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A program for INU

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A program for INU

*Federico Oliva**

Town planning reform is an unquestionable fact and the most part of the recent regional laws proves it, even if the law, foreseen by constitution and concerning the 'general principles of territory government', has still to be passed by Parliament. During next legislature, INU shall undertake to grant the positive conclusion of the law, through the confirmation of the public nature of planning and the proposal of the full equalization between restrictions and rights. It's also important monitoring the regional experiences that have already reformed their law, as well as all those regions that haven't effectively renewed their law yet.

Reform has to be carried on combining town planning subject analysis with everyday practice, as INU's tradition.

The first matter to be developed concerns the relationship between town planning and architecture, that is urban project question; such matter, in the past, brought to an ineffective contrast between plan and project and then to a greatest regard to architecture rather than town planning.

Recently, also in Italy, urban project subject and the relevant implementation modalities have been tackled, with particular care to citizens participation.

Another important aspect concerns the necessary compatibility between urban project and the essential elements of the plan, such as the mobility and the ecological network. This question, to be deeply analyzed, should allow town planning to be appreciated for its real role, concerning not only laws, control and administrative bureaucracy, but also project operations. A second matter concerns

the new transformation process interesting Italian territory, that produce great territorial imbalances. Towns have been largely changed and their geographic dimensions don't coincide with administrative boundaries any more; out-of-town territory is interested by a great urbanizing process. Transformation process involves serious effects (traffic congestion and other problems), particularly if mobility is based only on road system. Innovative town planning strategies, concerning an effective and sustainable mobility system, have to be implemented, as well as new centralities able to give order to settlement system.

The last two important matters concern house subject and periphery policies.

The first one has become topical again because of both the almost total absence of State in this question and the new features it presents nowadays.

INU tries to give an answer to these matters, proposing the implementation of State lands to be used for social aims and State building rights; both of them should be obtained by compensation (ordinary modality).

The second matter, characterized by international importance, should be tackled by comparing successful cases and their implementation projects, with particular care to peripheral areas and to project feasibility.

We have to analyze and compare real cases and not only theories, in order to understand the real effects they produced and the consequent peripheral redevelopment. The main purpose consists in generalizing the most convincing solutions and rousing real effects to national and regional legislative measures.

* President of Inu.

Not city nor yet countryside. A third territory for a landscape society

Mariavaleria Mininni

The present article, as well as the dossier it introduces, is focused on periurban agricultural land. It describes most of the pictures produced by the contemporary city and its sprawling edges, but also those due to a growing tendency to settle in the countryside. The countryside has always been characterized by slow growth processes and low settlement density, but it is now being affected by new social and economic practices that are transforming rural culture into a hybrid urban-rural form. Among these pictures evolving from different processes of rarefaction and densification of the urban space, both centrifugal and decentralized, the aim in the present work is to make an indepth examination of the space containing them, often ignored in contemporary urbanist culture because it has not been educated to recognize these aspects. This space is not referable as suburban, an imperfect city produced by its spatial contiguity to the true city, nor can it be regarded as a re-urbanization phenomenon because it is not generated by a sudden hypertrophy of rural settlements sprawling into the countryside and extending into adjacent urban tentacles. Even the different forms of agriculture produced by these periurban spaces have their own, innovative character. Unlike those of rural agriculture, which is indifferent to city models, they have drawn creative economic and social models deriving from the ongoing transformation of the rural world but above all from their proximity to the city,

inspired by the citizens' desire to return to nature and to occupy their leisure hours in pleasurable natural pursuits.

From some standpoints, it might be possible to describe this as a new form of suburb, a pluralist suburb, not only urban, built out from the city, but also rural, moving in from the countryside, and thus building a 'third territory' halfway between the urban and the rural. This research is an open invitation to town planners to pay a greater attention to this in between agricultural space, awarding it a greater autonomy.

From the suburb to the periurb

While the term suburb implies the notion of a defective city, of an imperfection of its fundamental prerogative as the central core, the term periurb aims to restore the idea of the city, attributed an inexhaustible role of organization of the territory which can establish ever new, interdependent and complementary relations. The study of the periurban space can thus be proposed as a new strategy for viewing urban sprawl, reconsidering the urban phenomenon and its context that features above all cultivated space, inviting a new way of seeing the combination of the picture and the background, as forms arising from a matrix, without needing to classify them *a priori* as either countryside or city. A new generation of landscape sprawl seems to be apparent in some socio-territorial instances, that demonstrate the decline of pure environments, the compact city and deep rural countryside. These instances are closely linked to the periurban territories. They stem from the erosion of the sprawled city and productive urbanization, and occupy those spaces that in the first generation of the sprawl were indeterminate,

grey areas of doubt. Like a third world, the periurban territories are now being subjected to deep study, part of a closer reflection that landscape culture has long proposed as a true thinktank on the contemporary city. As a result, an alternative view of town planning is emerging, not confined to inverting the priorities, from full to empty, but making a critical reading of the context.

For a sustainability ethic

Ever since cities first came into existence, the landscape society has built idealized forms of nature like parks and gardens inside the city, to satisfy the need for picturesque countryside and forests. In recent times, this tendency has been compounded by the pursuit of an urban model of ecological sustainability to contrast the degradation of the environmental resources. The issue of the sustainable city, revised in the light of a landscape focus, could offer a less anguishing view of the future than the environmentalist focus obsessed by the risk of catastrophic global changes. This revised view could recover the poetry of nature that a more sophisticated ecological school, nearer to citizens' needs, has been exploring for some time.

A new idea of nature, less exclusive and wild, is emerging, inspired by an aesthetic view that is less opposed to science and has lost its sharp angles, endeavouring to re-appropriate some of the wider ecological issues without resorting to the much overused terms 'sustainability' and 'environment'.

This culture refers to ecology by mediating its principles within a framework of more domestic terms such as the garden and landscape, reverting to ancient practices under the heading

of caring, of needing to pay closer, more careful attention and accepting responsibility for what lies around us.

The garden is a microcosm where the grandiose theories about cities are no longer in vogue, resorting to the ductile, deformable *maquette* of vegetable matter, massed trees, meadows, avenues, to capture the horizon.

This third landscape is a more radical concept than the urban countryside, as Gilles Clément has explained, where all the waste spaces are directly linked to the organization of the territory, of what is left of the territory after use, or before another use, including the remains of what remains at the borders of a decoupage, resulting from the application of town planning techniques.

From periurban land to proximity

Even the bordering environments of the urban countryside are more complex and not simply an expanded form of the city. The definition of urbanitas as an expansion of the classical *civitas* seems appropriate, that defines a city effect in the urbanized territorial forms where the links are more ephemeral, the identification is more symbolic or generic but the functional connections are more stringent.

Thus, the periurban space is an elaboration of the spatial category of proximity, reverting to the idea of a periphery of less spatially determined contexts and aiming above all to achieve an ideal of intercultural proximity between the city and the countryside.

To transform agricultural spaces into urban countryside, it is necessary to propose institutional proximity formulas starting from the concept of subsidiarity and incorporating the themes of recognition and belonging. Proximity in terms of nearby

services refers to a supporting network proposing a range of facilities and methods for responding to changing, ever diversifying needs by weaving a new web of social services and transport between spaces that have become contiguous. Spatial proximity refers to the need to set up new town planning techniques that can reconcile and draw together distant realities, residences and services, homes and roads, but also orchards and offices. Social proximity because citizens living in a society where the means of transport are ever more efficient may not feel condemned to choose the previous urban models that were once considered the only way to build a city. In town planning, there has for some time now been research into 'management town planning', concerned with making a capillary study of the life-styles and habits of a plurality of individuals, focusing more on the alternatives than on the needs. Landscape plans, landscape maps, country parks and city agricultural plots are all tools set up in the framework of the new methods for planning spaces starting from the inhabitants, by forging non banal identity relationships, activating policies combining the four concepts underlying a landscape design: intercommunity, enhancement of natural and cultural assets, spatial design of the landscape and local development supported by animators, who facilitate integration between rural and urban development policies. The above-described proximity is not, after all, far distant from the idea of empathy as an exercise in drawing near to the other. It proposes the image of a movement towards the other, in layman's terms the superlative of the relative

term neighbour, and assumes the plausibility of this viewpoint.

Empathy is the opposite of arrogance, says Cassano, when drawing near there may be a need to draw back so as to be able to talk and listen better, to stand on the border where the relationship with the other is most direct, least subject to deformation.

By considering periurbanity, friches, and ecotones we have attempted to cross this border, to imagine it not as a divide but as a synapse, not a limit but an expansion of the horizon where our gaze can focus on a wider area and our previous convictions can be expanded.

From a utopia to a real urban countryside

Pierre Donadieu

In western countries, to some extent rural areas have become spaces devoted to residence, leisure and tourism activities, not only in the mountains and at the seaside but also in the countryside. These spaces have entered a market that confers them a new social value founded on the high regard and function they are attributed. For a large part of society, agricultural landscapes have an even greater value in terms of the images they arouse, and the non agricultural practices they allow, than for their underlying agro-economic reality. I would name this society the landscape society, whose members share above all the pleasure, often ephemeral, of contemplating the landscape and walking in it, planning excursions to satisfy their curiosity and critical faculties. The members of this society are recruited certainly among tourists and aesthetes, lovers of beautiful landscapes, museums, monuments and parks, but also and even more widely among those who can count on 'time for themselves' to gaze at their extraordinary or ordinary world, without feelings of either resignation, or fatalism.

The landscape utopia and the city

The idea of enclosing urban growth in a network of green spaces with little or no builtup areas originated at the end of the 18th century. It was in England that the parks theoretician J.C. Loudon (1783-1843) first recommended embellishing cities with public spaces, right from the start of the 19th century, in order to create healthy cities protected against epidemics. This principle, together with some others (notably the taste,

cleanliness and safety of public spaces) was to be taken up again in Paris by préfet Haussman and Adolph Alphand. In the USA, A.J. Downing and later F.L. Olmsted laid the foundations for town planning, managing vast expanses of public green spaces, especially in Boston and Chicago, and later in New York. In Morocco, at the beginning of the 20th century, the idea of the city-park was experimented in all its grandeur in the European cities of the Protectorate under the aegis of J.C.N. Forestier and H. Prost, in particular in Rabat. The idea would be interpreted in France in the form of the city-garden, but was unable to withstand the influence of modern functionalist urbanism. Nevertheless, after the Second World War, the challenge of founding a capital like Brasilia inspired the town planner Lucio Costa, the architect Oscar Niemeyer and the landscape gardener Roberto Burle-Marx to attempt to create an urban utopia. So landscape utopias, although imaginary and unrealizable by their very nature, can still leave material, tangible traces. Like all such projects, they partly embody realities and partly mirages. In town planning, they have given rise to several aspirations: the urban pathogenic risk is opposed by the promise of hygiene brought by reparatory nature (green spaces); the need for public spaces for leisure pursuits is satisfied by the virtues of green areas opened to the general or specialist public; the longing for dreams and sensations, by the magical shapes and ambiances of the public park, etc. It is these very utopian trends that have led the landscape society to exert pressure on the urban authorities nowadays, demanding that peri-urban spaces be viewed as an

idealized urban countryside and not as the unstable, chaotic product of market demand and of the decrees of the public authorities. Indeed, this product really exists. In fact, it is quite common around small and some larger towns. In these cases the new urban fabric is intimately interwoven with the agricultural fields and greenhouses, like in the plain of Hyères in the southern French department of Var.

The urban countryside: projects for the landscape society

The urban countryside project attributes a number of virtues to agricultural spaces created with an urban perspective. From the town stand-point they can provide the citizens with fresh products grown locally, and offer rural scenes as a background for public leisure activities at a lower cost than public parks and gardens, as well as limiting or re-organizing urban sprawl. They can also become areas for recycling part of the urban organic waste, not to mention recycling the urban air, contributing to biodiversity by multiplying the borders of myriad different plants and, finally, managing the spread of the different territories, or protecting forests in the Mediterranean regions from fire. From the agricultural standpoint, the possibility of carrying out agricultural activities within the urban core is limited by urban constraints (traffic problems, the distance from specific agricultural services, the risk of contamination of fresh products by polluted air and, perhaps, water, product decay, not to mention the danger of theft). There are also the problems of legal successions and the sale of lands when terminating agricultural activities. Farmers may therefore quit the land unless invited to remain. Instead, if the farmers'

strategies are focused on the urban markets, they may try to attract city-dwelling consumers by devoting a part of their time to the sale of agricultural products. When this scheme is adopted, often thanks to lobbying by the associations and to the patient persuasion of the public authority land agencies, professional agricultural organizations and local and territorial communities, as soon as the agriurban utopia becomes a material reality, it allows the city inhabitants to walk in nearby countryside created especially for this purpose, to buy fresh or processed products at the farm or even pick themselves (fruit, vegetables); teachers and families can exploit the farm for educational purposes; fishermen and hunters can practice their favourite sports; nature-lovers can explore the area; aesthetes can enjoy their favourite views of nature. Lying beside the town, the countryside becomes a green urban infrastructure and landscape gardeners and engineers can devise landscape routes and roads crossing the agricultural spaces. But in these residential country areas, the urban farmers sometimes bear little resemblance to their rural counterparts: pluri-entrepreneurs, salesmen, hôteliers, owners of restaurants or organizers of guided visits, they no longer look down on the town but on the contrary welcome it as a market for the goods and services they offer. They can also provide these goods and services to the urban authorities that pay them: taking care of the upkeep of the roadsides, hedges and water courses, clearing snow from country roads, offering agricultural landscapes dedicated to leisure and tourist activities, etc. The promise, which is sometimes kept, is that of

imprinting each periurban site with a clearly recognizable urban identity, building this image by means of collaboration among the agricultural actors, the town-planners, the inhabitants of the town and consumers. From this standpoint, the town is no longer the enemy and destroyer of the countryside, but a power for conservation whereby the countryside is re-invented to the advantage (but not exclusively) of the town but where farmers, too, have a role. Failing this solution, as an alternative to 'suburbia', the public authorities can decide to devote the open spaces in towns to re-forestation and the creation of public parks.

