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Urban strategies and projects for sustainable development

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The evolution of regional town-planning legislation in Lombardy since 1997 has targeted its attention on new forms of urban planning practice, rendered necessary to bring the instruments of intervention into line with the complex needs of society which indicate that there can be no further delay in carrying out actions more and more targeted on the objectives, on the definition of the processes and on the subsidiary integration between agencies and the public-private sector.

Through Regional law 12/05, the general Masterplan (Prg), intended to govern the expansion of the city and based on the method of expropriation and on the concept of quantitative standard, has become transformed into the territorial government Plan (Pgt): from a totally prescriptive dimension of the town-planning instrument, fraught with constraints, in conformity with property rights and excessively rigid, one moves over to a new perspective of strategic-structural type, in which the town-planning instrument is broken down into three distinct components: the plan document, the services plan and the plan of rules.

A methodological approach which, above all regarding projects to transform and reuse urban spaces (among which also those relating to public housing must be included), is oriented towards innovative urban planning instruments represented by the so-called complex programmes, in which a basic role is filled by the principles of dialogue, agreement and sharing of the choices of the various subjects involved, both public and private.

The new planning model

In keeping with the new key principles of the most recent town-planning and implementation instruments, the basic and innovative characteristic on the Pgt of Bergamo is that of possessing simultaneously a strategic dimension (translating into the definition of an 'overall and aggregate vision' of the territory and of its development) and a more directly operative one, marked by the determination of the specific objectives to be activated for the various functional destinations and by the identification of sectors subject to transformation.

The Pgt of Bergamo is based on a twofold time reference level: on the one hand the five-year validity assigned by law, which responds to a requirement of flexibility to provide timely answers to the rapid evolution of territorial dynamics; on the other hand, a broader horizon enabling an overall, articulated strategic vision to be developed over a long-term time span, corresponding to at least 10-15 years.

The new idea of city

The new idea for the City of Bergamo of tomorrow must take as its objective the improvement of the level of usability and of liveability of the urban spaces, especially public ones, towards a city that is safe and secure not only for its residents, but also for its workers, commuting students, tourists and other visitors. All this through the implementing of urban policies able to guarantee better conditions of access, of use and enjoyment of public spaces at the various times of the day, differentiating their characteristics according to the various typologies of users and, at the same time, promoting the network of environmental resources present in the territory.

The strategic objectives

The new plan wishes to provide answers to the following strategic objectives:

- coordinating the measures of urban transformation linked not only with the requirements of the present demand for settlements, services and areas for public uses, but also with the will to propose the plan as an opportunity to develop the potentials of future growth;
- providing effective instruments for urban redevelopment in order to favour diffuse measures, aimed mainly at the rehabilitation and the transformation of the existing building assets, in particular those run-down, derelict or underutilized, at the recovery and improvement of existing public spaces and at their integration with newly constructed ones;
- curbing the consumption of land, favouring transformations and urban development in a logic of recovering permeability, the regeneration of soils of urban areas today strongly waterproofed, and less occupation of the 'empty' city spaces, which have become more precious for the environmental sustainability of the urban system and of the quality of life;
- promoting environmental measures targeted on safeguarding the areas of environmental and naturalistic value present in the territory, on the development of urban areas (free or potentially able to be freed) provided with environmental characteristics of great worth or important from the ecological standpoint, through the construction of its 'ecological-environmental project' and of a 'green belt' that fosters its connection and its use-enjoyment;
- relaunching the economic development of the city and of the territory, promoting strategies of intervention not only in the traditional sectors of productive and commercial activities, but also, and especially, in the sectors linked with the services, and with reception and tourism-hotel activities;
- promoting participation as the source of inspiration of the choices, brought about through open confrontation, transparency of decisions, sharing of strategies and actions for the construction of the project of the new city;
- economic sustainability of the Plan choices: search for a balance between resources generated and restoration to the territory of urban quality by way of new services and the renewal of what already exists.

Structure and project organization

The analytical territorial structure of the Pgt must needs be based on the path traced out by the Secchi-Gandolfi Plan, starting from its systemic interpretation, which organizes the model of the city in systems which respond to a functional demand that the territory makes to them, orienting the form thereof.

The main project themes are addressed and studied in depth through a process of sharing, also at territorial scale, that has guided the definition of the possible scenarios indicated in the plan for the various systems, from that of the environment (the Green belt urban project), to the infrastructural one (scenarios of the public and private transport networks), and to the economic and settlement one (urban transformations, development policies, rehabilitation projects and targeted actions).

The revision process, carried out during the examination of the observations, tested the validity of the structural organization of the Plan, which showed that it was able to take in new guidelines proposed by the administration, (the plan was adopted and approved by two different administrations) without waiving, but indeed consolidating its objectives of sustainability (environmental, landscape and of balanced settlement weights), which constitute the invariants of the Pgt project whose capacity must be recognized of guaranteeing a technical planning framework on a par with the strongly innovative content of the regional reform, in an adequate disciplinary context.

The Strategic sectors

An important innovation introduced into the strategic instrument of the Plan document, the Strategic sectors represent a proposal of method intended to provide project criteria and guidelines for the single measures and to accompany them to an overall vision of city government. They represent thematic areas of gravitation of the planning actions, defined through the analysis and interpretation of the urban places, of their peculiar features, critical characteristics and possible vocations for functional transformation and urban planning and environmental rehabilitation.

The 11 Strategic sectors identified by the Plan document form a reference framework for the measures outlining a coherent planning strategy aimed at rebalancing urban functions and at developing in the best manner the potentials of each area. These 11 Strategic sectors therefore translate the guidelines of the Plan document into strategies, urban projects, and environmental and infrastructural works, putting into effect the forecasts of the services plan, towards the construction of the new city.

The basis and the sense of the strategic value of the sectors stems from the identification of forms and contents of urban development projects and construction policies of the public city, through the capacity to identify shared objectives by public and private actors. The strategic sectors act on the strengthening, the development and the articulation of the existing offer of services and on their degree of accessibility and usability, considering

the problems and the interactions between the various territorial scales.

The Transformation sectors

In keeping with the flexible model and the strategic structure characterizing it, the Plan document identifies the Transformation sectors and the urban contexts in which to develop the complexity of the synergetic relations among the urban elements belonging to the three basic systems (infrastructures, environment and settlements) towards the new urban project. The contents of the Transformation sectors are organized on special project cards which do not have a conforming character, but which describe the objectives proposed for each of them through a series of constituent elements.

These cards form an integral part of the Plan document.

