements to their composition at a larger scale.

The method of developing a project through the continuous alternation between a master plan and building solutions was employed by Van der Broek and Bakema in their Pampus Project for the expansion of the city of Amsterdam. The two architects proposed the composition of the dwelling nuclei that define a project using building types tested over lengthy periods of time. They did not expect the Pampus Project to be implemented in its entirety by repeating these models but, on the contrary, imagined that each part could be configured through the introduction of variations. However, it was their intention to expose the utility of an *a priori* definition of many of the basic elements of the plan. This method of working aims to reconstruct a modern unity between architectural design and urban planning, and between the latter and industrial design.

RESEARCH
Strategies of Intervention for the New Urban Dwelling

Renovation and New Expansions

Marta Calzolaretti

A range of different contributions, gathered together under the title *Intervention Strategies of New Urban Dwelling*, offer a selection of the most significant European experiences in the field of dwelling.
The current panorama of solutions constitutes a vast field of study in which it is possible to identify various methods of intervention that we intend to investigate and compare, evaluating their ability to modify and restructure the existing city. This examination also considers aspects related to sustainability, understood in its most ample definition: economic, social and environmental.
The questions raised by the new needs of contemporary society constitute the common point of reference for all new interventions, expressed through different strategies and forms, in some cases even contradictory. This survey allows us to orient analyses and reflections based on the examples considered.
The configuration of public space as a field of mediation between urban infrastructures and buildings constitutes a key node at all scales of design, in addition to being an element of innovation and experimentation, tied to both figurative quality and means of use.
Strongly related to this theme is the question of the density of settlement. A higher density makes it possible to achieve objectives of sustainability and to plan multi-functional parts of the city, able to host a plurality of inhabitants and achieve the level of complexity of services and opportunities that underlies contemporary dwelling.
Within this scenario, the variety of elements that define a settlement constitute a value that corresponds with the search for the specific identity of one's space of dwelling, in opposition to the repetition and homogeneity of many parts of the city and the phenomena of 'sprawl' found in many areas of expansion in large and small cities.
The themes briefly described above constitute elements of reference for interventions in the existing city, as well as for large expansions.

One level of intervention designed to respond to the current need for housing and the regeneration of urban areas is based on operations of renovation, infill, reuse and, in some cases, also includes the demolition and reconstruction of the existing built fabric.
Only by beginning with existing buildings is it possible to realise the necessary quantity of homes, renew the city and means of dwelling, eliminate areas of degradation and conserve the territory and the environment without losing the relationships that both old and new residents have developed with pre-existing urban and social structures.

Notwithstanding the widespread belief that the city must cease to expand, opting instead to reorganise itself from the interior, expansion projects continue to be an important strategy for many European cities.
In recent decades Europe's primary cities have begun implementing important expansion projects, pursuing strategies of settlement, in some cases highly innovative, above all for their solutions at the scale of the individual building or city block.
Analogous to other typologies of intervention analysed, these proposals and realisations will be described primarily in terms of their characteristics of settlement and the relationships between the latter and the scale of the built environment. Comparisons will examine themes of suitability, flexibility, variability, multi-functionality and, at the same time, the search for identity and recognisability, all of which are anything but secondary questions for our current global society.

The Regeneration of Residential Neighbourhoods in European Contexts

Domizia Mandolesi

There are many reasons for focusing attention on the "regeneration" of existing residential structures as a best practice on which to base a relevant portion of policies and projects for urban transformation. In particular, two main issues solicit interventions in this direction. On the one hand, the indications formulated in the new *Piano Casa* [Housing Plan], governed by legislation that varies from region to region, offer incentives, through allowances for increases in volume to projects involving the requalification of existing public and private residential structures that can be enlarged through additions. On the other hand, the need to reduce energy consumption and polluting emissions from domestic uses, as per the Kyoto Protocol, rendered operative in the recent guidelines of Italian Legislative Decree 2005, induces interventions in the majority of existing residential structures to complete the modernisation works required to meet new standards. Two different aspects, the first focused on increasing residential construction to meet the housing emergency, the second in favour of energetic and environmental sustainability; together they represent an important occasion for implementing, even in Italy, a new phase of requalification works at the vast scale that, if conducted as part of a prudent planning and strict control by the State, may have a more evident effect on the overall quality of urban contexts, with obvious positive effects on social and environmental sustainability.
Intervening through more or less impacting modifications to existing residential complexes, rather than through demolition, may in fact represent, other than an economic advantage to be evaluated under specific circumstances, a means of recognising, beyond conditions of physical and objective degradation, their value as hubs of social and cultural sedimentation related to the local population, and their position within a broader urban context. However, it constitutes above all a necessary part of an approach to environmental, social and economic sustainability, which substitutes the obsolete "throwaway" principle with that of recycling, which must be extended from everyday objects to buildings and urban contexts.
The article examines a selection of interventions that have

been implemented based on this approach in different European contexts with the aim of identifying methods and design strategies that, while tied to the specificity of individual contexts, can be applied to other realties with analogous problems.