Is it better to live in an urban countryside?

In practice, this vision of the future requires a social pact to create a usable territory devoted to the habitat, agricultural employment and trade. François Ascher, sociologist and writer, pointed out in the year 2000 that information and communication technologies do not differentiate among places and situations.

Traders should therefore focus their attention on the possibility of 'cohabiting', for example in the shopping centres and malls.

From this perspective, the social challenge is that of contributing to rebuild an urban link to agricultural products and landscapes, a link that no longer exists, or is contested, or has now become merely virtual, promoted by the media.

This challenge does not only have implications on the creation of more space for agricultural practices but also on the quality of the agricultural products available in urban areas.

Stakes of new agriurban territories in Ile-de-France

André Fleury

The expression urban agriculture has appeared for eighties to qualify family gardening, developed as an individual answer to food crisis of developing countries. It is also used, a decade ago, to analyse the twin social identity of periurban agricultural areas, at time inhabited by farmers and by commuting city dwellers. Such a settlement was permitted by merging of usual country and city housing, thanks to advent of individual cars. So, this urbanisation movement was inventing a new alliance between city and periurban agriculture, often formalized in a common chart. However, Ile-de-France had preferred country parks, near of region boundaries, far from building areas; so, intervening areas were de facto devoted to future urbanization. But, new inhabitants has locally assumed power to keep life framework they had chosen; they have invented agriurban territory.

The agriurban project of territory, or agriculture as an urban component

The usual concept of urban parks excluded any kind of agriculture; these parks was designed and implemented with higher horticultural know how. However, towards 1900, a new urban planners generation have conceived another kind of green city, by including farmland. Especially, E. Howard in England, inventor of Garden Cities and green belt, and J.C.N. Forestier in Paris, who thought of a park system. For early sixties, the environmental revolution put nature forward. So, 1976 Ile-de-France master plan designed preserved natural areas to balance built areas, considered as antinature.

Later, their outside part was managed as Regional Country Parks (Parcs Naturels Régionaux, PNR); but, their inside parts were excluded of this label. Located near urban fabric, they could not considered as natural enough by National Nature Protection Commission. So, these PNR and large heritage forests are making a rural belt all around Region. Between this rural belt and central urban fabric, a gap was so maintained, registered as Green Belt in the 1994 master plan. It is devoted to be the green and landscaped framework of urban core (Paris and suburbs). But, in this area, there was no management project, up to local citizens take initiative for preservation of the life framework they have chosen. So, they has invented the agriurban project of territory

The main stakes

New meanings of farmland are appeared. In 1973, a 2,000 inh. quiet rural village, Périgny-sur-Yerres, was enjoined to let build 4,000 social flats block in place of fields. When they got this project was given up, city councillors understood that urban planners saw their countryside as vacant, meaningless place. So, they conceived and implemented a multifunctional park: a market gardening area, surrounded with public paths and an environment education house. So, farmers were becoming actors of common territory. From point of view of urban dwellers, that means new relationships both to open space, henceforth considered dynamic landscape and heritage, in co-evolution with agriculture, and also as a urban recreational areas. Rurban dwellers highlight modernity of their rurban housing, absolutely different of suburban one. By choosing their living place, they have invented a new

art of living: rural landscape is become residential infrastructure. So, they grab hold of city council and create new relationships with farmers, heirs of a long tradition of innovative entrepreneurship. A lot of the latter have adapted their farm systems to new chains and new fields, thanks new know how. Others keep their usual arable crops farming, and empower their agricultural system by enlargement (> 1,000 ha) and new strategies of quality; so they maintain rural landscape.

These new territories needs to define identity, between invention and re-discovery. In comparison with this one of Paris, suburbs are short of identity; so, it's a major action focus for new elects. Best policies are looking for a linkage between past and future: the Triangle vert des Villes Maraîchères du Hurepoix underlines both market gardening, enrooted in a long history and its new state of green oasis in heart of a huge banal urban fabric; the Plateau de Saclay binds modernity of a scientific pole and modernity of successful agriculture.

If such sound characteristics are lacking, identity can be re-invented: it's especially the case of new vineyards.

The last stake is to highlight the differences in comparison with near territories. For instance: banal suburbs against specific agriurban territories; ß social composition of population social housing against quasi cottages. These distinctions are often underlined by boundaries style (maintaining of a fields belt around city) or by rating plates (you enter a PNR), etc.

Because of these common features, these territories would like to manage a network, at a time for exchanging experiences, and building a common representation face to regional government. Such

a network exists in France since 2000 (Terres en Villes); early warning signs can be observed in Europe, such as new network called PURPLE (PeriUrban Regions Platform in Europe).

A new governance

If concept of agriurban territory is now well designed, a true cultural revolution is requested to a lot of territory stake holders who don't understand still how agriculture could be urban: urban developers, who are thinking development only as jobs, taxes and growth population; city department of green spaces, who don't deal such an idea of green urban breaks; ecologists, for whom agriculture is not nature, and farmers themselves who have other conceptions of their job. Another local management is requested; till now, city dwellers moving to country were not fond of agriculture, they often want to rule, because of farming nuisances. But, in agriurban projects, agriculture is asked to stay along. So, the first step results in a chart, founding document of new alliance between city council and farmers; it established a common will that urban agriculture is no more only community gardens or public parks. Generally, the main commitments are due to city, because urban policy has never taken agriculture in account. An action programme is necessary to give again confidence to farmers, for whom the usual process was to be pushed away. First step is to restore management freedom for farmers, too often harmed by city dwellers way of life. The prime example is this one of business parks, which must be attractive test for enterprises; it's the same for agriculture. Main questions concern traffic, crop safety, long term land safety. The second one is to

sustain economic projects, for which countryside as an infrastructure; so, goods and services value can be emphasized. Useful tools are different kinds of contracts, such as now sustainable agriculture contract, created by French government.

Conclusion

At time of globalisation, agriurban project expressed a new modernity of urban design. A new basis of urban planning was permitted by a socio-geographic analysis, called urban areas (aires urbaines). More generally, new concept of urban region is more and more shared, and request to recognize nature a part of city. From this point of view, agriculture can be nature, whatever farming systems, except intensive breeding of course.

Agriculture and the rights of citizenship

Serge Bonnefoy

The relationships between the city and agriculture are as old as the concept of city itself: the primitive accumulative city, the cereal market city, the city marked by agricultural supremacy and union unrest, the city that gives its name to local controlled origin products, the city as an agricultural shopwindow.

These relationships affect agriculture both in proximity to the city and in the larger scenario of the Regions and, indeed, have a bearing on agriculture in general. But it is in proximity of the city that agricultural practices, known as periurban agriculture, are most directly affected by urban development, by the evolution of the dichotomy agriculture-society, city-countryside, urban-rural and, lastly, city-nature.

The periurban agricultural policies that have emerged over the years have followed a tortuous path, contrasting with the classic paths of the great public policies. In France, the issue is a complex one because it depends on one hand on the urban planning sector (the Ministère de l'Équipement, town planning agencies) and on the other on the government sector for agriculture (the Ministère de l'Agriculture and professional farming organizations), each of which frequently passes on the buck of responsibility for periurban agriculture to another sector. The State has intervened only on a few occasions, while on others it has attributed this responsibility exclusively to the territorial authorities. Although the periurban agriculture issue first raised its head in the region of the Ile-de-France, at the beginning of the 1980s, it was in the Rhône-Alpes region that territorial periurban policies first made

their appearance.

These originated thanks to a convergence of interests, an alliance among rural planning experts, town planners concerned with the territorial balance, active researchers in the field, the leaders of the professional farming categories and the political authorities responsible for rural agglomerates. The innovation was facilitated by the good relationships that developed among the State, the Region and the Department.

In the '90s, the 'Grenoble variant' triumphed, to the great advantage of the intermunicipal areas and of local governance. At the end of this decade the State reappeared on the scene, heralding 7 infield agro-urban projects.

The creation of Terres en Villes in June 2000 and the new involvement of the State placed a symbolic end to half a century of the dilatory formula, 'on the agenda', that had characterized the periurban agriculture issue. The territorial dimension of this policy is nowadays more widely recognized and it is to be hoped that it will be incorporated into territorial planning in general.

For a long period, the leaders of the profession believed that the peri-urban farmer would 'keep going' by selling land for building. Nursery gardeners inside the green belt have long been considered a world apart, and the denomination periurban agriculture was looked down on by country cereal farmers and qualified breeders, as if use of the term would demean the farming profession and acknowledge defeat of the rural by the urban world. Nowadays, the periurban situation is a microcosm of all the main contradictions of French agricultural policies, and has obliged farming professionals to question the meaning of their job. Nevertheless, in the last fifty years periurban

agriculture has won full rights of citizenship, becoming an important focus of public policies nationwide and taking its place in local urban and agricultural history.

Agricultural and nature fairs organized by social groups and local institutions have resulted in this type of agriculture being attributed countless strategic objectives, often of a contradictory nature: territorial balance, attraction, quality of life, economy and employment, quality of urban products on offer, landscape and biodiversity, asset and identity, social integration, protective barrier against natural hazards.

Since the first urban Regional agricultural program, drawn up in Lyon in 1979, the processes and formalization of local agricultural policies, known as periurban, have gradually been improved.

The process generally occurs as follows:

- a triggering event or facilitating institution causes the intermunicipal area or the body representing the interests of the entire farming profession in France, i.e. the Chamber of Agriculture, to set up a partnership in favour of periurban agriculture.

- a preliminary diagnosis is made, adopting a different approach, which facilitates the procedures and the definition of common goals for the partnership;

- the common goals are then formalized in a document signed by the partners; this document is generally called a charte agricole, (agricultural charter), a protocole cadre (cadre protocol) or a projet agri-urbain (agri-urban project), promulgated in a pluriennial action program. These goals are echoed in the main political documents of the urban Region: Projets d'agglomération (Agglomeration projects), Schémas de cohérence territoriale (Territorial

coherence schemes);

- finally, an agreement is signed between the intermunicipal area and the Chamber of Agriculture or, more rarely, an association granting equal status to the different actors is formed, defining the methods for implementing the action program.

The content of territorial periurban agricultural policies

An analysis of the actions taken in the territories adhering to the Terres en Villes project, reported in the databank that collects the experiences of the network, reveals that the themes taken into account by the agglomeration policies are fairly homogeneous:

- actions in favour of the protection of farm estate and programmed value enhancement of farm and forest land and nature oases;
- actions in favour of the agro-environment and biodiversity;
- actions in favour of the sustainability of farmers and foresters activities and of agricultural settlements;
- actions in favour of farm and forest economies and especially value enhancement of local produce in the urban consumer pool;
- actions enhancing the value of agricultural and rural estate in urban communities and fostering good relations among farmers and city-dwellers.

The land estate issue is central to periurban agricultural policies and is constantly raised by the farming profession, that calls both for clearer and more sustainable rules and for a better apportionment of land use to balance large urbanization projects, for instance.

The first type of action aims above all to ensure that farm and, in some territories, forest land are attributed a greater importance in urban

planning, and to increase the level of protection of non built-up land. The second type aims to achieve correct management of the effects of urbanization on farmers and farm estate. This largely involves new expropriation, creating land estate reserves that will then enable exchanges and the recreation of commercial farming estate and vital agricultural spaces. In order to guarantee the protection of agricultural spaces, it is not enough to convince the urban authorities and other actors of the need to protect periurban agriculture. This protection must also be meaningful to the citizens and respond to social needs going beyond those of simple agricultural production. The inevitable corporate professional spirit needs to be overcome so as to promote programmed, multifunctional management of farm, forest and uncultivated land. This is why periurban agricultural policies intervene at three different levels:

- at the level of the farm (Aubagne, Grenoble, Rennes), or more rarely forest (Grenoble), encouraging agri-environmental or sylvan-environmental, as well as multifunctional undertakings. The aim is mostly to adapt the European and national norms to the local territorial priorities: the centralization of French governmental policy makes this attempt to achieve coherence somewhat difficult;
- at the micro-territorial level, in areas of less than 1,000 hectares, in agreement with the other actors, to establish the goals of the management project and the priority actions to be taken. This project proposal is ratified thanks to the Law for the Development of rural territories, that sanctions the creation of intervention perimeters within which

natural and agricultural periurban spaces are fostered;

- at the level of the urban agglomeration or Region, to define the governance of the farm, forest and uncultivated spaces.