The environmental project of the Green belt

The Pgt assigns to the Green belt project the concrete implementation, in the design of the Plan, of strengthening the environmental system and the general improvement of the connections, the usability-enjoyability and the quality of the city's open spaces.

A veritable environmental project which integrates, connects, pieces together and amplifies the special conditions of the 'urban spaces' to obtain highly qualitative and easily measurable results for the purpose of increasing the quality of living.

In particular the Green belt project is formed by the linear park and by the Green rooms.

The Green belt is a linear park with agri-woodland characteristics, specifically designed to bring about the ecological connection between various areas of particular naturalistic interest and at the same time to foster the tourism and environmental enjoyment of the periurban rural territory.

The Green rooms are three large parks having different environmental and use characteristics: the Trucca Park is naturalistic by vocation, the Martinella Park is of ecological type and the great urban park of Porta sud is characterized by its green spaces that can be used for games, recreational and sports activities, and of relation with the urban context.

This Green for sport and for leisure activities integrates the environmental system formed by the linear park of the Green belt and by the Plis, in the overall project of upgrading the public green spaces and those of public use at urban scale, with particular reference to the green spaces equipped for sport and for leisure pursuits.

The Green belt project is completed with a protected cycle and pedestrian system which runs along and connects the centre with the peripheral areas, physically separated by the ramification of the road system in the southern part of the municipal territory. Moreover the system of slow mobility foresees necessary connections between cycle tracks and pedestrian ways and stopping places for the rail and tramway public transport service so as to broaden the range of opportunities available

also to those coming from the upper local station. The 'slow mobility' project evidences also those crossings of the ways having a high or medium-low critical character, in the attempt to make a detailed verification of the soundness of solutions at the observed critical levels.

The services Plan concretely implements the environmental project of the Green belt outlined in the Plan document: through the Transformation sectors whose implementation is proposed via the equalizing model, provision will be made to acquire, equip and develop the areas of the Green belt and of the large parks in order to respond adequately to the demand for open spaces for sport and leisure pursuits, within an integrated system of environmental and ecological connections which give form to the open space and rethink the relationship between the city and the urban system.

Equalizing compensation

The equalizing model outlined in the territorial governance plan regards in particular the project of the Green belt and of the system of urban public parks correlated with it as an element to enhance the areas with an ecological and environmental value (green wedges, ecological gaps, filter belts). The equalization mechanism on the other hand makes it possible to attribute to these areas (which thus taken on the character of take-off areas) a virtual index to be transferred to the Transformation sectors proposed by the Pgt and identified in the Plan document in exchange for the free, compensatory granting of the areas to become a public park, and for the construction of portions of the cycleway-pedestrian networks and of the system of green connections, as well as of skirting belts for the infrastructures.

The model identified for the plan of Bergamo is therefore an equalizing-compensative one, whose application solely to the Transformation sectors attenuates and makes fairer and more equal the treatment between the properties in the areas subject to the equalizing system with respect to the plan choices (in fact the distinction is reduced between private areas and public areas for purposes of economic relief).

From urban spaces to the environmental project to the Green belt

Bruno Gabrielli

Bergamo is the Italian city for which a sequence of development plans has been deposited, the contents of which could constitute, themselves alone, a 'history', the history of modern and contemporary town planning in Italy.

Piacentini (1916) here provided, while aged only thirty-five, his best effort, designing the new city centre on the plain at the foot of the Città alta, connecting this with the station. After which came Angelini (in the '30s), the great interpreter of the historic city, the Morini-Muzio plan (in the '50s) and the Astengo-Dodi plan (1969), which represented the most advanced example in those years of an experimentation of great interest on which Astengo had made a start with the abortive attempt at a plan of Genoa (1963-65). This virtuous circle of planning continued with the Secchi-Gandolfi plan, started in the '80s and finally approved in 2001.

With the territorial governance plan the path chosen was that of continuity.

As opposed to the others, this is not a 'named plan'. The municipal office that drew up the plan operated in full autonomy and had to address a problem that was certainly a new one, as it was the first Pgt of a Comune that was a provincial capital and therefore had to come to terms with the new town planning law of the Lombardy region (Lur 12/05 and subsequent amendments). I believe it can be stated that the interpretation that was given obtained such recognition that the Pgt of Bergamo has become a 'model' of reference for the whole Region.

The basic choices of the new plan

When Galfetti and I met for the first time to suggest to the design team the choices to be preferred, the choice reached was surprisingly in unison (so that one cannot say which of the two was first), namely that of dedicating ourselves to the analysis, census, assessment and design of urban 'spaces', understood as free spaces with any destination of use whatsoever, whether or not in urbanized territory. From this arose the underlying idea of a project able to express a visible material 'sign', adding a further element of recognizability to the urban landscape.

The urbanized city has by now 'occupied' the entire municipal territory and has therefore exhausted its possibilities of growth. There are very few areas of large size that are still free and thus their use had to be regarded as a particularly precious resource.

While on the one hand there is a lack of 'physical' space for growth, on the other hand Bergamo and its metropolitan area demonstrate an economic vitality that has endured even through these recent years of crisis. More and more, therefore, vast area planning would be necessary to give coherence and efficiency to a territorial

system that, in absorbing the economic impulses, cannot manage to operate the territorial choices rationally (the Comunes around Bergamo act as veritable parasites, with a growth that presses against the confines of the municipal territory of Bergamo and giving free rein to destinations of use, such as the big commercial centres, which naturally have a considerable incidence on the general functioning of the metropolitan area).

The environmental project

When we, Galfetti and I, chose to 'start from the urban spaces', we certainly had no intention of making a census of them to transform them into 'solids'. The idea was that of connecting them together to form 'ecological corridors' so as to construct a 'network'; it was for this reason that every type of space, public or private, whatever its intended use, was censused.

Naturally, a 'connection' cannot always be made in view of the limitations that are implicit in the fabric of the consolidated city, but little by little the research took shape and it was thus possible to establish the corner stones of the system. These are the three new urban parks that can be set up through the application of the equalizing-compensating system.

The 'Green Belt' is not a ring, but a double system.

The first system forms part of the network of cycle paths, existing and planned. The objective is to manage to cross the entire city on cycle and pedestrian paths separate from the ordinary traffic: an innovation of considerable importance as it is aimed at serving the whole city, every part of it. Not all the relations are continuous, as they often come up against obstacles that cannot be surmounted, which interrupt them, but then wherever possible they are resumed further on; but at all events these cycle-pedestrian ways constitute a diffuse network and create a new urban landscape compared with that used by vehicular traffic.

The second system instead regards (even though it runs along the first one and even beyond it) a row of trees, which should assume such an important perceptive role as to form a veritable 'green crown', a new design of the landscape, a continuous line that is uninterrupted as it can be made even within private areas.