Aesthetics and Energy Efficiency in the Redevelopment of Social Housing

Francesca Riccardo*

As demonstrated in numerous studies, 'beauty (is not) in the eye of the beholder', and aesthetic judgment is not a question of personal taste, but rather something that can be objectively described and quantified. These issues can produce effects on the architectural composition of buildings and, in particular, their facades.
Research demonstrates that an awareness of this type of data assumes particular relevance in the redevelopment of social housing because the aesthetic appreciation of residents is amongst those factors that contribute to improving the quality of life in degraded neighbourhoods. How are we to re-design building facades to be more aesthetically effective and energy efficiency? This question is the object of research conducted by the Faculty of Architecture at the Delft University of Technology in Holland. This text presents the methodological protocol for this study, introducing the theoretical background and describing the methodology adopted. In particular, the text illustrates the Discrete Choice Method (DCM), a method of research generally utilised in market research, adopted here to measure preferences regarding façade configurations for residential buildings. The DCM also describes the façade solutions to be tested, explaining the combined aesthetic and energy efficient effects of each system.

* Francesca Riccardo was a researcher with the department of real estate & housing at the faculty of architecture at the delft university of technology in Holland. For the study described in this text, entitled *facade re-design*, she collaborated with the research group composed of Clarine Van Oel, Peter De Jong and Paul De Ruiter, from the aforementioned university.

New Density, Urban Redevelopment and Social Housing

Rossana Battistacci

The text highlights the necessity, in Italy, for a change in the means of dealing with the demand for housing, above all when supported, for various reasons, by public funding. Beginning with a re-reading of the values of the city, of its discontinuities, of the quality of the urban landscape and its fabrics we can gather indications necessary for proceeding with interventions for the redevelopment of even the most depressed neighbourhoods, exploiting the opportunity to implement a process of energetically sustainable urban redevelopment.
One important reference can be found in the strategy for the urban redevelopment of Paris. The new *Plan Local d'Urbanisme* (PLU) is based on detailed research extended to the entire urban territory, and focused on evaluating possibilities for new constructions and the identification of

new parkland. At the same time, the Climate Plan, approved in 2007, introduced numerous indications and guidelines focused on ensuring consistent improvements to the energy efficiency of buildings by 2014. These priorities will guide the course of the new interventions defined by authorities to deal with the demand for housing in Paris, distributed across almost all of the city's *arrondissements*. The city does not ignore its less well-known and less attractive areas, but re-reads its different fabrics and intervenes by respecting diversity. An excessively unifying and homogenous urbanism is to be substituted by an approach that considers the diversity of the city's fabrics and landscapes.
The Municipality of Paris is thus focusing its attention on the residence, identifying opportunities for urban redevelopment even in its most historic areas, in some cases renouncing the typological characteristics particular to residential buildings. A range of examples describes this vast and complex urban redevelopment programme.

The Urban Redevelopment of Abandoned Areas

Alessandra De Cesaris

Recent processes of de-industrialisation in so-called advanced developed countries has freed up a significant quantity of lands located in strategic positions. What is more, while the process of industrialisation during the last two centuries represented the driving force behind urban growth, today the growing phenomena of de-industrialisation may represent an occasion for reconsidering the form and structure of the city. Following the phase of expansion, the contemporary city is in fact re-evaluating a compact and more sustainable urban model, capable of intervening in the transformation and redevelopment of abandoned areas, as part of a vision in which the city grows atop itself, and regenerate itself from the interior.
Densification is proposed not only as an alternative to the dissipation of the territory, a primary and non-reproducible resource, but may in fact represent an opportunity for experimenting with models of settlement capable of proposing a new and superior quality of urban form. Within this framework, the question of dwelling and the design of residential space may rediscover its central value through the identification of dwelling typologies capable of defining the variety of spatial situations and functions *mixité* typical of the city.

The most innovative experiences in Great Britain unite urban redevelopment, land decontamination and research into the quality of dwelling. London is exploiting the 2012 Olympics to redevelop the enter Lower Lea Valley that, in the next twenty years, is destined to become one of the prime areas for the development of the city, capable of offering between thirty to forty thousand new residences.
Turin exploited the 2006 Winter Olympics to restore over three million square metres to the city, left empty in the wake of deindustrialisation. The completed interventions represent an important inheritance in terms of infrastructures, services and residences for a city searching for a new identity. In particular, the majority of new homes designed for the Olympics are now used as *special* dwellings [for the elderly and infirm - TN], a type of housing almost entirely absent in the market.
As part of the vast operation for the environmental

redevelopment and urban regeneration of the Ruhr Valley, in the search for a renewed identity for this former industrial region, particular importance was given to experiments with new housing typologies.