The second fundamental tenet of periurban agricultural policies after the protection of agricultural spaces is global agricultural development. The actions furthering this purpose vary from one metropolis to another according to the different types of dominant agriculture: the main aim is to create a network of vital commercial farms characterized by a high degree of sustainability. The creation of local trademarks guaranteeing the quality of the product and introducing a coherent marketing and promotions policy corresponds to an overall policy of short circuits. The actions in favour of farmer-citizen relationships set up by the actors of the Terres en Villes agglomerations cover all the areas. The principal aim is to increase the citizens' knowledge and understanding of farming and the forest, and of the farmer's identity. These actions are much in demand by farmers as they appear to be a means of eliminating the isolation of periurban agricultural professionals and combating stereotypes. The europeanization of the urban issue, of periurban agriculture and the governance of open periurban spaces is already underway, as demonstrated by the PIC Urban, Interregional projects III B that define the governance of periurban farm, forest and uncultivated lands, and by the deliberations of the European Social Economics Committee of July 2004 on periurban agriculture, as well as by the creation of the network of peri-urban regions: PURPLE. One of the most important developments of the

upcoming years should be the implementation of a management policy of open spaces, complementary to, but distinct from the periurban agricultural policies. It will then become apparent whether periurban agricultural policy can 'fit in' with the policies for non built-up land; this conviction is strengthened by the behaviour of the urban visitor in search of the regenerating effects of 'nature'. Agriculture would thus be reduced to the status of a tool, like many others, serving to enhance the city asset. But adopting this view would mean neglecting all the other open challenges of periurban agriculture and the restraints of public management. A management of open spaces that does not succeed in creating wealth seems to us bound to fail in view of the European strategy defined in Lisbon and Göteborg. But the reasons behind this are largely social: in recent years, themes such as the greenhouse effect and the notions of the sustainable city, energy, public health as well as social integration and identity, not to mention the harmful effects of urban sprawl, have come ever closer to the forefront. The most recent focus is on the effects of classic farm produce in countering the growing problem of pediatric obesity. The social and economic challenges raised by periurban agriculture are too great to allow us to evade the issue and its myriad implications.

The agricultural areas in the peri-urban Italian parks: toward new models?

Paola Branduini

The projects of valorisation of the agriculture in the Italian metropolitan areas have had above all origin inside the initiatives of the peri-urban parks. The debate on the role of the protected peri-urban and metropolitan areas has received vigour on the occasion of the second national Conference on the Protected Areas (Turin, October 2002), in which has been confirmed the idea that the peri-urban agricultural areas can have the task of approach between the rural and the urban culture, through new models of management. The Italian territory presents some experiences of plans already realized or in progress: among these some are meaningful for the expressed idea of peri-urban agriculture, for the actions in progress and for the role dressed again by the actors of these territories, stakeholders, citizens and farmers.

Which idea of agriculture in the peri-urban?

In the park of the Po torinese, belonging to the project of Green Crown, agriculture is considered as producer of environmental good and in order to that able to offer a landscape of quality. The landscape improvement can be solved by an enhancement of ecological network.

In the metropolitan Park of the Hills in Naples the productive role of the peri-urban agriculture is explicable through the promotion of products of quality certified by the Park. The biological offer of the typical productions is also the proposal of the consortium RomaNatura in order to maintain the bond with the Roman countryside and the city.

In the North and West Parks of Milan, agriculture has passed through a trial of incessant erosion to the recognition of its role of filter, that has allowed her to maintain its physical space. In the South Park of Milan agriculture is still productive, but it should reinvent its relationship with the city through more direct links, allowing the citizen to recognise an agriculture producer of good not for distant markets but for a near clientele.

The actions on the territory

In the areas where a consolidated tourist tradition and of typical products is present, despite the fragmentation of the territories, actions improving tourist offer as paste of the peri-urban offer have been privileged (Rome, Naples); in the areas with more compromised agriculture and crushed from urbanization (Milan, Turin), environmental actions retraining to improve the landscape quality of the pedestrian mobility and cycle connections were engaged.

The public administration is the promoter of the initiatives, the manager of the protected area is the maker; it can coincide with the public administration or to be submitted to other subjects (CFU in Boscoincittà, Milan). Sometimes a global regional project is at the base of the operational choices of the park management (Turin, Naples).

The citizens' participation in the decisional trials is sometimes dominant, sometimes is still weakly. In the parks of the west Milan the involvement of the population has been decisive for the realization of some works, coordinated by the personnel of the park and completed by the volunteers: this has favoured the awareness and the education to the

green as public good.

The involvement and responsibility of the farmers in the projects is not always clear. The farmers of Palermo-Ciaculli have initially had a key role in the process of construction of the park: at first informed, to get their assent, they have initially answered with distrust, egoism and closing of it, later with an wide adhesion, signed by a convention. In the metropolitan Park of the Hills in Naples the farmers were called to be the principal makers of the diversification of the agricultural activity through educational actions and direct sale.

Toward a city comprehending her agriculture

Recurrent idea is that the preservation of the landscape passes through the promotion of a biological agriculture, as guarantee of the traditions and the local identity: but also a modern agriculture can be witness of the vocation to the precursor of a territory. Introduced experiences testify of a certain fervour inside the peri-urban parks, even though with vigour and speed more or less sustained: above all an afterthought of the traditional models of the parks is noticed, toward more projects and less plans, coordinates rather than isolated actions, consultations and involvements of the population also in practical activity. This enthusiasm testifies of an European interest on this theme as the birth of the net ENUPA (European Network on Urban and Peri-urban Agriculture) and some ended INTERREG projects (Métropole Nature) or in progress (Extramet), as other experiences going ahead in the peri-urban territories not delimited by a protected area.

**The viability of the
Agricultural park and
ongoing re-interpretations***Francesco Coviello, Giorgio
Ferraresi*

assumption of the pressing
needs related to the themes
of local development within
the classic process of
planning may be read once
again in terms of social
processes.

This contribution is the
introduction to a repertory of
cases, leading to a phase of
redefinition of the topic of
the Agricultural Park.

The repertory of
experiences emphasises
the strong redesigning
under way of the planning
practices based on the
strategic value of the
Agricultural Park intended
as a tool, an operating and
design option aiming at
defining the development of
potential open spaces by
promoting processes of
protection and exploitation
of local cultures and
agricultural productions
typical of the rural district
involved. Thus a strategy
oriented towards the
protection and the
exploitation of primary
production on the one hand,
on the other hand targeted
at the cultural and playing
enjoyment of environment
by citizens.

Consequently the analysis
of such experiences takes a
founding connotation as it
makes more complex the
theorisation of the
Agricultural Park because
attention is centred on the
growing structuring of social
networks, institutionalised
according to various
degrees, capable of
directing planning tools at
different levels and wanting
to redefine the supply of
foods on the basis of the
quality, the specificity and
identity of the product itself.

We are dealing with a
comprehensive survey of
experiences testing
solutions intended for
relaunching the planning of
open spaces. Therefore
such a reading leads to a
set of problems which seem
to show a kind of cultural
change of great importance.
Finally, it can be pointed out
with special reference to the
process of structuring of
social networks, how the

A strategic challenge

Fabiano Belcecchi, Daniele Olivi

In Jesi the Mayer and the new Commune Council, which has been in office since June 2002, guide a series of policies forming a program for the governance of the territory, whose culmination is the fulfilment of the *Variante generale* (general zoning variance) of the Prg (town development plan).

In September 2003 the Commune Government prepared a "program to fulfil the Prg in force from a strategic and ecological point of view": a plan uniting the dimension of land use regulation with the wider planning of the policies of governance, which are related by the shared aim of sustainability as an necessary presupposition for lasting development. Achieving this decisive choice has been planned by integrating traditional regulation based urban design and planning with two voluntary instruments aimed at ensuring the environmental-participative and strategic-planning character of the choices: Local Agenda 21 and the Strategic plan. Followed by the other important decisions then taken by the Commune Government: appointment of a group of planners composed of young professionals and people from academic university life (specifically DIAP, the Department of Architecture and Planning at Milan Polytechnic, has been appointed as consultant to the strategic plan and town development plan, particularly Sandro Balducci and Patrizia Gabellini, the latter being coordinator responsible for the whole *Variante*) with support from the local Commune offices. There has been considerable discussion, comparison, and further development of Local Agenda 21, the Strategic

plan, and the *Variante generale* of the town development plan so that documents activating the same activities have been produced: firstly, the strategic plan for 'Jesi in 2020' with its four territorial development projects and nine growth promoting actions; secondly, the Piano idea and the Approfondimenti for the new city design; thirdly, the State of the Environment Report, the local action plan, the VAS (Strategic Environmental Evaluation) in agreement with the provisions of EU directives; fourth, the environmental accountability of the local authority, that is, the Commune; fifth, starting to gain ISO 14001 certification and EMAS registration of the Commune; sixth, application of European, regional, and local decrees; and lastly, being a local part of a wider network. In short, the use of these operations in the design of the new city has attempted to change the political paradigm in terms of shared and strategic planning, promoting and experimenting with good practice for sustainable and lasting development, applying strategies to the city as a 'strategic territory', playing a part in 'archipelago' systems-economies composed of horizontal and transverse city networks or groups of cities in which small communities like Jesi play a role and enjoy opportunities that would otherwise be impossible.

The experience gained during these three years has led to the feeling that the program, because of its experimental nature, has many strong points but also a great many weaknesses. The strong points include the use of 'local knowledge' in the planning process (in a non-technical sense) provided by citizens and public-private organisations located in a wide area, the systematic return to and

contextualisation of supra-local commune territory transformation projects prepared by third parties and informing the heedless local community on a regular basis, and the osmotic and synergistic use of three differing instruments (*Variante*, Strategic plan, and Local Agenda 21). The weaknesses include the failure of the political decision making system to comprehend the meaning and significance of this innovative initiative. In some difficult situations the political decision making system has seemed to fear lack of respect for its own institutional prerogatives, and there us a lack of specific and modern regional urban design and planning regulation, which is still in the process of being elaborated.

Aims, framework, and direction of work in Jesi

Patrizia Gabellini

One of the first actions taken during initiation of work in September 2003 was recognition of the documentation transferring the railway goods marshalling yard from the commune of Falconara onto commune of Jesi territory. So a transformation process was activated which also initiated discussion on the new character of a 'small compound city', which fuelled the development of the preceding town development plan. The following factors immediately loomed as a unified group of significant phenomena: the arrival of the interport followed by the goods marshalling yard, substantial expansion of the Zipa industrial area, the growth of the nearby Falconara airport with its new station providing an underground railway service, the multiplication of huge commercial and sporting structures, the location of managerial centres belonging to several banks, the increased traffic along the highway in the form of both goods and people, and the strong development building pressure. This diffusion of value adding functions throughout a 'web of value' was required in Jesi so that it could become a fully interconnected component in the process of transforming central Italy, and more specifically, inserted into the corridor which connects the Adriatic to the Tyrrhenian Sea. The proposals in the Piano idea, refined through the *Approfondimenti* and the *Bozza del Progetto comunale del suolo*, are meant to represent this new character of Jesi as a provincial 'administrative centre', 'widened centre' of an extensive territory, outlining a future focusing on the simultaneous

presence and quality of various territorial resources: broadly speaking, infrastructure and scenic panoramas.

The development plan for a specific territory is fraught with difficulty as it attempts to adapt the shared rhetoric and objectives to the context within a specific period of time. In Jesi the first territorial translation of what today are recurring motives (accessibility, polycentrism, habitability, sustainability) takes shape in the Piano idea, manifesting themselves in the recognition and consolidation of a differentiated road network i.e. the creation of a system of local subcentres. This contains the compact fully built-up city to the west, the discontinuous additions to the east, and developments in villages with good accessibility; restructuring of weak parts in the lower city, and restructuring of rural areas in terms of economy, nature, and as a place to live; lastly, significant large partitions of the territory in order to make ecological corridors.

Approfondimenti on the public city, mobility and housing policy, plus the *Bozza del Progetto comunale del suolo*, have progressively refined these orientations and brought about the nodes and connections that now characterise the new urban and territorial structure, managing several points in doing so: the 'Esino Corridor'; the 'ecological network'; the 'historic city'; the 'villages' of old hamlets and new developments; 'viale della Vittoria' and 'l'Autostrada' (the Motorway); the 'west ridge'; the 'railway axis'; the 'public city'.

The Atto di indirizzo (Planning Policy Guideline) with which the Commune Government activated the development required "Learning from the requirements of the Secchi plan", considering this plan

to be 'the reference point'. In effect, this plan has been a legacy with which to confront the following from various points of view: incidence on the urban structure; the value system introduced; the regulatory framework defined.

The Secchi Plan has interpreted the incipient dynamics of manufacturing re-conversion that will make ample industrial areas available for other uses during the course of the next few years. The localisation of old mills and works in the lower part of the city decisively favours infrastructure, new residential development, and tertiary uses to the south, and the stopping of the dynamic expansion of large residential areas on the hill to the north. In particular, the mobility system and the relationship with the historic centre have been radically modified. This profound upheaval is not shared by all, is not completely inclusive, and has not been concluded yet, leaving problems for the new plan to solve.

The Secchi plan identified urban and rural areas possessing differing characteristics, values, and problems, listing as many projects again based on the morphological and typological studies and the meticulously detailed layout of the open spaces (for the first time *progetto di suolo* is spoken of). The Secchi plan's greatest legacy is that this group of values has taken root in Jesi. "A compound city with parts", "The city within the city", "Planning the margins", "Crossings" are synthetic expressions of this value system around which the Piano idea revolves by interpreting these values. Problems are sorted out in the daily management of the Prg, especially the activation of the morphologic regulations. This has produced a large number of both substantial and insubstantial variations

concerning the 'project specifications and schedule' and other articles in the standards and regulations. Reforming the regulatory framework is among the main aims of the *Progetto comunale del suolo*.

In terms of the direction desired, confronted, and organised by the urban planning operation, the choices in the Piano idea have run into obstacles. It took eight months to resolve the impasse (consigned at the end of July 2004, the Piano idea was brought before the communal Council at the end of March 2005). This was made possible by the decision to approve the choices on which there was agreement and to postpone the other three *Approfondimenti*: mobility, housing policy, and the public city.