The 'Green belt', as well as defining a 'mark' of the landscape, also forms a sort of belt 'containing' the city, a new limit in the same way as the city walls once were. In reality, such a limit would have, more than anything else, a symbolic and wholly virtual value, since barriers cannot be constructed and as this limit has already been crossed in various parts. The 'Green belt' is also a system of public green areas backed up by the nearby, contiguous presence of private green areas.

The compensating-equalizing system enables ambitious objectives of the plan to be achieved, guaranteeing at the same time other 'benefits', first and foremost that of sheltering the plan from the five-year decadence of the constraints foreseen by law. This instrument enables the administration to obtain the areas for the services fre-

ely, and for public green in particular. Hence, the 'Green belt' is a project of a prescriptive nature contained in the 'services Plan'.

Conclusions

The 'Green belt' and the large parks cannot be viewed as choices in themselves almost autonomous from the overall choices of the plan. On the contrary, they represent a part, if you wish, structuring the whole, but in any case a piece of the entire logic of the plan, to be read also in terms of sectors and systems and which binds together the answers that are given to the local demand and to the general one. The criterion of the integration of territorial policies is very present in the Pgt and has to guide the management of the measures, also in terms of time.

The figure of the architectural consultant in producing new instruments of municipal planning

Aurelio Galfetti

Working as an architect I have always thought that architecture and town planning are inseparable subjects, or rather professions. No architecture exists that does not have town planning significance, and no town-planning rules exist that have no influence on architecture.

Making the design of a building, of a whole city or of a highway crossing a territory, whether built up or otherwise, always means designing spaces to which, obviously, the infinite other components of the space of a man's life have to be referred. Drawing up a plan of territorial governance is therefore, essentially, an interdisciplinary task.

In this experience, it has been my good fortune to be able to participate in the definition of many projects, some linked to implementing instruments, competitions or programmes in the process of being carried out, others again linked to preliminary proposals concerning the new transformation sectors that the new instrument was assessing within the ongoing planning process.

Among these preliminary proposals and projects, there are three cases which to me seem the most significant ones.

The first example is that of the competition for the new head offices of the Province. A public competition was announced for the head offices of the Province of Bergamo, foreseeing a jury of not only architects.

What, then, were the criteria that guided the choice of the winning design?

I think that the design should in the first place have shown itself able to respond, in terms of coherence, to the guidelines that had for two years underlain the work of the design team that was drawing up the territorial governance plan.

The second representative work of my collaboration is the design for the new Porta sud intermodal centre, in the preliminary Masterplan, which was worked on in order to draw up Project card of the Plan document dedicated to the most important and strategic urban transformation of the whole Pgt.

The main quality of this project consists in having attributed to the public space (the great green terraces over the tracks, called the Esplanade) the task of characterizing, vitalizing, but substantially making all the other qualities present in the urban planning vision imagined for Porta sud both possible and actually participating.

The third project is the foreseen expansion in the Transformation sector of the Pgt Plan document called 'Ata/e/i_36. Pole for agricultural and food research and advanced research', connected with Jean Nouvel's contribution, the 'Red kilometre'.

The chilometro rosso has often been viewed as a sort

of obvious solution that did not come off, that does not solve the problems but hides them behind a long, handsome, but useless, red wall.

Instead it would be more correct to view this invention positively, as the plan of Bergamo did in fact do, conferring due importance to the wall by prolonging it. Indeed, it might be wondered why we did not prolong it throughout the whole length of the autostrada?

To my way of thinking, the Chilometro rosso could become hundreds of kilometres long.

The Chilometro rosso model is a precise proposal of public space in proportion to the dimensions of the motorway.

As far as the Transformation sector of the Pgt Plan document is concerned, in assessing the design proposal, the methodological approach was basically the same as the one characterizing the assessment of all the measures. A methodological approach based on the interdisciplinary confrontation corresponding to the various professional skills and competences of the Pgt design team, taking equally into consideration criteria linked with town planning problems, social and relational themes, environmental and ecological questions and, lastly, but no less important, formal and architectural aspects. Those for which, in all the team's 'extended design' meetings, both institutional and political ones and local and district ones with the residents, as also working meetings at the Pgt office, I had the role of architectural consultant on the town-planning choices linked with the new instrument.

Environmental sustainability and implementation of the transformation measures

Giorgio Cavninis

The town-planning instruments of the last generation, in particular those deriving from the most recent regional laws, have had to turn development choices and guidelines towards a settlement logic more and more conditioned by the following necessities:

- guaranteeing a more adequate level of sustainability of the transformations foreseen with respect to the effects induced on the territory and on the environment, understood both as urban landscape and as complex ecological system;
- promoting and favouring implementation and management modalities aimed at the selection of forms of contracting-concertation, able to guarantee the effectiveness of the forecasts of the instruments in their capacity to be translated into concrete projects and real measures, through the economic feasibility of the measures within the difficult economic framework dictated by the present global financial predicament, hardly favourable to either public or private investments and initiatives.

Environmental sustainability and soil consumption in the Pgt of Bergamo

The first consideration on the subject of environmental sustainability regards the data deriving from the Plan project relating to soil consumption: the strategic objective of the regeneration of urban soils and of the general rebalancing of the territory of Bergamo has been translated into localizing choices that have identified, thanks to the careful and meticulous work of analytic reconnaissance of the territory, the sectors suitable for urban transformation measures more in keeping with the environmental profile and therefore priority ones.

The Plan document therefore proposed transformations that foresee new volumetric concentrations for 78% of the cases located in already built areas and for only 14% in free areas not yet possessing building rights; the remaining 8% corresponds to forecasts of volumetric concentrations in free areas already concerned by previous forecasts of the Prg and confirmed by the new instrument.

In all, the soil consumption foreseen in the Transformation sectors is decidedly limited, being equal to 0.7% of the green area that today exists in the entire municipal territory.

From the strategic approach to the dimension of implementation: from design to governance

The strategic character of the plan is revealed by the elements of the non-prescriptive programmatic scheme: a plan of dimensional guidelines provided by quantitative parameters of first reference, but at the same time also

qualitative and with indicative locations.

A new model whose force and sustainability are based precisely on the fact that it does not have the rigidity of an allinclusive character; through the splitting of planning into its two fundamental components: the strategic component, which represents the necessary point of reference for rehabilitation and urban transformations, and the component of operative detail, which guides, disciplines and makes the measures ready for implementation, through the Transformation sectors.