A strategy of 'densification over time', based on the formula "while we cannot offer more land, we can offer more roofs" was defined in Barcelona, during the urban transformation of the industrial area of Poble Nou.

New Urban Expansions

Michela De Licio

While the expansion of urbanised territories in the majority of European cities, may no longer represent a line of research coherent with the necessities of conserving land, reducing sprawl and the dispersion of energy, infrastructures and resources, on the other hand it appears to be a necessary operation for responding to demands for

new housing mad by a progressively more differentiated user.

Confronting expansion is thus a highly problematic question, and has led in recent years to a significant variety of interventions that tackle and resolve different problems according to specific methods, on a case-by-case basis. Amongst these methods we can identify three that establish an equal number of relations with the pre-existing city and with the territory.

The first deals with interventions that attempt to create new parts that privilege relationships of integration with the natural landscape.

The second results from the creation of urban fabrics that propose schemes formed of the repetition of elements or unitary parts such as, for example, the urban block.

The third method is based on the ability of new interventions to establish relationships of exchange, connection and interaction with parts of the existing city. The article presents some of the most recent projects realised in Europe.

RESEARCH
Residential Settlements and Energy Eco-Efficiency

Eco-Efficient and Eco-Sustainable Experiments in Mediterranean Residential Construction

Alessandra Battisti

Experimental settlements in Europe are currently characterised by an attempt to promote innovation through evolutionary, organic and integrated energy efficient and environmentally sustainable housing. This approach is considered to be fundamental to the structuring any instrument focused on the development and realisation of an urban form that is as sensitive to social issues as towards ecological and environmental ones. Nodal fulcra of this research can be found in housing projects in Northern and Central Europe, presented as models of what can be obtained through contemporary experimentation. These projects create sustainable architecture with clearly recognisable characteristics that consider the complexity of the built urban environment. They begin at the scale of urban structures and peripheries, arriving at the building, its architectural envelope and its mechanical and electrical systems, based on an integrated approach to design that combines passive and active technologies to improve climatic comfort and reduce energy consumption and CO_2 emissions. It is now more urgent than ever that we examine the adaptability of these Northern-Central European examples to Mediterranean climates. As part of this approach, the article offers a framework of current research into the development of sustainable Mediterranean settlements. The most developed projects are thus focused on implementing an awareness of the necessity to radicality invert processes and methods of employing energy resources, in addition to focusing on the recovery of traditions and the use of solar technologies serving eco-efficient urban development. Within these operations,

residential experiments represent an attempt to transpose the inherent potentials of local cultural and the environmentally sustainable use of energy resources into architectural and urban forms – and thus into the forms of dwelling and living.

Technology and the Environment in Experiments with Eco-Efficient Settlements for Central Europe

Fabrizio Tucci

This text presents a re-reading of questions related to a specific relationship to the site and the manifestation of the close ties between man and the environment in the design of dwellings and settlements in Central Europe. Since the birth of the *Neue Stadte* in the Modern Era these conditions have defined a method of designing and building the city that, passing through a period of evolution characterized by their spontaneous and balanced growth was witness during the nineteenth century to the coining of the German term *Okologie* (Ecology). At the beginning of the current century we are now working with an urban dimension attentive to the concrete analysis of a New Nature, having dealt with a difficult moment of verification during and after the Second World War – surviving the convulsive forms of reconstruction and, what is more, in particular in Central Europe, taking advantage of this condition to re-found the relationship between man/city/environment – which has exploded in the recent diffusion across Europe of experiments involving technologies and settlements. These latter, beginning with the Central Europe of the *Okologisches Bauen* and the *Umveltfreundlickeit*, whose epicentre is situated in Germany, branched out to Northern Europe and the

Mediterranean, articulated in Urban Renewal and Green Technology in Scandinavian countries, in the Ecological and Compact City of Great Britain, in the school of *Environnement et Devéloppement durable* in France and activities related to the concept of the "appropriateness" and "sustainability" of the relationship between artifice/nature in Mediterranean countries.

In recent years, confronting the problem of ecological and energetic efficiency in the design of contemporary dwelling means designing with a particular focus on the implications of technology-construction and performance. These issues must be examined in light of European Guidelines for Energy Performance in construction and the use of energy, and the legislation developed in light of the latter in all European countries, beginning with those who were first to produce them. This new approach to design has been implemented above all in Central European countries, in particular in experimental housing neighbourhoods. These projects have involved architects who offer innovative design solutions focused on cross verifications of energy requirements for heating, ventilation, cooling and illumination. The triple objective of respecting European standards, of employing natural and "passive" ventilation, illumination and heating and drastically reducing energy consumption while simultaneously improving interior environmental comfort, may contribute to sensibly reducing greenhouse gases. Objectives with respect to which the experiments of the last 20 years in Central Europe are considered paradigmatic, but which must be studied and interpreted as part of the delicate operation of their transferability to Mediterranean climates, which necessarily transform their characteristics and contents.