The concomitant decision of the Council to develop a *Bozza* in advance of the *Progetto comunale del suolo* recognised the need to confront and compare so that other relevant choices could mature before the definitive version of the town development plan was produced.

Approfondimenti del Piano idea and *Bozza del Progetto comunale del suolo* have occupied the logical and temporal space with new studies, proposals, and projects which are to be found in the strategic-structural plan and the development-operations plan (i.e. the Piano idea and the *Progetto comunale del suolo*), attempting to cover a distance considered excessive. If the Piano idea had concentrated on modifying the new character of Jesi, indicating the general aesthetic lines and the directions to be followed from a strategic point of view, the *Approfondimenti* were used to reopen the cognitive phase in which improved understanding, specification, discussion of the merits of solutions, and comparison of alternatives was required. The *Bozza*

has completed the framework of expected transformations, verifying previously formulated hypotheses and carrying out other planning explorations aimed at identifying irrefutable quality needs, and continuing in some cases to look for alternatives. It has also provided initial findings for zoning criteria and for the equalisation model.

The *Progetto comunale del suolo* must complete the process of developing the new town plan by identifying different 'situations' to which the urban design and planning rules can be applied, regulating the land and property rights.

Compared to the form a town development plan is usually presumed to take, several 'anomalies' can be recognised in the documents articulating work in Jesi.

Contingent factors, together with the conviction that the investigation 'for' the plan should be explicitly explanatory and developmental, are presented in dossiers.

These are folders containing a variety of information on the same aim or theme. The 13 dossiers of the Piano idea contain studies into the new phenomena, involved the reading of pre-existing plans and projects, several exploratory studies and the initial development of relevant aspects of these, and contain the variations, plans, and programs to be activated.

The reasoned nature of the Piano idea has influenced the composition of the tables, becoming 18 manifestos. A pilot for the theme and for the arguments, montages of designs, tables, and explicative text have transformed the tables into communications of the meaning of the idea, potentially self-sufficient compared to the report. The manifestos select arguments and present them in clear themes so

that not only the proposed structural plan is obvious, but also the urban and territorial strategies too. The program does not 'cover' all the territory in the commune, and preferential aims have been developed on all possible and required scales given the degree of widening achieved for each of them.

Compared to the Piano idea, the presentation of the *Approfondimenti* and the *Bozza* is 'plain, simple, and unpretentious': a concise report with emphasis on guiding the reader interested in 'the essentials', which is provided with easily understood tables and graphics. The intermediary nature of the papers is also marked by their format. The differing roles which the *Approfondimenti* and the *Bozza* respectively play as the *Piano idea* and the *Progetto comunale del suolo* are reflected in the type of designs. Papers in the *Approfondimenti* are nearly always in map form with the data being obtained from GIS, or are composed of data used to concentrate on the objective so the vague schemes in the manifestos is replaced by focus on boundaries, use, and procedures. Plans and urban material in the *Bozza* almost always determine this beforehand, being based on reliable measurements and quantities, abstracting that which suffices to express its true interlocutory nature. In addition, for the first time there is a table based on 1:5,000 scale aerial photographs in which the transformation of the urbanised territory as a whole is portrayed, with all the individual operations also being recorded and enclosed.

Now arises the problem of recomposing all of this into a single instrument of urban planning for the new regional urban design and planning laws are not yet in place with the current urban design and planning laws

still surviving, and with the investment made being too great to waste.

Sensemaking

Alessandro Balducci

The Commune Government of Jesi is young and motivated. It specifically requested a 'Strategic plan' be drawn up together with revision of the Prg, and also ordered the construction of the Local Agenda 21. During the formulation of the Strategic plan the instruments used in urban design in this situation had to be revised by defining the strategies of both actors already operating in strategic and general decision making, in sectors of society normally excluded from this type of decision making.

Although the revision of the town development plan maintains its centrality, the Strategic plan runs in parallel with it and majors in two interesting and complementary directions. On the one hand, it frames the urban design plan in a wider context compared to its normal field of interest, linking it to the physical nature of the urban transformations, and on the other hand, there has been discussion to overcome the limits of the policy community which more strictly speaking is affected by the widening of the urban market. A problem in the city clearly presents. With this as the mandate, an exploratory course was embarked upon in Jesi by transforming the Strategic plan into a process of collective reflection. This has used many methods to communicate with the city, resulting in the form the plan documentation would take not being dealt with until the final phase. It was conscious of the fact that no model existed that could be applied to Jesi, and that the form recurring in the more noteworthy experiences of places like Barcelona and Turin might not necessarily adapt itself to the task required in Jesi.

Just as all exploratory

journeys open things up, the road taken in Jesi was also very open. However, it was oriented in certain directions so that significant results would be obtained: to the creation of a vision that could be recognised and shared as an objective by all the actors; to the immediate short term actions arising out of this vision and avoiding conflict between this and long term policies; to involving interested parties and subjects who, being independent of the Strategic plan, are capable of transforming the visionary elements and action contained in a community development and growth plan; in applying the plan, to communicate with and involve the various urban populations so that a sensitive environment within which the strategies could be developed was created. Composed of mobilisation, discussion, and investigation of the city, this important wide ranging local event was recognised in the final Strategic plan document, as it had to be, which therefore became a planning and interpretative outlet proposing new strategies and characteristics which could then be consolidated by local agreement.

Looking back it seems that the most important role played by the group of activities emanating from the Strategic plan was that of sensemaking, that is, making sense of the direction to be taken, giving it meaning, and making people conscious of it. For example, consciousness of the transformation processes in a city which has changed profoundly, being widened into an urban region through which it has built a different relationship with its territory, its parts, and its populations. Sensemaking is also revealed as recognition of a possible future not only to be obtained immediately but also through planned

development trajectories. This is the most significant sense that can be attributed to this group of practices as described by strategic planning. Should this be the case then any modelling or standardisation, if not impossible, becomes extremely difficult; on the other hand, constructing each level around the specific development of the community concerned can only be a good thing.

The urban design and planning operation: documents produced and actions taken

Jesi is a composite operation configured as such because of the desire and need to accomplish a burdensome process of developing urban policies that encompass important actions.

The main documents produced and the activities put into operation are briefly illustrated below in order to show the technical range of the process.

The *Piano idea* (approved by the Commune Council in March 2005) is the first of the new Commune of Jesi town development plan's two components. Its name (together with that of the second component, the *Progetto del suolo*) comes from a Marche Region legislative bill passed in April 2003 (Regulations for sustainable development and territorial management). This law defines the *Piano idea* as the "document that ... defines a participative and equitable strategy of sustainable commune territory development, evaluating and addressing the morphological needs of the settlements and the territory ... is a planning type of document forming the reference framework for the commune's policies regarding, for example, the environment, transport, public construction works, and social services. It does not accord with land rights and neither does it confer building rights". The *Piano idea* therefore has a marked communicative nature, summarising structural-strategic and operational values and functions. The *Piano idea* is essentially a "schema" for the plan and the qualifying choices in the new *Variante generale* (General Zoning Variance): a group of schemes contained in 18

manifesto-tables (in A0 format), with a report (in A3 format) and supporting 13 dossiers (A4 format with attached tables in A3 format) in which the results of specific investigations and studies are enclosed. This specific documentary form expresses the belief that the methods of schematic representation are the most useful and suitable for identifying and substantiating the problems, selecting and establishing aims, putting interpretations forward, and formulating planning hypotheses to be communicated and subjected to review and discussion.

From the beginning the *Strategic plan* has worked in a differentiated manner, activating several fronts of activity: organising talks with numerous subjects and themed *approfondimento* (investigative) meetings in order to analyse local questions together with those of the territory, activating an investigation into the life environments, collecting evidence on specific themes from selected people at round tables based on facts and figures emerging from previous phases. The plan has therefore grown out of a listening process in which all the territory's active subjects participated fully. The *Strategic plan* acts like a draft agenda for more or less mature future operations, and, where there is sufficient need, it defines several projects which can be fulfilled within specific time periods. New characteristics emerged during the formulation of the *Strategic plan* from which a possible vision of the future can be formulated. These not only focussed on studying current trends and phenomena in relation to the environment found in the territory of the commune of Jesi, but also on the aims and places in the

government of a much larger area.

The *Strategic plan* was presented to and adopted by the Commune Council on 23 July 2004.

The process of *Local Agenda 21* was formally activated by the Commune of Jesi in 2000 and was integrated into the urban planning operation in the revision of the Prg (town development plan), and provides for the preparation of several documents.

Report on the state of the environment. This activates the local Agenda 21 process, presents a brief study of the state of the territory, and points out the relationships between environmental, social, and economic aspects. The Report was adopted by the Commune Council in July 2004.

Strategic environmental evaluation. An evaluation of the environmental effects of the choices made in the *Piano idea*, or rather, a constant check on the results of the plan and how coherent they are compared to the objectives initially adopted. The Vas (strategic environmental evaluation) was approved by the Commune Council in March 2005.

Local action plan. The Pal (Local Action Plan or Local Area Plan) for the Commune of Jesi (consigned in December 2005) is a concrete program composed of the actions required to achieve the objectives. In context, it identifies the actors responsible for activating these actions, for the financial resources, and for the support instruments.

Through the "*Abitare il Centro antico di Jesi*" project the Commune Government tendered a bid for the Marche Region's "Neighbourhood Contracts 2" (deadline April 2004): this is an initial result of the social attention and the values accorded to the city's

historic centre by both the *Strategic plan* and the *Piano idea*.

The environment affected by the project coincides with the original Roman nucleus of Jesi, the oldest and most stratified of the historic city, which the *Piano idea* identifies for the first time as a unified environment composed of nine parts. Preparation of the neighbourhood contract tender application was based on the recognition that today this part of Jesi is affected by the following limiting factors: phenomena of abandonment as yet not evident, physical decline, and social hardship; these could rapidly become difficult to manage. The application therefore presented an opportunity to re-launch the city's historic centre based on the re-introduction of residential use, the planning of service activities, and the recovery of collective spaces: an organic group of programs and projects affecting both the social and physical space.

The project tendered was ranked first in the Marche Region, and received financial support totalling 23,236,715 Euro.

The Laboratory of participative planning "*Let's Design Prato*" is an integral part of the new urban design and planning process adopted by the city, and is at the same time the instrument of the "Historical suburbs" renewal program already partially activated by the Commune of Jesi Aldermanry for Public Works, and is therefore the first point of contact between the complex strategies for restructuring mobility, the public spaces identified in the *Piano idea*, and the historical city renewal programs promoted by the Council. The Laboratory's work (November 2004-March 2005) focussed firstly on restoring and constructing new character to the Prato

neighbourhood and the places which define it, the problems affecting it, the qualities with which it is marked, by starting from the point of view of those who live there. Therefore, the social character and spatial orientation was interpreted by identifying several crucial planning nuclei, after which a few but relevant hypotheses of transformation were formulated, distinguished by their feasibility and urgency.

The *Approfondimenti del Piano idea* are the result of operations aimed at articulating and favouring the decision making process. In responding to the requirements of the mayor's Resolution that accompanied the approval of the *Piano idea*, they revolve around studies and verifications that refine the degree of planning definition and are relevant to the zoning revision. So in this sense they "anticipate the *Bozza del Progetto comunale del suolo*". The first *approfondimento* concerns The public city and confronts several questions: the degree of activation of the Prg in force with regard to the *progetto del suolo* which has guided the zoning and the standards initially expected; the effective substance of the public services and facilities (not necessarily public property) of general and local interest present in commune territory; the recognition of "service systems" on an urban and neighbourhood level which, when taken as a whole, constitute the city's framework; and review of the social demand. The second *approfondimento* is dedicated to mobility and focuses attention on several hypotheses to systematise the layouts indicated in the *Piano idea*. The series of checks carried out, and the new operations outlined, redefine several nodes and elements in the mobility

system, which were originally presented in the *Piano idea*. The third *approfondimento* is housing policy that forms a point of recognition in the potential tender, distinguishing it by its specific characteristics and localisation, being evaluated in terms of housing scenarios and the market. After discussion and sharing, the three *Approfondimenti* have been united in a single technical document, which was presented to the Commune Council and approved on the 22 July, 2005.

The *Bozza del Progetto comunale del suolo* is the second of two intermediate plans (the first being the *Approfondimenti*) connected by two instruments that in turn compose the *Variante generale* of the Commune of Jesi Prg (town development plan): namely the *Piano idea* and the *Progetto comunale del suolo*. The document arose out of the Commune Government's need to follow a timely and transparent course of review to produce the definitive version of the new town development plan after discussion of relevant choices. The *Bozza* completes the framework for the transformations provided for in the new plan: it verifies previously formulated hypotheses and carries out several planning explorations oriented towards identifying the requirements which will produce irrefutable quality, explores alternatives, and provides initial suggestions for operating methods. Furthermore, for the purposes of urban planning, there is a proposal to subdivide the commune territory into five different "macrozones": the existing urban territory, the territory of urban transformation, the agricultural territory, the non urban territory, and the territory of infrastructure and

services. This is partition and denomination whose orientation in the design is expressed so that it conforms to the new national urban planning laws approved by the Chamber of Deputies on 28 June 2005 entitled "Principles of territorial management". The *Bozza*, by constructing a "Values map" of the city, also activated the first step in applying urban planning equalisation to the new Jesi plan. The *Bozza* was consigned to the Commune Government on the 30 November 2005, and was being discussed at the time of writing.