The introduction of consensual and participatory models

The transactional mechanisms of the Plan call for the propositional intervention of private operators in carrying out not only public works, but more generally works of public interest, within a declared and shared platform of criteria and guidelines. In other words, the new urban-planning instrument foresees an interesting integration between public and private for the safeguard and development of their mutual interests, no longer regarded as at conflict with each other, but as synergetic and subsidiary, permitting the construction of the public city through what are termed 'expected public services'. The latter constitute the performance requisites that each sector has to provide to be able to proceed with the definition of the implementation plan and the carrying out of the transformation.

The public-private interaction in urban development represents the key element for the sustainability and the feasibility of the urban planning choices introduced by the Pgt of Bergamo.

The main instruments for implementing the strategies are the Transformation sectors, some of them programmed following proposals and suggestions by private operators, which have to be compared and assessed in keeping with programme indications through an evaluation scheme, broken down into six levels (known as 'Thresholds'), as foreseen in the Plan document:

- first threshold, coherence of the proposed measure with the strategic framework of the Plan document. Each measure represents a basic element of the strategic summary framework of the Pgt, drawn up according to an overall direction of the transformations; for these reasons, in particular those targeted on the creation of the public city, must find concrete references in these;
- second threshold, coherence-compatibility with the reference Strategic sector. The Strategic sectors are portions of the city differing one from another, characterized by special objectives and specific aims. The proposed measures, falling within the 'relational and functional' perimeters of the Strategic sectors have to evidence and demonstrate their coherence with the choices at intermediate scale, as described in detail in the objectives of the single Strategic sectors;
- third threshold, assumption of principles of environmental sustainability and coherence with the indications of the Project card of the Transformation sector. Each proposal of the implementation Plan must foresee

models of spatial organization which correlate between them qualified functions and spaces, interpreting the following concepts in project terms: improvement of environmental and urban quality; offer of building products and of urban spaces of high quality level; adoption of an ecological approach, reduction to a minimum the use of natural resources and the consumption of free soil; coherence with the town-planning parameters indicated in the Project card of the Transformation sector; inclusion of the ensemble of functions within the flexibility limits stated in the card.

- fourth threshold, alignment with the indicators of the Strategic environmental assessment (Sea) and with the monitoring system of the transformations. The project choices of each transformation must demonstrate their coherence and compatibility with the strategies aimed at improving the overall environmental balance as a consequence of the transformations proposed and also carry out the necessary mitigation and compensation works requested at the stage of general planning;

- fifth threshold, requisites of economic-financial compensation. Against the transformations foreseen by the Pgt, the Plan document sets out the elements of economic-financial compensation to benefit the community. The following are foreseen in particular: the obligation to acquire 'virtual' building rights assigned to the 'take-off' areas according to the equalizing model; the carrying out of works and services defined by the term 'quality standards' in an amount equivalent to that due for the costs of primary and secondary urbanization; the granting of areas to be earmarked for public services or ones for public use; the construction of a portion equal to 10% of the gross residential pavement area foreseen by the Transformation sectors to be earmarked for social housing, in the various typologies and forms foreseen by the services plan;

- sixth threshold, bonus elements. The administration reserves the right to attribute increments of the quotas of gross pavement area foreseen in the Project cards of the single Transformation sectors for the provision by them of a number of additional qualitative elements over and above the ordinary supplies and the requested public services.

The initial stages of experimentation of the implementation phase of the Pgt of Bergamo are starting up through the process of assessing the first Transformation sectors; since the coming into force of the new instrument, which took place following the publication of the acts of the Pgt in Burl, there have been five urban sectors undergoing preliminary investigation. In spite of the particular and very delicate state of the economic situation, assuredly not favourable to the translation of the forecasts into entrepreneurial measures and operations, the high degree of equilibrium and the sustainability of the Implementation Plans presented confirms, on the one hand, the substantial validity of the equalizing-compensating model 'produced' for the urban and territorial situation of Bergamo and emphasizes, on the other hand, the funda-

mental importance of the action of coordinating the strategies introduced in the Plan document and the implementation modalities identified in the services plan for the carrying out of the public city urban project promoted by the territorial governance plan, towards the concrete creation of a new and tangible urban quality.

Equalizing and compensating choices in the service of planning

Fortunato Pagano

Without wishing inadvertently to cast any doubts on the application of what might be indicated as the principle of equalization-compensation, it is observed that in various parts of the country considerable indifference is shown towards equalization.

To be sure, plans are not made to equalize, but have to pursue objectives of correct town-planning development, equalizing as far as possible.

It does not seem that on this point any reasonable doubt can be raised.

It was necessary, in the case of Bergamo, and it is always necessary to beware of and avoid the distortions of planning which might arise, if there is no real awareness of the need to promote equalizing and compensating choices in the service of planning.

Suffice it to think that building rights can be attributed, by means of equalizing-compensating models, without first questioning the development objectives which should be predominant even over choices of distributive equity.

Reference is made in particular to the overdimensioning of settlement weights which in some cases have occurred in the past and still occur today.

It is possible to observe situations of conflict between two public interests, that of a planning effectively pursuing correct objectives of town-planning development, and that of equalizing in summary fashion, making as many people pleased as possible.

It should be added right away that in Bergamo's case the need to avoid such a conflict has been clearly felt, and at all events it may be considered that the 'reasons of planning' have been privileged.

The report accompanying the plan document states that 'the model identified for the plan of Bergamo is a strategic-compensating one, applied to the achievement of strategic objectives of public value and integrated by compensative modalities stemming from the implementation of the transformation sectors'. It adds that 'the equalizing model outlined in the territorial governance Plan regards in particular the project of the Green belt and of the system of urban public parks correlated with it as an element to enhance the areas with an ecological and environmental value (green wedges, ecological gaps, filter belts)'.

The attempt to guarantee the 'landing' of the building rights pertaining to the areas set aside for public services Apart from satisfying the requirements indicated above, in defining the equalizing-compensating model for Bergamo an undertaking was made to satisfy also other requirements. Briefly, these may be indicated as the need to guarantee credibility to the model, and that of avoiding, through summary choices, arriving at a 'one-sided equalization'.

To use terms that by now form part of the jargon of equalization, there are plans that guarantee 'taking off' of building rights, but which do not also guarantee their 'landing'. The question raised here is definitely not one to be considered of marginal importance. Quite the contrary. The 'novelty' that characterizes the Bergamo model in this sense is that it makes an attempt also to guarantee this 'landing'.