The Ministry of Transport and Infrastructure are promoting an initiative called "*System project - territorial complexity*" in order to reinforce the connections between large infrastructural networks and city systems in 11 "target-contexts" in central-north Italy. The Commune of Jesi is identified as leader for the Esino Valley in the Marche-Umbria channel, which according to the Ministry represents the main articulating interchange between the Adriatic coastal system and the system penetrating inland to the Appennines. The System project explicitly recognises the attention already given to the "Esino Corridor" in the *Piano idea* and the *Strategic plan* in their attempt to develop a new interpretative character for the city within the framework of a broader system of territorial relationships connecting Jesi to, and in the context of, a large area. The executive Program for the System project was sent to the Ministry during February 2005, and was approved. It contains the specific objectives that the policy of integrated development in the Esino Corridor must pursue. This territory therefore has three

groups of actions provided for it, and some of them have already been activated.

Planning change. Note on efficacy, agreement, and relationship in Jesi

Vincenzo Zenobi

Whether or not the *Secchi plan* of 2000 is still the tool governing urban planning practice in the city of Jesi is certainly a question open to discussion. If it is the palimpsest of regulations, variations, practice, customs, and traditions that govern the transformations of the physical city, it is a palimpsest that might in some way be traced back to the *Secchi plan's* intentionality. Perhaps an excessive simplification but the *Secchi plan* seems to be characterised by two aspects. In the usual meaning of the term, the *Secchi Plan* contains the urban expansion of the city and has brought about the longterm recovery of disused industrial areas. However, it has produced somewhat questionable architectural results and in many respects has failed to provide shared solutions to mobility problems. From the point of view of the professional groups involved in practical government of the city, whether in or outside the public administration, the *Secchi plan* is now unlikely to metabolise transformations. A terse judgement of its effectiveness might conclude that the *protostrategic* new character of the 'compound city' has had little effect even though evidently so rich in planning suggestions, and has failed to operate as a significant reference point during the course of the *Secchi plan*. Whatever the fortunes of the plan have been up till present, at the beginning of the new decade in 2000 the times seemed mature enough for more substantial renewal. Some sort of correspondence exists between the position, in the field of practical local

politics, of the subjects who were victorious in the 2002 elections and that of the technicians in the field of practising professionals who produce plans. In their respective domains they seem to be two winning minority positions which provisionally and locally at least discuss the prevailing opinion, the doxy of the respective camps. One of the more interesting outcomes of the 2002 local elections was that in an apparent continuity (the ruling majority in the city is substantially unchanged) the best part of the personnel with governmental responsibilities changed. The operational strategy of these new subjects is interesting (coinciding with their *de facto* strategy of legitimisation). It logically follows that the result is not the consolidated and assured positions of the disciplinary *mainstream* but constructions which continually refer to the environmental and strategic-participative aspects of the choices. It is a logic that naturally makes them hold discussions with the more innovative sectors of the discipline. The choice of Milan Polytechnic's DIAP as cultural-technical reference able to manage the complex interactions between strategic, environmental, and urban planning, on the one hand demonstrates the desire to creatively re-interpret the legacy of the *Secchi plan*, and on the other the ambitious attempt to challenge the current *doxy*, to repeat the success of that plan and set an example in Italy of practical government. If one were to consider the motivation and strategies underpinning the production of new instruments of territorial management, one might assert an underlying logical relationship. One of the motives driving the project is that three instruments of territorial

government (Strategic plan, Local Agenda 21, and the town development plan, which is subdivided into *Piano idea* and *Progetto del suolo*) might allow better performance in territorial management to be obtained if they were produced together in a cross-referenced extension of forums and other forms of participation, environmental evaluations, technical-urban planning proposals and analyses, that is to say, in technical knowledge of various kinds cross-referenced to local knowledge rooted in daily experience. The attempt to relate and make different areas of knowledge react together raises further questions. That it is easier for the urban planning technician to deal with information and advice obtained from local knowledge, in that case through the mediation of the policy and not vice versa since technical knowledge is deposited in the imagination with its own time and cadenza and is not easily recognisable as an ability to settle controversial questions immediately. That the interaction between fields of knowledge requires time that sometimes conflicts with the timing of the decisions. From the technical point of view, more traditional instruments (i.e. the town development plan) have shown themselves to be sufficiently flexible to agree to attempts at innovation in the practice more than, for example, an informal instrument might have been able to do. The obligation to follow a standardised approach and a protocol has made an effective relationship with other practices more difficult, and casts doubt on the wisdom of proceduralising innovative approaches which, rather than in a standard, must find their legitimacy in the context.

Local action in urban planning and system strategies

Pier Carlo Palermo

This phase probably offers the best opportunities to observe and discuss trends in the local experience of Italian urban planning and zoning. In taking this point of view, the case of Jesi may be seen as a laboratory of notable interest for several reasons. Firstly, the themes of regulation, physical transformation, and territorial development are profoundly connected in modern planning. In the case of Jesi the construction of a strategic agenda has been imposed according to an unusual model, guaranteeing original contributions from listening and hearing, diagnoses, attention shaping, and above all it forms part of a joint action program oriented towards town planning and the environment. A prerequisite for the development of (necessary) interaction between respective themes is the elaboration of the *Piano idea* and the Local Agenda 21 in the specific context. In particular, the *Piano idea* can guarantee the verification of (functional and morphologic) territorial cohesion of the local context's strategic directions.

The problem of local development must be solved within a suitable framework of vertical governance: that is, it must be articulated by extensive networks (required to ensure innovation and additional resources) and cooperation on the territorial, sector, and institutional level. In Jesi these integrate on different scales and are explicit because the area is valuable and strategically important to the national government's policy of territorial and infrastructural reorganization, which the

Italian Ministry of Transport and Infrastructure has been carrying out for some years now. Although the experiment has not yet matured, it is already possible to recognise influences on the work in progress. The urban planning and zoning process cannot be limited to dealing with local criticalities, nor can dealing with the strategic problems of large areas be left to a future territorial plan. The problem lies in how the area's future strategic plan, which provides for investment in infrastructure aimed at improving Italy's competitiveness as a nation, will be integrated with the needs, expectations, and management of the local context. Jesi in this sense is a laboratory in which local urban planning action and system strategies must find a shared vision of development. The aim has already been imposed correctly, and could merit more specific and detailed scrutiny in the future. This reference framework cannot but reflect the technical interpretation of the '*piano idea*', namely, the rediscovery of structural frameworks: this was a very influential aim in the cultural changes of the 1990s, occurring very much later than it did on other countries and carrying the risk of applying models which had been superseded by then. After almost a decade of testing, certain simplifications must be abandoned. Developing reference frameworks is not enough because they need to anticipate various action priorities in pragmatic and also, if possible, operational terms, action priorities which have a morphogenetic function in the future development of the urban territory. The transcalar nature of Jesi's problems reinforces these requirements. The work which has been carried out represents an interesting

model of strategically oriented structural urban layout. The framework outlined is already articulated on several scales and time durations, and incorporates a rich variety of knowledge using creative instruments and opportunities. That is, a good example of 'new urban planning in action'.

The experience of Jesi shows how professional responsibility and research interests can be married to cultural innovation. It truly is a 'city project' (not a work of art by one of the great masters), but the work of the planning group also reveals a strong and original sense of identity. The professional role is not external but needs to be rooted in the context, as witnessed by the availability to listen, by the time dedicated to the planning, by the presence in the field, as well as sensitive, diligent, and devoted management of the places involved. Nevertheless, experience, including lively dialectic exchanges, has demonstrated that where necessary planners are able to contribute critical interpretation and reorientation of local visions in order to consolidate them.

What clearly emerges is a desire for technical research and innovation. From the ideation of a descriptive-planning language able to marry vision, clear statements, and salient arguments, a great many innovative aspects result. What emerges is a notable ability to articulate new characteristics and discussions that are inclined to have a common form. Lastly, from this point of view the case of Jesi also becomes a laboratory of planning innovation meriting further reflection and development.

Changes undergone by the legal framework of town planning schemes and the evolution of the discipline of town planning. Part I

Chiara Mazzoleni

The various kinds of municipal town planning schemes (*piani regolatori comunali*) produced in Italy over the hundred years between Unification and the transfer of town planning authority to the Regional administrations are extensively and comprehensively documented in the *Archivio dei piani regolatori generali* administered by the office of the Director general of regional planning development (Dicoter) at the Ministry of public works (now the Ministry of infrastructure and transport). The research project that led to the establishment of this important Archive, assigned to Dicoter by the Triennale di Milano in the framework of the RAPu project in 1999, has made it possible to reconstruct the evolution and development both of the discipline of town planning and of the legal and procedural provisions by means of which the central administration endeavoured to control planning actions. These gradually took shape in a process that started with Law 2359/1865 on expropriation for public use and continued until the 1942 national town planning law (no. 1150), which decreed the separation of land use planning provisions from those concerning compulsory purchase and established the technical and administrative framework, the principles, the contents and the procedures for what came to be defined as *piani regolatori generali* or master plans. This process can be said to have taken place in three stages, each of which featured specific

adjustments, revisions and developments of the framework of laws and regulations relating to urban planning. The first, from 1865 to the early 1900s, is characterized by recourse to rules and procedures featuring a certain stability and to conventional legal instruments that were adapted for the specific purpose of controlling the development and transformation of parts of built up areas. In the second, from the early 1900s to 1942, the traditional forms of regulatory system, the building code (*regolamento edilizio*) and the town planning scheme (*piano regolatore*), were seen to be inadequate and determined efforts were made to devise solutions that were better suited to the new urban planning requirements. As technical knowledge and skills were reviewed and developed in academic spheres and as the effect of this came to be reflected at the institutional level, new types of norms and rules were devised for particular circumstances and special laws for specific cases, anticipating the contents and the characteristic features of the new form of plan that was later outlined by the national town planning law. The third phase, from 1942 to the beginning of the 1970s, was the period of the application of the town planning law, the effect of which was to link up the various measures introduced through special laws for specific cities and to mould them into a single general design, applicable to the country as a whole and based on a hierarchy of plans (a policy that confirmed the centralist approach of previous government institutions, especially during the Fascist period). In line with this approach and with the prevailing attitudes of the legal system of the 1930s, which recognized the

interests of the community and gave State bodies responsibility for ensuring they were taken into account, the new law established the general principle that overall supervision of town planning activities was to be the province of the Ministry of public works. Accordingly it placed that Ministry at the head of the public administration hierarchy in this field and thus established an organic system, at least in theory. In actual fact, numerous theoretical and practical problems hindered its implementation over the years, though some of them were dealt with through the application of Law 154/1945, which set out to regulate the activity of post-war reconstruction. While the attention of the academic and professional elite, especially during 1950s, was directed at the construction of a disciplinary statute for town planning, a theory of the discipline was being developed in juridical circles and represented, to quote Federico Spantigati, the developments in "the rivalry between the emerging school of public law and the school of traditional administrative law" that were to make it possible to supersede "the interpretation that fragmented the systems of norms as a construction of projections of and derivations from other legal frameworks". Over the century, furthermore, the meaning attached to town planning action changed considerably as the phenomenon of the 'city' assumed new importance. And as its object, the city, in its most basic terms, itself underwent change and only later came to be perceived as a unified whole, albeit with a multiplicity of different aspects, both by the community of town planning architects and by legislators and the legal system. Thus, in this latter sphere, it

gradually became established that town planning was a discipline that concerns problems which progressively "rise to the level of socially significant importance and thus warrant consideration and legal control".

The town planning scheme as a special case of the law on compulsory purchase

The reconstruction of the process by which town planning schemes and development plans led to the master plan enables us to explore two partly connected subjects. One is the standardization and centralization of the administrative system decreed by the unification laws of 1865; the other is the transformation of a legal framework, that of compulsory purchase, which was central to the real estate system during the 1800s and which played a changing and gradually less important role as the new town planning order became established. This discipline, which originated as a "sub-section and special case in the 1865 law on compulsory purchase" eventually "acquired the status of an autonomous legal framework" and compulsory purchase became its "corollary and instrument". Underlying this process was the uncertainty of the legislators engaged in the complex task of unifying the administrative and legislative systems of the kingdom as to whether urbanization problems should be dealt with by recourse to the legal framework of compulsory purchase for public utility or by the more conventional route of the building code. Though on the one hand, as noted by Mazzarolli, the procedures governing the enforcement of the 1865 law on municipalities and provinces had included "planning schemes for expansion and for levelling or realigning streets,

squares or public walkways" (art. 70) amongst the municipal responsibilities for building regulations, on the other the very next law, no. 2359 on compulsory purchase, had allowed municipal authorities to adopt planning schemes for the transformation of built-up areas and for the expansion of the city by exploiting the procedures and effects of declaration of public utility.

The decision to base the legal framework for town planning schemes on the matrix used for compulsory purchase rather than that of the building code led to a clash between the procedures laid down by the law on compulsory purchase and those adopted (but never applied) by the new system governing municipal and provincial administrations and thus to a clearcut distinction between town planning schemes and building codes. It is clear from the parliamentary debate that led to the passing of Law 2359 that the explanation for this lies in part in the paramount emphasis placed on property rights and in part in the limitation of powers assigned to the local authorities, which were the subject of complaints concerning their existing regulations governing urban and rural policing, building, public health and a plethora of 'local statutes' containing coercive measures that could be used to override owners' rights to dispose of their real estate as they wished. The amendments to the bill on compulsory purchase tabled by the minister Pisanelli in 1864, introduced to take account of criticisms made by the parliamentary commission charged with reporting on the bill for legislative unification, that the regulations concerning the transformation and extension of built-up areas in the original text were too detrimental to property

rights, help to clarify these points.

The regulations laid down under headings VI and VII of the general law on compulsory purchase (no. 2359) established a legal framework for town planning schemes that was not altered until the issue of the national town planning law of 1942. Thus it was no longer possible to apply the legal provision whereby regulations governing town planning schemes and development plans could be based on building codes.

The provision was formally abrogated when the law was reviewed for the first time and the procedures for enforcing the law on municipal and provincial authorities were approved and included in the 1889 Consolidation Act.

The period covering the end of the XIX century and the beginning of the XX was thus characterized not only by the extension of municipal functions and responsibilities to include public health, roads and traffic and building but also by the creation of separate offices with responsibility for drawing up and implementing town planning schemes on the one hand and for inspection and supervision of all building activities on the other: the technical office and the building commission (which replaced the *Commissione di ornato*).

Of the amendments introduced into Pisanelli's bill, the most significant was the requirement that town planning schemes had to take the form of detailed land use plans before any declaration of public utility, so the compulsory purchase procedure became necessary rather than optional as before. Another amendment abolished the obligation to draft a planning scheme since it was "held to be inopportune for general rules to be issued for a subject that needed to be considered case by case, in relation to the

requirements of the large cities", and left the decision up to the local administration; and a distinction was introduced between town planning schemes, which were admissible only for larger communities (with a population of at least 10,000 inhabitants) and which had to provide for the salubrity of the urban environment and for communications by rectifying cases of 'faulty arrangement of buildings', and development plans, which could be drafted for any municipal authority that could show an objective need to expand. The purpose of development plans was to control and protect areas destined for expansion and, by contrast with town planning schemes, could also be concerned with ensuring that the layout of built-up areas was 'convenient and decorous'. The public utility factor had also to be demonstrated before an authority could legitimately proceed to draw up plans and it had to relate to concrete existing needs, not to potential future needs; and a deadline (no more than 25 years) was introduced for the implementation of plans. Town planning schemes devised under the terms of Law 2359 therefore represented a special case of compulsory purchase; they could be drawn up only in relation to current needs and could be considered as a more direct derivative of alignment plans, which gave rise to corresponding easement rights. That the real essence of the plan and its *raison d'être* lay in the easement consequent on alignment was reiterated on the occasion of the first attempt to reform the law on compulsory purchase, which was backed by the Secretary general of the Ministry of public works in 1912 but which never progressed beyond the study stage.

The limits of town planning schemes devised with reference to the legal framework for compulsory purchase

It can be said that little use was made of the provisions of the law as regards the drawing up and implementation of town planning schemes. Up to 1900 formal approval was issued for around 750 town planning schemes (focusing on new construction in built-up areas, expansion and rehabilitation) and their updated revisions, over 200 of which concerned just seven large cities (Turin, Genoa, Milan, Naples, Rome, Florence and Palermo). The pattern was repeated in the two decades up to 1920, with decrees of approval being issued for around 450 schemes, 82 of which concerned the three cities of Genoa, Roma and Turin. Between 1865 and 1920, Genoa alone requested approval for 80 schemes and their updates, for new building, expansion and rehabilitation in distinct parts of the city, while transformation in Turin between 1865 and the end of the XIX century was governed by 63 plans (and their updates) again for specific areas of the city. It was not until 1906 that Turin decided, also in response to heavy pressure for increased housing, to draw up a 'single' town planning scheme, which was approved by law in 1908 and attempted to connect the various areas where expansion had taken place to each other and to link them to the many districts that had grown up outside the urban area in the meantime.

There were many reasons for the limited recourse to the law on compulsory purchase. In the first phase of application of the procedures concerning town planning schemes the main factors seem to have been a lack of technical preparedness on the part of the municipal

administrations, which were now responsible for the drawing up of the scheme, and the excessive burden that massive public works projects would have placed on local finances. Another factor, which emerged later, was the inadequacy of the law itself, which was not, for example, accompanied by a decree containing a set of rules and criteria for use in drawing up schemes. In particular, the law failed to define the nature of the schemes, gave little information about their intended contents and how they were to be drawn up, was vague about regulations for unbuilt areas outside the areas where development was permitted, gave a controversial interpretation of the limits on compulsory purchase, especially in cases where it was extended to areas needed for the construction of public buildings, and failed to identify clearly the authorities responsible for supervising the matter and the prerequisites for completion of the legal transaction. Yet another important factor, perhaps the most important and one that prompted the creation of various administrative procedures and different juridical interpretations, was the separation of the two legal frameworks for urban planning issues, those of the building code and the town planning scheme, together with the central authority's determined attempts to reduce the limitations of property rights established by both. Revitalization of the building code did not really take place until the issue of the Sicily-Calabria earthquake law of 1935, whose provisions concerning building regulations tended to constitute a set of rules governing building activities; this "led to increased use of these instruments and the trend was consolidated by the 1942 town planning law that made it compulsory for all municipal authorities to

issue a building code". As regards town planning schemes, the main problem that emerged in relation to planning control over building activities, also as a result of the initial phase of expansion of the large cities, concerned the possibility that further limitations on private property rights, those included in schemes for built-up areas and for expansion as well as those already consequent on alignment, might be introduced through this legal framework. The issue prompted divergent opinions and the public administrations adopted a variety of approaches. In general, schemes drawn up in accordance with the provisions of Law 2359 were accompanied by a set of implementation rules, a sort of special procedure applied to the area covered by the scheme. As regards their contents, positions varied from those who maintained that a town-planning scheme should consist of no more than outline indications (thus reflecting the judgements handed down in several High Court cases) to those who were more inclined to give priority to the interests of the community as a whole and allow, in the case of the construction of new neighbourhoods, the inclusion of directives concerning the mass and density of buildings. There was also the position, one that found considerable favour in legal circles, of those who maintained that the scope of town planning schemes should not be extended to include provisions other than the outline indications already included but that the 25-years duration limit should apply only to compulsory purchase actions and not to easement consequent on alignment. It was, however, generally acknowledged that provisions annexed to a town planning scheme and

not conceived as an integral part of it should be understood as building codes, even though they had a particular field of reference. In this case, they could continue to have binding force even after the scheme was no longer enforceable. In normal administrative practice it was possible to encounter examples both of provisions annexed to a town planning scheme and approved via the same decree and also of provisions approved as if for building codes. In general, in order to speed up the approval of schemes and to simplify the relative procedures, it was agreed initially to allow the government authority to approve the implementation procedures of schemes adopted by municipal councils. Later, in particular during the 1930s, the technical implementation procedures were approved in the same way as the town planning scheme itself. The frequent recourse to provisions that appeared only in updated versions of approved schemes, the *routine* practice of authorizing municipal authorities to reiterate restrictive orders imposed by one scheme and have the second scheme approved before the first ceased to be operative, the common practice of drawing up sections of a scheme for specific zones before definition of a more general instrument (especially in the main regional capitals), the long and complex processes associated with development actions in particularly strategic urban environments and results of transformation action that were not always consistent with the intentions of the scheme and with the demands of public decorum, these were just some of the problems that ensured that town planning schemes were eventually subjected to the same general rules as those that the law

already applied to the planning of work requiring the compulsory purchase of real estate. This involved the drawing up of a broad scheme designed to create a general framework for the work to be done, at least an indication of the areas involved and the alignments. This preliminary procedure would be followed by the creation of implementation plans whose function was to establish the details of the work and the constraints to be imposed on the individual properties. This procedure enabled the municipal administrations to carry out closer studies of the areas involved in relation to requirements stated during the stage of approval of the broad scheme and later. The distinction between the two types of plan was not however the same as the differences between the two procedures provided for in the provisions for compulsory purchase for the purpose of public utility (even though similar names were used). According to Law 2359 the two plans were identical in nature and both embodied projects for work in the public interest. The first, a non-specific document required as a condition for the declaration of public utility, contained only a general description of the work to be carried out and of the real estate needed and stated the constraints on the owners that derived from the obligation of alignment. The other was more specific and had to be presented before any compulsory purchase order could be issued; it figured as a detailed version of the first document and included execution plans for the work to be done and a precise definition of the real estate to be compulsorily purchased. Having basically the same nature, the broad scheme and the detailed execution plan could be brought together as a single document or, as happened more often in practice, the

detailed plan could replace the broad scheme altogether since the compulsory purchase order could not in any case be issued without it. A formal distinction between the broad scheme and the execution plan was made for the first time for the general town planning scheme for the development of Milan in 1912; the scheme was approved via a specific law, no. 866, and the same approach was subsequently applied to the schemes for other cities. This distinction introduced the possibility of drawing up two instruments of a differing nature: one a general document dealing with the entire built-up area of a municipal authority and/or the areas of intended expansion and containing an overview of the projected layout and the town-planning development of the urban area; the other an execution document detailing all the work expected to be completed in a certain area and within a given period of time. It was this latter instrument, which included both the declaration of public utility and the designation of the real estate to be compulsorily purchased, that was the prerequisite for the issue of a compulsory purchase order. Thus the broad scheme no longer needed to define the implementation period and examination of private property owners' opposition was delayed until the implementation of the execution plan; however, the limitations deriving from alignment, which in this case had the same duration as the scheme, were retained. This approach, which had also been urged by some of the leading municipal experts engaged in planning and executing large urban transformation projects, involved the adoption of different measures matched to the duration and impact of the various broad town

planning schemes and of several different procedures leading to approval of the detailed execution plans. It therefore gave rise to a number of heterogeneous instructions, which generated confusion and contention and ultimately failed to achieve any real simplification in the formalities that had to be observed before it was possible to progress to the execution plan.

Exceptions to Law 2359 and the creation of 'special regimes'

The need to modify and regulate the legal framework for town planning schemes had already been voiced in the 1890s both by jurists and by technical experts. An opportunity to draw attention to the inadequacy of town planning schemes understood as statements of road layouts and indications of alignments and adjustments came with the architectural section of the first Italian exhibition to focus on building plans, held in Turin in 1890. Here, as Vittorio Zucconi writes, comparison between Italian practice and the most important foreign experiments led to "the first exploration of planning techniques that had already been codified by the legislation and the administrative practices of other countries". In particular, the new approach involved the first changes to the conception of town planning technique, changes that heralded the new prescriptions and techniques of zoning. In effect, though they were still associated with attempts to bring built-up areas into line with hygienic and aesthetic criteria, zoning provisions were brought in from the first decade of the XX century through the introduction of specific laws approving individual town planning schemes. These authorized the government to endorse

special building codes designed to ensure control of the transformations proposed.

Also towards the end of the 1800s, in the context of lively controversies between modernizers and conservatives, the shortcomings of Law 2359 were exposed, especially those arising from Art. 86, which made it impossible to introduce into a town planning scheme restrictions or constraints that arose from causes other than those envisaged by the scheme; thus any transformation work of an aesthetic nature or concerning archaeology or landscape was excluded.

1889 saw the establishment of Regional commissions for antiquities and fine arts; these led in 1902 to the creation of decentralized State offices, the Superintendencies, which were given responsibility for the protection of monuments, in place of the municipal authorities. Later measures to protect items of artistic or aesthetic beauty, landscape and the archaeological heritage tended to be designed to defend specific public interests and requirements from the threats posed by urban development and gave the Superintendencies a safeguarding role during the execution phases of town planning schemes, though their authority did not cover improvements to private property.

These measures, which made the Superintendencies responsible for protecting catalogued items of cultural property by means of restriction orders and which involved a complex procedure for the approval of town planning schemes covering municipal areas containing such items, prompted discussion of the important question of coordination. This led to a division of authority that in turn became a prime cause of fragmentation: what

developments in town planning had come to express as a single problem became increasingly broken down into multiple sectoral issues.

In a situation where the traditional legal frameworks of the building code and the town planning scheme, both severely limited in their field of application and in the focus envisaged by the law, no longer provided the means to development and transformation demanded by many urban centres and where a more restrictive approach was needed in relation to private property, the response was dual: on the one hand a series of measures designed to control the transformation and extension of built-up areas (in relation to their aesthetic appearance and improvements in sanitary arrangements), and on the other, approval of town planning schemes via special legislative provisions.

This combination of responses and the institution of the practice of making exceptions to the law on compulsory purchase whenever a scheme required more complex control showed the government's determination to tackle the obvious inadequacy of conventional instruments by devising a general law to replace the legal frameworks that had been in place since 1865. A crucial contribution to the emergence of a *ius singolare*, in the sense of the derogation of the principles embodied in the legal code, came from the experience gained in developing special legislation during the first decade of the XX century, a typical example of which was the emergency measures adopted to deal with the effects of the earthquake that struck Calabria and Sicily in 1908. This experience, which included the devising of experimental legal frameworks and innovative

procedures, constituted a workshop of fundamental importance for consolidation of the government control procedures that proved in the following two decades to be one of the most significant legacies left by the later Giolitti administrations. The most obvious and lasting result of the new legislation was a weakening of the abstract and universal nature of the law and the establishment of legislative provisions designed to control specific situations by means of targeted ad hoc instruments and technical solutions. In fact the special legislation, writes Guido Melis, "proceeded by stratification, first rooting legal frameworks and procedures in the legislative system and then gradually expanding and developing their influence through subsequent measures".