The Pgt of Bergamo foresees that the owners of the areas earmarked for residential or productive purposes, which come within the transformation sectors and in a number of sectors for planning implementation foreseen in the 'Plan of rules', should grant gratuitously to the Comune, with the conventions relating to the implementation of executive plans and programmes, also parts of the areas assumed in the plans as landed properties; this in order to use them for the assumption, by third parties, of the building rights pertaining to areas earmarked for public services or equipment.

Subordinately the aforesaid owners, instead of granting to the Comune the abovementioned portions of their landed properties (having characteristics such as to permit their autonomous building for the aforesaid purposes), may acquire building rights for use in the sectors forming the object of the implementing plans and programmes.

Admittedly, it cannot be claimed that the abovementioned 'landing' would in this way be definitely guaranteed. Certainly, though, foreseeing the two mentioned alternatives creates greater possibilities that the equalizing model will function.

The possibility of conditioning the attribution of building permission

It should be observed in this context that in Lombardy there is legislative cover for conditioning not only additional building, but building permission as a whole as recognized to transformation sectors with plans characterized by having recourse to equalizing models such as that under consideration.

Reference is made to the provision of art. 11 of Regional law 12/05 which foresees the possibility for municipalities to prescribe with their Pgt the free granting, for the transformation sectors, with the conventions relating to carrying out the due forecasts, not only of the areas earmarked for public services, but also of the areas to be used for the aforesaid urban planning compensations.

The need to avoid one-sided and iniquitous results of equalization

Another need which it seems may be regarded as satisfied is that of avoiding cases of attributing (in Comunes that are not small) undifferentiated indices for the areas reserved for public services in central, semicentral and peripheral areas, the omission of attributing any importance to the place of utilization of the volumetric rights forming the object of transfer, and so forth. On the contrary, the Pgt of Bergamo contains various forecasts

having the purpose of satisfying the evident needs of differentiation and of weighting as indicated above.

In short it is observed that for said purposes, on the one hand, the Pgt foresees the application, for the areas reserved for public services, of differentiated building indices in relation to their location (see document P65, 'the equalization sectors, the take-off areas'), and whose progressive reduction is foreseen, on the basis of coefficients established for the purpose of providing an incentive for the granting to the Comune of the reserved areas within short periods.

On the other hand, the application is foreseen of weighting coefficients that have been defined considering the different value, according to their functional destination, presented by the gross floor areas of the buildings.

Lastly, for the transformation sectors located in fringe areas, an increase of one hundred per cent is foreseen for the weighting coefficients.

No solution can be optimal.

Certainly, however, as the experience of Bergamo perhaps demonstrates, 'hatchet choices' can be avoided and the dangers of differentiated or one-sided equalizations (caused in particular by the absence of weighting coefficients) can be limited.

Elements of innovation in the Plan of rules of the Pgt of Bergamo

Silvia Pergami

It has often been evidenced that, of the three documents into which the territorial governance plan of the Lur of Lombardy has been broken down, the plan of rules is the one most like the traditional town plan, with reference not only to the conforming character of the legal system of the soils linking them, but also to the graphic elements linked with the representative modalities, calling to mind the design of the zoning in the 'old' general Masterplans.

The plans of some time ago, 'those that still dominate, maybe a bit faded and dusty on the walls of many municipal offices'¹, and which, in the case of Bergamo, refer to planning experiences that have in time become real case studies: plans known to every town planner through having studied them in university texts and manuals, the Astengo Prg (Masterplan, 1969) or, more recently, the Secchi Prg (2001).

On this point it should however be stressed that the principle of zoning, the by now anachronistic application of the classification used of the old, rigid homogeneous zones, is appropriately translated in the new interpretation of zoning proposed by the Plan of rules as 'identification of assets or portions of territory more or less homogeneous and characterized (by means of their cartographic representation), with which differentiated rules and regulations are associated'.

In the case of the plan of rules, it is not therefore the case of over-simply translating the zoning of the Prg, nor of cancelling it out completely, to do everything all over again from the beginning. In other terms, this instrument becomes a possible field of research and experimentation of forms of innovation which, elsewhere, has constituted the paradigm of a renewed planning process³. A plan, the Prg, that continues in part to be 'a skeleton in the cupboard that has not yet become a skeleton'⁴ whose influence is still evident even when the forecasts traced from it have run their course or have actually lost their meaning in the mutation of the city and of the territory.

Methodological approach and structure of the Plan of rules

From a morphological type of articulation made on the basis of a research of the factors of building and of the urban environment (to recognize therein the wealth of building typologies present and the environmental quality of the built area), with the Plan of rules we go on to a progressive division of the territorial structure into subsystems called Sectors, in their turn subdivided into components (and these in their turn into elements). From this ensues the identification of city parts⁵ (at one time open spaces and buildings), Fabrics, whose features of homogeneousness are prevalent over the diffe-

rences in any case present and in which the building and urban elements forming them appear to be based on a number of types different from each other but constantly repeated and articulated. It is within this framework, aimed at a progressive simplification 'of tree type', that, glancing at the item of the legend of the Plan of rules, constant re-ference will be made to 'systems', to 'sectors', to 'components' and, finally, to 'elements'.

The systems

The reference systems identified are: the Infrastructural system, the Environmental system and the Settlement system. The first two represent the structural elements, of long duration, the two networks that condition the transformation of the city and make its development possible in terms of linear connections and environmental sustainability, constituting the 'framework' on which it is intended to construct the new urban order; while the third one is regarded as the sector of construction of urban quality.

The sectors

By 'sector' is understood a subsystem characterized by homogeneous elements, in which certain particular points are defined with greater precision. As far as the Settlement system is concerned, the sectors are represented by the main city types; as far as the Environmental system is concerned, they are constituted by the main ecological-environmental subsystems, identified in relation to the characteristics of the areas forming them and to the functions that are and/or could be located in them.

The ancient and modern Historic city

The Historic city proposed by the plan of rules is not limited to the traditional acceptance of such a city, generally coinciding with the homogeneous area of type A in the Prg, but extends the concept of historical-testimonial value also to city parts outside of said boundary and to the plurality of historical testimonial emergences (even of modern and contemporary times) observed in the settlement fabric.