The main issues tackled by means of legislative measures and through legislative reform projects

In addition to the already mentioned problem of the distinction between broad town planning scheme and execution plan and the important issue of the need to uphold the dignity and aesthetic character of the city, other questions that emerged as soon as Law 2359 began to be applied included some that were dealt with by separating regulations governing town planning schemes from those concerning compulsory purchase; the separation was eventually given legal sanction by the national town planning law of 1942. In particular, these questions concerned the distinction between schemes to regulate building in existing built-up areas and schemes to control expansion and development areas, and thus the admissibility of schemes focusing on the future needs of urban communities; the possibility of drawing up town planning

schemes also for municipal areas with populations below the threshold set by Law 2359; the advisability of making it compulsory for more densely populated areas and for those with special characteristics to draw up a scheme; the need for schemes to identify areas destined for public buildings and facilities and to introduce prescriptions concerning zoning; the right of property owners to forgo payment for areas destined for the creation of roads and squares; the right of municipal authorities to use compulsory purchase orders to acquire areas designated for development in their scheme at less than market values and the possibility of proceeding to execution of the scheme through the creation of what were called *comparti edificatori* (these were specifically defined areas within which building activity, involving transformation and/or new construction, could be carried out in order to create the new street alignments provided for by an execution plan). While some of these problems were tackled, albeit partially, with measures for special cases or for specific needs, others were dealt with by targeted provisions, contained within the various legislative measures embodying approval of town planning schemes, that tended gradually to become more and more generalized, to the point where they constituted the closest precedent to the national town planning law. As regards the inflexible distinction between the two types of scheme (to regulate the transformation of existing built-up areas and to control expansion and development areas), in practice the municipal administrations adopted an extensive reading of the law, drawing up plans for the entire built-up area and at the same time taking its development needs into

account. By contrast, in the theoretical considerations developed by an elite group of engineers during the first two decades of the XX century, this conceptual distinction was not only re-proposed but also became the object of various technical planning approaches.

Further confirmation of the separation between existing built-up areas and development areas came from measures designed to make good certain omissions in the provisions concerning building regulations and town planning schemes. These included the 1903 law on public housing which, by presenting itself as what Zucconi calls a sort of "national-scale, superregulation for building" established "the principle of separation that subsequent measures tended to exacerbate".

The vexed question concerning the indications to be included in planning schemes of the areas designated for public buildings or facilities, as a safeguarding action designed to place a temporary block on building activities deemed to be incompatible with the designation assigned to such areas, was tackled for the first time with the approval of the 1931 town planning scheme for Rome. Analogous approaches were later adopted in the schemes for Milan, Naples, Jesi, Reggio Emilia and Bolzano.

The introduction of zoning prescriptions into town planning schemes had followed a similar pattern and here too the provision had first been introduced into schemes approved by special laws and into the relevant general regulations and technical prescriptions. Thus zoning was presented not only as the delineation of areas within which buildings had to have certain characteristics, but also as a functional sub-

division of the urban built-up area and as an indication of land-use criteria for its various parts.

But though there seemed to be little opposition to a restrictive conception of zoning, understood as a sub-division of the urban built-up area through which the nature of permitted building activity and the constraints upon it could be established, there continued to be strong resistance to proposals for comprehensive zoning. Zoning, that is, where areas identified as destined for public services involved a complete ban on what had previously been conceived as the only possible utilization of privately owned areas, i.e. their exploitation for profit through building activities. And the resistance was stronger still if the zoning proposals outlined in the broad scheme were not subject to any time limits. Another procedure that had initially been put into practice via a special law was the right granted to municipal authorities by the Consolidation Act no. 2318/1919 to use compulsory purchase orders to acquire not only areas needed for work provided for under Law 2359 but also building areas designated in the town planning scheme for the construction of low-cost and public housing. Similarly the procedure whereby the proposals of the town planning scheme were put into practice through the creation of *comparti edificatori*, i.e. units comprising a number of buildings belonging to different owners but considered inseparable for construction purposes because they fell within transformation areas involving entire building nuclei, was first introduced through the Consolidation Act that fused the laws enacted following the earthquake in Calabria and Sicily. The legal framework for the *comparto*, which also appeared in the draft

'general town planning law' presented by a specially appointed Commission in 1933, was given definitive form by the national town planning law of 1942.

Towards a new town planning law

Taken together, the special laws embodying approval of various town planning schemes brought into being new technical and legal instruments that became progressively stronger in passage from one law to another, introducing new elements and features that ultimately changed the original structure of the town planning schemes.

A substantial revision of the legal framework of town planning, incorporating both the innovations introduced by the special law granting approval of the scheme for Rome and the demands of the academic-professional elite of Italian town planning architects, municipal officials and professional bodies for adjustments that would take account of the new problems posed by urban development, was undertaken by the Commission appointed by the Minister of public works, Araldo di Crollanza, who had been an under-secretary at the same ministry during the drafting of the scheme for Rome. The resulting bill, with its distinction between regulations concerning town planning schemes and those governing compulsory purchase for public utility purposes, was the first to establish the principle of a separate legislative identity for town planning.

Though the town planning scheme continued to impose a series of restrictions on building work carried out on private property it was no longer conceived solely as a public works project to be carried out within a certain period. It now performed a new function as a guide for the public administration and the private sector as

regards the transformation and development of built-up areas, with a view to providing the best possible framework for ensuring improved living conditions for the population.

In an attempt to respond to the demands emerging from the debate of the previous years and to bring together the many town planning measures scattered amongst various laws and special provisions, the Commission set specific norms for the preparation, contents and execution of the town planning scheme. These sanctioned the principle of the unitary nature of the town planning instrument, abolishing the distinction between the two types of plan established by the 1865 law and confirming the division of the new procedure into two stages. And given the positive results of the experience of schemes being approved via specific legislative measures, the Commission endorsed the advantages of avoiding a situation where the town planning scheme had immediately to take the form of a comprehensive programme with detailed plans for every aspect of its proposals. What was required was a programme containing general directives, so restriction orders on private property would need to be issued only when the operations concerned had received formal approval from the public administration. Hence the proposal that the scheme be drawn up in two stages. The first involved the drawing up of a broad-based general plan with guidelines as to how it was intended to develop the entire built-up area, indicating the network of major road and rail infrastructures (showing how the plan catered for the area's needs in terms of traffic, sanitation and decorous layout) and showing the spaces reserved for public use and zoning arrangements. This

latter aspect was to define the characteristics required of buildings in the various districts so that owners could at any time take action to bring their properties into line with the prescriptions of the town planning scheme. The second phase involved the drawing up of detailed land use plans, containing precise details of any restriction orders and specification of the characteristics and extent of each operation. For the first time the areas out-side the built-up districts were also taken into consideration in compliance with a general directive that opened the way to laying down rules for the protection of landscape in the non built-up parts of the municipal territory. Altogether the bill drafted by the Commission, which was underpinned by the idea of the town planning scheme as a 'rational' instrument for the management and control of urban development, was not only one of the most advanced contributions to the town planning culture of the period but was also the expression of a carefully appraised mediation between the demands of the town planning architects and the interests of private property owners. However, this proposal too was destined to suffer a similar fate to that of previous attempts to reform the law on compulsory purchase. Discussion of a new town planning law, on the basis of the draft bill presented in 1933, was taken up by the Ministry of public works Commission appointed for the purpose in 1941. As well as representatives of the central administration and of the professional and other bodies most closely involved in the subject, members of the Commission also included some figures who had taken a leading part in the earlier experience.

Planning and evaluations

Anna Laura Palazzo

The aim of this paper is to verify if and to what extent, the 'environmental issue' and the principles of strategic action have led to reducing the gap between the rationality that has always influenced the discussions on territorial disciplines and the rationality that has inspired the path taken by the environmental sciences. In particular, I am proposing that this convergence between the two has come about on the basis of 'scenarios'.

1. It is now an established fact that the knowledge systems with an operative goal in planning activities can have features quite different to those linked to survey activities aimed at study and research. Thus, 'planning to act' practically must influence the selection and organization of the set of information needed as base materials (indicators, thematic maps, etc.). At the same time, we have witnessed a decline in such simple associations raising the need for 'pure knowledge' regarding neutral results and the need for a 'finalistic knowledge' with a presumed partial, hence arbitrary vision. Some consequences of this shift in thinking over the last years can be found in the acknowledgement of the non-linear behaviour of the actual processes due to a radical rethinking of the sequence *know-understand-judge-act* suggested by Giovanni Astengo in reference to 'comprehensive planning'. The concept of circularity (contemporaneity and recursiveness) between the processes aiming at gathering together existing knowledge, as well as, monitoring the present state, and those aimed at evaluating a supposed, tendential and desired future state, is now largely

shared, with its possible consequences on remodelling the specific aims of planning and the ways to achieve them. If it is true, that the recognition of the environmental thinking was crucial in renewing the plan paradigms, the circularity of the knowledge-action *ratio* looks carefully at the process and also the result, taking into account the shift from a substantive rationality, linked to ends-means-decisions thinking, to a procedural one, associated with the idea of the capability of the territory, where compatibility, not conformity, is the key word. Moreover, the renewed interest in feasibility studies exhibiting techniques in *ex ante* evaluation, seems, whether interpreted differently or not, to reaffirm this change. Today, the future of planning and that of evaluation, calling for 'environmental' and 'strategic' thinking, also supported by local governments, tend to be taken into account together. It is obvious that the prospect of a 'common path', without doubt more reasonable than a 'common destiny', can be none other than the result of dialectics between a strategy for the conservation/reproducibility of resources strongly conditioned by the environmental sciences (indicators of optimum and critical consumption of earth, air, water and energy, that determine the quantitative 'limit' to development), and the territorial strategy conditioned by the need to localize and qualify its aims and its field of activity. To accept this, we need only look at how the rationality regarding the environmental paradigm, supported by analytical mechanisms closely linked to the sector, results in being hardly reconcilable with the 'whole vision', synthetic, but also timeless, that traditionally supports territorial and

town-planning. In other words, if we look at the sequential formulation of the 'if...then' type that gives rise to both discourses, then the emphasis placed on the two terms of the hypothetical construction is different. In town-planning practice the stress is placed on the latter (the *then*, or rather the "desired future", as Luigi Mazza defined it), while the environmental sciences begin from the near future (the *if*), in progressive steps, following a course, also taking into account evaluations of possible alternatives.

2. Here, we come to the 'hitch' in the issue, i.e. the requirements and criteria to be adopted to guarantee an authentic and sustainable transformation, where the planning choices are called upon to confront the issues of 'safeguarding the natural, environmental and landscape values', 'improving the state of the environment' and 'securing' the territory. The 'thresholds of use' for the primary resources result in individuating the degrees of resource exploitation linked to the mainly quantitative indicators. In other words, a knowledge regarding environmental considerations, allowing for results being noted and mapped in their spatial configuration and distribution, is quite rare, and even if available, would be of questionable usefulness. Vice versa, the options concerning town-planning procedures are mainly linked to the need to 'localize' and 'qualify' the development forecasts. This is without taking into account that the consequences of the choices, not included in the prefiguration and therefore, not able to be hypothesized beforehand, can form interference factors that are not easy to interpret. These conditions of 'uncertainty', that, as we have seen are

unavoidable, have led to some innovative town-planning experiences taking advantage of precautionary formulations correlating properties and size, part of the environmental sciences body, to the expected territorial performance. The standard, obsolete in its traditional physiognomy, finds here a renewed *raison d'être* through an *ex ante* indication of the 'expected' performances regarding the environmental sustainability for an area transformed by town-planning, with, for example, the definition of parameters and indicators relevant to the consumption of environmental resources depending on the various town-planning uses and the possibility to establish the compensatory measures. In recent years, we have seen a move by the disciplinary culture towards more ambitious formulations that have adopted in an allusive 'scenario' dimension the interaction of the *if* and *then* jointly. The realistic path to take, other than a type of 'obligatory path' from a condition of 'imperfect' knowledge, seems to be that of selection and arrangement, within what is available of the different knowledge, of interpretive and synthetic frameworks, able to incorporate into the development scenarios (tendential and corrective) some opportunity and risk factors, adequately indicative (e.g. important and relevant) and possibly related to the environmental field.

3. With some simplifications, we could go over the causal chain that supports the logical framework and the arguments for the scenarios. Beginning from a hypothetical correlation between properties that describe the present state (from *if*), it takes on a future projection, or tendential scenario. At this point, the outlining of corrective measures raised by the

alternative future scenario (the *then*) looks again at the methodological moment of the *if*, imposing a change or break from the considered relationship, through appropriate policies. As we can see, the procedure is recursive and repetitive. Here we could see the relevance of the research, *I costi collettivi della città dispersa* (*The community costs for a scattered city*), that studies the Milan and Brescia areas. Analytically, the research aims to measure the impact, i.e. "to objectively evaluate the significance, from a statistical and econometric aspect, of the hypothetical causal relationship". Thus, the hypothesis of an inverse relationship based on empirical observations between the residential density and use (quota) of private transport with the resulting procapita energy consumption must be verified. The *procapita* energy consumption acceptably encompasses events linked to car use (noise, pollution, time lost in commuting, stress, isolation, etc).

At the end of the work, the hypothesis of a corrective scenario means adopting more appropriate patterns of urbanisation, through solid promotional policies with less waste of resources. The research *Campagne urbane. Paesaggi in trasformazione nell'area romana* (*Urban countryside. Changing landscapes in the Rome area*), that uses the Province of Rome as the study target, tried to use the so-called 'fragmentation' to describe the degree of abuse of land resources, ie. the processes of occlusion and breaking up of tracts of open territory, as has happened over the last 20 years, by the main transport routes and urbanization. I must stress that the interpretations of these images are not always shared. The diachronic survey leans towards an interpretation based on

'changing states' implying various patterns of 'migrations' of open territory from larger to smaller. The selection of optimal thresholds to define variability ranges is, therefore, a sensitive process. Moreover, the phenomenon has different meanings and explanations regarding the different sized thresholds and space and time distribution. Yet, it is easy to generalize that the considered processes, of which we can hypothesize spreading, according to the town-planning tools of municipalities included in this survey, conspire against the principle of ecological continuity. The 'insulating' of territorial resources is symptomatic of bio-diversity reduction, and indirectly provides the sign of a risk for the territory and the environment.

4. However, when all is said and done, the scenarios, that appear relevant to the different parameters and factors, where the sustainable traditions are placed alongside the more interesting 'thresholds of use' in the keystones of 'possibility' and 'regulation', lend themselves to the use of knowledge that bridges the territorial extensive property and the intensive property, and undermine a planning philosophy based on the 'certainty of the norm' and on the 'possibility of forecasting'. In this pragmatic version associated with a weak idea of sustainability, where time becomes historical and no longer metaphysical, the risks linked to the outcomes of an 'issue-based' culture are evident. However, the inherent opportunities become evident in the need to express the capability to respond to and change the non-standardized awareness-building of the public, involving, as well, an effective improvement in analytical and planning knowledge.

Dispersion of urban areas and indicators in the spread area SEA: the Gini index

Pier Luigi Paolillo

The urbanized shreds, marking by now metropolitan systems as well as valleys and national coasts, express the binomial 'growth, dispersion' representative of many Italian urban plans in the last decade; the immoderate growth of the building property has been noticeable for the stressed urban dispersion of the consolidated centres towards urbanizable rural spaces, without evaluating its suitability with the territorial frame, measuring the only efficacy at a proximity scale, and compromising the involvement of the undefined spaces of the suburban transitional area: insufficient is the saturation of the existent building structure, the re-use of many urban areas currently abandoned and disused, the willing to mend the incompleteness of the dissipated borders as well as the historical continuation of the structure of the urbanized centres and the territorial hierarchies preservation. These features of non-centricity brought the creation of many different not-places, not-locations, where the centre, fundamental principle to arrange explicit *limes* (from Latin: 'borders') that have the function to defend agricultural spaces against the uncontrolled diffusive urbanization processes, as well as against the waste of soil and against the historical city framework already consolidated. To sum up, the response of the plan turned out to be strongly inadequate to the environmental sustainability demand, and a solution, at the provincial scale at least, is required to deal with the urban-agricultural conflict for

the physical resources exploitation. One way out could be to designate 'centred' localities where urban expansion can be planned, where alternatives to the actual urban settles dispersion can take place, where the irresponsible waste of not-renewable and finished resource, such as the soil, can be obstructed, where the good government of the territory can be expressed in a moment of synthesis of the plan. Therefore is required to start evaluating, selecting, addressing the local choices at the wide scale in order to make the competition between urban growth and rural spaces come to an end, so that the municipal instruments have to face up to the environmental sustainability questioning about the use limits of physical resources and about most effective tools to measure them: the problem, too long laying in vague, pretends now new shapes of planning, in which the focus on physical resources is the absolute presupposition to propose urban and agricultural places where the main terms of conflict with land sustainability are identified, evaluated and explicitly faced: from lacked conservation of natural heritage to pollution and waste of finished physical resources, to the indifference in construction and re-construction processes of cultural and historical landscapes and to the deterioration and ratification of local peculiarities and urban individualities. In effect we are able to see a so wide range of pressures generated by processes of urban expansions (fragmentation of rural texture and natural habitat, banalization and alteration of sensible landscape, loss of high quality soils, increase of pollution load on waters, gain of environmental costs due to sprawl phenomena),

to make necessary a control of municipal plans location choices, towards the consumption and alteration of soil, waters, air, landscapes, so to determine their sustainability degree and to modify (in case of negative evaluation) the quantitative characters and the consequent spatial options, though it is demonstrated a very little interest towards the evaluation of the environmental consequences of the plan; just to cite one case, the attention towards the EIA was at the beginning as high as it was, secondarily, the methods and the analytical contents oversimplification, besides the adoption of routinely instruments and the lack of strategic assessment. The EIA has been degraded as 'optional accessory' among the amount of documents considered compulsory by law. The environmental strategic assessment future will be the same, actually the few evaluations produced by now seem to reveal weak analytical tools, masked by a just theoretical and effectiveness lacking framework of sustainability theories; as methodological protocols not really able to evaluate sustainability of new development urban areas with regards to environmental variables. It is urgent to equip plans of evaluation instruments with the double rule of 'assessment tools' of choices for new urban areas and also sort of 'simulator' of alternative options, supported by specific spatial performance indicators able to identify particular sustainability thresholds and to provide numeric measures to found assessment on. With the environmental impact assessment the need of quantitative evaluations comes up from the very beginning of the plan, and, to this purpose, appropriate indicators are required to express the

limitation in use of the physical resources. In the adopted interpretative model the sustainability of expansive locations chosen by municipal plans has been considered function: of urban shapes compactness (under the same quantities of urbanized soils, compact perimetric morphologies produce shorter distances from centres, less interference in rural and natural lands and consequently less economical and environmental costs); of number and extension of new urbanized areas (urbanistic choices for small centres or, what worse, for puntiform centres bring about a pulverization of settles weave, higher soil consumptions and greater transport and environmental costs); of settles dispersion (i.e. of ways in which urban weave is arranged in the space; choices of new urban areas referred to: the saturation of existing urban porosities; the sewing of fringe urban zones in city planning; the urban weave continuity, represent sustainable urbanistic models contrary to discontinuous, diffusive and centreless configurations, with serious consequences of rural and forest systems fragmentation and alterations of their functions); of consumption of high capability use soils (expansive choices often don't often consider the pedological quality of interested soils); of hydraulic risk connected to new urban areas located in fluvial expansion zones; the pressures on natural systems (sustainable choices of new urban areas have a prefer for locations far away from woods, reserves, wetlands, potentially alterable by human activities). In previous works (synthesized by Paolillo 2005) indicators and procedures have been selected and used to quantify the components of

the model (building new indicators and adapting some old ones to measure the urban settles spatial pattern as well as the distributive spatial pattern, two components for which, since concrete reference from literature is missing, the need to find classificatory models to the urban framework, against the soil waste, appears more urgent). Finally a path was delineated in the following six components: I1 *the perimetrical morphology* (indicator j1,1 = CF shape coefficient); I2 *the distributive spatial pattern* (indicators j2,1 = DISP1, urban puntiform dispersion coefficient; j2,2 = DISP2, dispersion of smaller urban centres area <1,5 ha; j2,3 = DISP3, dispersion of bigger urban centres area >1,5 ha); I3 *the urban settles spatial pattern* (indicators j3,1 = DIFF, diffusion of urban polygons coefficient; j3,2 = CONN, connectivity coefficient; j3,3 = ETE spatial heterogeneity coefficient; j3,4 = CONT continuity coefficient); I4 *the pedological structure* (indicator j4 = Q pedological quality of soil interested by urban expansion); I5 *the hydraulic risk* (indicator j5 = RI hydraulic risk coefficient); I6 natural elements sensibility (indicator j6 = INT interference coefficient quantifying here the entity of the influence that new urban areas act to natural zones). We'll be able to estimate, for each of the six components, the intensity of the phenomena at t0 (the consolidate urban settle) and at t1 (the PRG thresholds put into practice). From these intensity values it can be drawn the D, i.e. the difference between the two temporal thresholds: raising the D it has a decrease of the sustainability degree of location choices (Paolillo, La Rosa, Gabaldi 2005). Is also true that, except for I4, I5, I6 expressing peculiar physical factors not

replaceable by different nature synthetic indicators, the other urban components I1, I2, I3 could appear redundant in the estimate of the territorial dispersion, and therefore we would like to experiment different descriptors, carrying useful, not-pleonastic information, such as the Gini index (1912, 1955) used to calculate the concentration-dispersion degree intended as distribution of the area of each urban nucleus over the total urbanized area of that Commune, varying from the extreme case of all the urbanized nuclei having the same surface (maximum dispersion, perfect inequality, index 0), to the maximum concentration case (only one nucleus with measurable dimension and all the others with puntiform dimension, index 1). Gini index has been estimated for all the municipal urban polygons settles pattern of Cremona province, splitted into four intensity classes and for three different temporal thresholds: *in the second post-war*, Cremona, Crema and few other Communes have higher index values, they show a central nucleus bigger than the one in the Communes nearby (where there is a lower urban nuclei number, having more less the same dimensions, that means homogeneous distribution and centred urban settles pattern: it comes out in the post-war period the diffusive model was not started yet); *nowadays*, the urban settle framework threshold ongoing, brings to a Gini index increase in the overall province (currently there are many more bigger urban nuclei compared to the previous small ones, so that the Gini index increase and the curve goes closer to the perfect inequality curve, this draws to the conclusion the diffusive model has taken place); *in the last temporary threshold*, as a consequence of the PRG

expansion choices it can be noticed the increased cities sprawling and the correspondent soil waste, although the urban nuclei number remains the same, or it can even decrease, due to the fact that the generalized urban expansion brings to the absorption of the smaller centres nearby, in the bigger urban centres, demonstrated by a perfect linear correlation with the decrease of DISP1 (urban puntiform dispersion coefficient) and DISP2 (dispersion of smaller urban centres), and the increase of DISP3 (dispersion of bigger urban centres). This expansion process appears in strong contradiction with the demographic decrease of about 13%, registered from the 1951 to 2001 in Cremona province, with a constant reduction in the period 1951-1991 and a slightly inversion tendency in the last period; besides, in the last decade 2001-1991, looking at the provincial value of the local units, it is decreased (-1.63%) and it does not justify the expansion processes in the productive areas; if, then you look at the growth spatial extent (in the post-war period 26.46 km², at present threshold 128.35 km², at predicted threshold 186.00 km²), we have to admit a waste situation that, considering Q = pedological quality of soil interested by urban expansion, has taken place (in the prevision of the most recent municipal urban instruments) for the 50.15% on soils of the I and II classes, above the 28.43% of the III classes, in a province where the agriculture always has been the most important sector, reaching the highest European levels, and now it has to compete for the use of the soil resource with the urban settle diffusive process, as the indicators complex demonstrates: CF = shape coefficient, DISP1

= urban puntiform dispersion coefficient, DISP2 = dispersion of urban centres with area < 1.5 ha; DISP3 = dispersion of urban centres with area >1.5 ha; DIFF = diffusion of urban polygons coefficient; CONN = connectivity coefficient; ETE = spatial heterogeneity coefficient; CONT = continuity coefficient; Gini = urban settles framework concentration. In the estimate of the Pearson coefficient r, at *the post-war period matrix*, the dispersion of smaller urban centres (DISP2) and the diffusion of urban polygons (DIFF) appear to be the most correlated with r = 0.87; it follows the correlation between connectivity (CONN) and heterogeneity (ETE) with r = 0.66, then between Gini and ETE with r = 0.57; between CONN and DISP2 r = 0.51; instead CONN is inversely correlated to the dispersion of the bigger centres (DISP3) with r = -0.44; in *the present urban settle matrix* the higher correlation is between the dispersion of smaller urban centres (DISP2) and the diffusion of urban polygons (DIFF) with r = 0.86, exactly as in the previous threshold, while the second higher correlation is the one between Gini and DISP3 with r = 0.63 and between Gini and ETE with r = 0.62; inverse correlation is shown between DIFF and Gini (-0.59) and between DIFF and DISP3 (-0.55); the CONN index is positively correlated to DIFF with coefficient equal to 0.32; at last, in *the expansion urban settle matrix* the most correlated variables appear to be the Gini dispersion index with ETE (0.94), followed by the ones already well correlated at the previous thresholds, DIFF and DISP2, with Pearson 0.87, and the inverse correlated ETE and DIFF with -0.42 and Gini and DIFF with -0.39. At the end a relevant contribution comes from the

Principal Component Analysis (PCA). The model has been performed taking away one variable at a time, for a total of eight variables, and comparing the variance explained in calibration and in validation for each model. For the *historical matrix* the first four PCs explain the 84% of the variance and, of the 25% explained by the second PC, the Gini index describes the 33% (it seems to take new and relevant information, although it does not resume the total system information, it gives an important contribution, and therefore it represents a fundamental component for the description of the historical urban settle pattern of the Province of Cremona); for the *present matrix* it can be deduced the worst predictive model is the one without DIFF and Gini (and the best is the one without DISP1), confirming therefore that the Gini index, together with DIFF, DISP2 and ETE, expresses a high explicative portion; in the last case, *the expansion matrix*, the last temporary threshold taken in consideration (the residential and productive expansions localized by the municipal urban instruments), shows that whereas Gini would be removed, the model would lose a high quantity of useful information, describing, with 5 PCs, only the 90% (to the contrary if DISP1 or CF would not be considered with 5 PCs the 97% can still be explained). Once again, as in case of the previous historical and present thresholds, the Gini index appears to be extremely relevant especially to estimate the new urban processes predicted by the municipal plans, appearing to be rather than a synthetic index (as it is PC1, that describes the 38%, and PC2, describing the 21%) a fundamental variable, together with the other three, considered, by themselves, already enough

for the urban settle spreading synthetic description.

In this way there will be a relevant model simplification f (I1, I2, I3) because the analysis dimension would result halves (from 8 to 4 variables), in this case it would not be useful to calculate I1 (expressing the compactness of the urban settles shapes) since we have seen that the perimetrical morphology CF does not play a very significant rule; for I2 the distributive spatial pattern DISP1, urban puntiform dispersion coefficient, can be replaced with DISP2, the dispersion of smaller urban centres of area <1.5 ha; besides the DISP3 calculation can be avoided, since it takes too little and not-innovative information; the CONN indicator can be substituted by DIFF, urban polygonal diffusion; the Gini index must be added to evaluate I3, since it has revealed peculiar features carrying interesting results.