The ancient and modern Historic city therefore identifies an integrated ensemble consisting of:

- the main historic area, called Città alta, of mediaeval origin, included together in the detailed Plan of rehabilitation of Città alta and Borgo Canale (Pprca);
- the sector of the five historic borghi immediately outside of the boundary wall, located along the radials giving access to the ancient city and recognizable by their morpho-typological system and by their outstanding historical, architectural and environmental characteristics, described in the five Catalogues of Historic borghi by means of specific cards drawn up for the single building artefacts and containing specific prescriptions and modalities of intervention permitted;
- the nineteenth-twentieth century fabrics of the Città bassa, distinguishable by their features of historical and architectural importance, referable to the city centre, recognizable by its unitary urban organization dating

from the first thirty years of the twentieth century and stemming from town-planning measures, urban projects and single new constructions by authoritative architects, including Marcello Piacentini, Luigi Angelini, Alzira Bergonzo, Giovanni Muzio, and others;

- single modern and contemporary buildings or parts of complexes, constructed as from the Thirties and including examples of fine architecture, based on the rationalist movement or relating to the public building of the Sixties and Seventies;
- historical fronts and peripheral historical nuclei, including the fronts along the main historical thoroughfares and the marginal historical fabrics outside of the city centre, of rural basis and corresponding to the historic centres of the minor urban nuclei annexed following the expansion processes of the consolidated city;
- single historical-architectural emergences of special value, identified as special buildings to be subjected to indications of protection, being subject to restrictions as per legislative Decree 42/04 already included in the Inventory of cultural assets as single items or pointed out in the Pgt as elements of special interest.

The Consolidated city

The sector of the Consolidated city identifies the existing part of the city permanently represented and defined in its morphological-typological characteristics, to a large extent generated by the expansion processes 'by addition' of the nineteenth-century and early twentieth-century city and the urban sectors generated by the implementation of the executive town-planning instruments of the Masterplans after the war, through measures of additions made to city parts characterized by unitary urban planning systems. The types of fabric classified by the plan of rules as belonging to this sector are listed and briefly described.

These types of fabric are separated into the following typologies (components): settlement typologies with a closed or semi-open organization; settlement typologies with an open or free organization; settlement typologies with a unitary organization; typologies with the presence of mixed or polyfunctional activities.

The city of activities

This identifies the part of the city in which the productive-handicraft functions of traditional type or the more recent activities based on research and the presence of technological poles continue to play a predominant role or in which the mixture of activities and residential fabrics influences to an appreciable extent the morphological, functional and relational characteristics at local scale.

The city of services and equipment

This represents the integrated ensemble of the main public services and those of public use at urban scale and of equipment at local scale or at supralocal scale. It also includes the services located in buildings belonging to

the fabrics of the ancient and modern Historic city, the Consolidated city and the City in transformation. For this sector the Plan of rules refers to the services Plan with regard both to policies and actions linked with management, and to projects and proposals targeted on development and on quantitative and especially on qualitative improvement.

The city in transformation

This represents the integrated ensemble of the city parts in evolution, being involved in programmed measures, based on instruments parallel to the Pgt or on forecasts contained in the Pgt, in the various acts comprising it. The following typologies of measures are therefore the ones concerned: ongoing plans, programmes or projects; plans and programmes foreseen in the Pgt; new building measures of defined volumetric size; measures of new services.

Some elements of innovation

The working methodology used in constructing the Plan of rules thus took as its starting point the rigour of the traditional plan and, at the same time, sought in the concepts of legislative simplification (linked to the contingency of the daily application of the Plan of rules in running the existing city) and qualitative effectiveness, the stimulus to introduce a number of elements of innovation. These elements reside: on the one hand, in the introduction of a number of ecological-environmental parameters (the permeability index and that of tree and bush density); on the other hand, in experimenting on 'hybrid' implementing models, deriving from the application of principles, guidelines and instruments introduced by the Plan document (qualitative standards, equalization model), in the management of 'ordinary' measures. These elements, in their application to the building and urban planning measures that concern the existing city, constitute the contribution made by this instrument towards achieving the objectives of urban quality and of environmental sustainability.

Some conclusive reflections

As recalled by Paolo Avarello in an article ironically entitled *Not even the gods...*⁶ published a few years ago relating to the diction of 'territorial governance', in the current use of the term 'alludes also to attitudes more positive than that traditionally prevalent with respect to town planning', and this should be particularly valid for its application in the Lombard version of the new municipal planning instrument. In particular and above all in the act (or component) of the Pgt most closely recalling the aspects of regulation and form of the traditional instrument, the Masterplan (Prg), in which 'town planning of forbidding type'⁷ (the town planning of parameters, of indices and prescriptions, often limited to indicating the normative elements that constitute the so-called 'plan of no's') should more often and with greater determination and force of will be replaced by a 'town planning

of doing'⁷, also in 'day-by-day' measures, in less strategically important transformations (often described as minor building measures), but certainly more numerous and rapid in being carried out.

In the attempt, and in the hope, of a plan 'less designed, less coloured ... but perhaps more useful', of an instrument with rules and regulations that are more simple (not more banal), but, perhaps, more effective.

The design of the new public city: from needs to actions

Marina Zambianchi

Four years after law 1/01 that established the Plan of services as a compulsory annex to the general Master-plan, this instrument was taken up in Regional law 12/05 and raised to being one of the three constituent components of the new territorial governance Plan.

The notions of service and standard do not automatically coincide: the Plan defines itself as an instrument of general programming of the offer of services and the objectives identified by the public administration for drawing it up assume a suprasectoral value.

On the plan of services the question of quality has been introduced first and foremost with the meaning of 'service', going beyond the consolidated practice of thinking of the endowment of services as the endowment of public areas, in mainly quantitative terms.

The plan identifies the present offer of public services and of services of public and general interest, inventoried in a georeferenced database on the basis of qualitative and quantitative characteristics. The question of demand is addressed through a participatory process which brings out the framework of earlier requirements in the various territorial sectors, analyzed at the various scales of reference.

The Plan also provides criteria for the creation of new services and for upgrading and improving existing ones, in the logic of the construction of integrated systems of services.

It identifies strategies for the design of the public city, in keeping with the plan document and the plan of rules, and goes towards ensuring, through the system of services, the integration of the various components of the built fabric and guaranteeing for the whole population, resident and temporary alike, an adequate and homogeneous spatial and temporal accessibility to the various services.

The qualitative approach to the project of the Public city

The quality of life and urban quality are explicit aims of the Pgt of Bergamo, and the plan of services becomes a decisive instrument in prefiguring them and implementing them.

A 'standardized' endowment of services, today, is not sufficient to respond to the needs dictated by new lifestyles and new ways of using the city and the territory. The need for services is today increasing and becoming more and more sophisticated, and it regards not only the consolidated offer, but also services of innovative type coming within the new concept of welfare.

The Bergamo plan of services promotes a classification of services in groups, subdivided into typologies and classes, classified also according to their scale of 'belonging', local (district) or territorial. The classification proposed includes also services of innovative and 'a-spatial'

type (for example, 'access at a distance', emergency services, home assistance, sustainable mobility, infomobility, and so on), among which the most significant ones are linked to social

housing, to safety and to social integration in districts and environmental mitigation services.

The plan of services considers moreover the theme of 'events' in terms of the cultural and recreational offer of city services, treating the event as a new service which must find its proper location in the open and built spaces of the public city helping towards the rehabilitation of the collective space, through a functional redesign of its liveability, hospitality and safety.

The plan project cannot leave aside considerations regarding the use of the city and of the open and built public space, in relation to the new lifestyles, by its inhabitants, whether residents or temporary ones. The project of the new services has thus been constructed on the basis of the investigations and of the participatory process conducted, which has outlined the framework of previous needs, and on the basis of a framework of 'public services' defined and designed to make the forecasts of overall growth indicated in the Plan document sustainable.

According to this process the measures have been defined (location, creation and modality of management of new services, implementation-improvement of the existing offer, upgrading of connections, etc.) and the priorities have been indicated, with regard to the degree of correspondence to needs (previous and emergent), to coherence with the strategic lines of the plan document and to the feasibility of the measure in relation to the effective availability of resources to carry it out.

The dimensioning of the services and of the equipment is thus based on real requests and data and not on improbable theoretical future needs, for which in any case a quantitative estimate is determined based on respect of the minimum standards fixed by Ministerial decree 1444/68, incrementing the obligatory minimum housing standard from 18 sq.m/inhab. foreseen by Regional law 12/05 to 26.5 sq.m/inhabitants (as however already foreseen in Regional law 51/75).

Lastly, the Plan of services supports and guides the construction of the three year plan of public works (Ptop), which is one of the main operative instruments for implementing the plan. The Ptop in fact provides the opportunity for constructing an effective link and attempting to guarantee coordination with the other instruments and policies of sectoral planning, today already drawn up or in the process of being drawn up (urban mobility Plan, commercial Plan, municipal energy Plan, territorial Plan of times, and so on), as well as for guiding the planning of the services to be guaranteed and identifying criteria for the future management thereof.

The system of services as generator of urban quality at the various scales of reference

A demand for a different quality of the collective space,

today, must be answered not only by rationalizing the policies of the offer of services and rebalancing the relations between costs and resources, but also by translating this demand into a precise indication, for a new project of the public city able to give back to the system of services an identity, a recognizability and a capacity to transmit meanings also through the physical order of the public space.

The Bergamo plan of services answers to the urgings of the new needs by means of upgrading not only the action policies, but also the criteria and the techniques of designing the public space, attributing to the services a role as a system generating functional order and overall urban quality. Two scales of reference have been chosen: the local scale (district, neighbourhood) and the territorial scale (urban, supra-urban).

Quality of services and urban quality: the lines of strategic action in the Plan of services

The Plan project assigns to the public space and to its quality an important role in promoting new social relations: new spaces equipped and usable for games, sports and leisure pursuits (45 new parks and gardens as well as the three big territorial parks and the linear park of the Green belt), but also new piazzas designed for flexible use, on which are based mixes of functions able to protect them: spaces for daytime services, spaces for recreational evening activities, and equipped spaces also to accommodate the weekly market.

The Plan of services takes as its objective, giving a quality response to the needs (previous and insurgent ones) expressed by the city, and wishes to contribute towards giving back an identity and sense of belonging to the places, proposing a strategy for the design of the public city, identified within a process of exchange and open debate with the city, extended to the various public and private subjects operating in the territory of Bergamo.

The Bergamo plan of services shapes in fact the vision of the public city according to four lines of strategic action:

- construction of an environmental system, through the creation of an enjoyable green system and 'gentle' mobility, guaranteeing continuity and connection to the parts of the city built and in transformation;
- project of the 'line of services', through an integrated multi-scale vision of the existing and projected services, regulating the efficiency of the system of services following a 'line-type' logic;
- guarantee of spatial and temporal accessibility to the services, with particular attention to the typologies of users, to the various capacities of access and use, and to the temporal 'restrictions' dictated by the possibility of movements through sustainable mobility;
- promotion of urban quality and new services, by means of the architectural quality of public space (open and built), maintenance, safety, friendly reception, and sensitivity of catering for different ages and their joint presence.

New ways of management, new protocols and new organizational models

The plan of services, by its very nature, must be a flexible instrument, in relation to various aspects: the dynamic nature of the services, which in time change their character, their location and their operativity, or which start or end their activity; the equally variable dynamics of developing needs; the availability of economic resources; the will of the public administration.

The intrinsic dynamism of the needs expressed by the community must necessarily be monitored, so as always to have a real picture thereof, able to be verified, in particular when defining the carrying out of the measures, enabling the expected services to be implemented, improved or modified, in keeping with the real, documented requests and requirements, and with the times when the transformation takes place.

Against this necessity, the plan foresees a system of management and monitoring of the framework of the offer of services and of the needs expressed by the community to be able to verify-redefine the measures and the priorities of performance.

The system of monitoring must necessarily interact with the managers of the services, both in and outside of the municipal administration. To achieve the expected results the organizational structure in charge of management must maintain an updated vision of the characteristics of the inhabited city the way it is today (or is perceived as being) compared with the dynamic picture of the needs expressed by the inhabitants (residents) and temporary users, within a single framework of interpretation enabling the effectiveness to be progressively assessed in the transversal carrying out of territorial policies. the Pgt forecast. The number of social housing units foreseen in the Pgt and by the transformations in progress will mean an availability of new units equal to about one and a half times those that exist today owned by the Comune of Bergamo.

Criteria for the identification of the priority urban transformations

It is useful to point out that the Plan document identifies as strategic and therefore as having priority the transformation measures not only in keeping with the strategic guidelines of the instrument, but also able to pursue a number of objectives identified as priority ones in the period of validity of the instrument foreseen by regional law (five years). Hence the services and the public facilities or facilities for public use are classified by the services plan with various degrees of priority, and among them those classified as 'level 1 priority' are intended to remedy the earlier deficits observed within the framework of the offer (existing or in the course of completion). Each Transformation sector must therefore address this level of 'temporal planning', thereby expressing its programmatic character. It should be pointed out that in various city districts the demand for social housing has meant that this new service has acquired a 'level 1 priority'.

Indicators and monitoring in carrying out urban measure

Serena Trussardi

The introduction of Strategic environmental assessment (Sea) into the regional legislative system of Lombardy has modernized traditional planning processes, transforming them into circular ones centred on the constant search for a sustainable development of the territory.

Sea is an instrument that fits perfectly into this logic of innovation and processes, testing the positive and the critical elements of the new planning model: a process parallel to the drawing up of the plan, it has the difficult but highly important task of guiding planning towards choices that are environmentally sustainable, in keeping with supra-local planning and with the strategic objectives of the plan.

In studying these aspects, Sea introduces further elements of innovation, including transparency in the choices made, the sharing of strategic objectives and participation, by means of taking part in thematic tables, both of 'institutional' type (organized with Agencies concerned and with subjects competent in environmental matters), and 'diffuse' ones (bringing in the stakeholders and more generally the community concerned by the plan).

In the case of Bergamo, Sea has permeated the plan, guiding it towards sustainability of its actions, assessing the town-planning proposals and seeking to bring about 'possible significant effects on the environment, on human health and on the cultural heritage'.

The integration between Sea and Pgt has given the Pgt the effective capacity to assume in itself the environmental considerations and the instruments pertaining to Sea.

Assessment of transformation sectors

The assessment approach used at Bergamo, developed in four distinct phases, may be regarded as a 'hybrid-integrated' model, based on a system that is both 'quantitative' (with performance indicators) and 'qualitative' (with context indicators). In the first phases a precise quantitative assessment was made of the impacts deriving from the Transformation sectors and of possible alternatives, in a logic of the contextual verification of sustainability in terms of insertion in the local context. Only in a subsequent phase, at the conclusion of the process, was an assessment made of the entire Pgt, taking into account the foreseen effects of the mitigation and compensation actions.

The four phases of the assessment process were the following:

- phase 1, factual situation of the Transformation sectors and of the possible alternatives;
- phase 2, comparison between the localizing alternatives and transformation proposals;
- phase 3, assessment of the environmental impacts and definition of compensations-mitigations;
- phase 4, assessment at a general scale.

An important innovative compensatory instrument used was represented by the setting up of an integrated green system (the Green belt) put into effect through the equalizing mechanism. This mechanism foresaw the assignment to the integrated green areas ('take-off areas') of a virtual building index to be transferred, in the operative phase, into the proposed Transformation sectors, guaranteeing the gratuitous acquisition of said areas for the municipality in compensative form.

The Sea monitoring plan

Since this is a process aimed at the continuous improvement of the Pgt also in the implementation phase, Sea foresees a monitoring phase able to guarantee that the foreseen transformations are carried out in accordance with the criteria and the guidelines as defined, to assess the sustainability of any variants to the plan, and to monitor the state of implementation of the plan. The monitoring phase represents an essential point in the 'circularity' of the planning and assessment process.

The monitoring plan foresees the definition of the following elements: objectives and effects to be monitored; performance and quantitative indicators; factual sources and database from which to obtain information to populate the indicators; modalities of collecting, processing and presenting the data; temporal programming of the reports; identification of the subjects responsible for monitoring.

The trend of each indicator must be the object of a moment of diagnosis and in-depth study aimed at understanding what variables have influenced the achieving of the plan objectives or the failure to respect them.

In the choice of indicators, ten monitoring cards have been created, regarding different environmental themes, constructed on the basis of the initial Sea factual outline (Report on the state of the environment of local Agenda 21) and refined on the basis of the indications provided by the competent agencies on environmental matters and of the contributions obtained at the moments of participation in the process. These cards will constitute the basis for drawing up the annual report on the state of implementing the plan forecasts.

The monitoring must enable it to be assessed whether, in the course of the implementation phase, the strategies remain unchanged or whether, on the contrary, priorities and requirements vary, so as to permit changes to be made in itinere, in a logic of coherence with the initial guidelines of town-planning and environmental sustainability and in a perspective of *valutar facendo*.

While we were preparing this short note we remembered an article published in this journal, reread at one of our first meetings with the scientific consultant of the Pgt of Bergamo. In the article, Bruno Gabrielli stressed how decisive the contribution made by the Offices in the production and management of the town-planning instruments had proved to be, in his experience with some of his better-known plans. In the cases recalled by the designer, the offices had been manned by 'well trained

and enthusiastic' youngsters who, by means of the interaction between the administrative machine (technical and in terms of policy) and the contributions of professionals with specific assignments, had 'cut their eyeteeth', supporting and defending, even at the critical moments that all plans go through, the operative component of the project and its most authentic innovative efforts.

This concordance with some town-planning experiences of the past and, above all, with one who had first lived through and later taught these experiences, stimulates us to analyze the process of drawing up the plan, aware that 'to understand a plan it would be necessary to have the whole scientific and administrative event restored, reconstructing the process from the inside. The documents are not enough, what is needed is that un-spoken and unwritten element that guides the formative process'.

The setting up of the Pgt office

Recounting today the experience of the Planning office, barely more than four years after the date of its formal constitution, is like going back over a journey by means of the stills that best summarize the significance of a goal reached after a long series of stages, some not programmed, others absolutely unforeseen, and some, again, achieved with tremendous effort.

The first of these stages must in fact be sought in the choice, definitely among the winners of the whole journey, relating to the setting up of the so-termed 'Office of the territorial governance Plan', at once abbreviated to the more immediate formula of 'Pgt office'.

An 'operative nucleus' within the Comune, but formed by external elements (architects and planners), with diversified and complementary professional experience, some linked with earlier relations with territorial agencies, others stemming from relations with professional offices or collaborations with original academic ambients, with different competences and disciplinary approaches, and a very variegated cultural and territorial background.

As opposed to the case on the occasion of the Prg, the Planning office was right away set up in the municipal structure, for a twofold purpose:

- to allow the team a certain level of autonomy and of 'exceptionality', to emphasize the novel aspects of an instrument which, assuredly, would have represented the inevitable but necessary 'emotional detachment' from the traditional plan with its reassuring familiarity;
- to guarantee, from the very first phases of analysis and reconnaissance, and the preliminary methodological approach, the possibility of a prospect of formal and disciplinary continuity in the subsequent project and procedural phases and above all in the phase of carrying out and managing the instrument, considering the fact that no-one can know (and manage) the plan better than those who actually made the plan.

New figures, new idioms, new roles: experiments in the field

In the town-planning game, in which the main roles are

given, as are also the moves, when the players do not limit themselves to carrying out the preconstituted assignments and engage in hybrid approaches, objectives and ways of acting, mechanisms come into play that enable the work team to function as a 'problematizing factor' in the procedure of construction of the instruments.

This enabled the team to live the experience of constructing the plan with relational and working forms more typical of an academic or professional environment than that of a municipal technical office of traditional type (also and above all in the creative 'disorder' of the loft which was for two of the four years of work the 'unusual' seat of the Planning office). These elements enabled the team to acquire and progressively to consolidate the results of the ongoing process, with a specific profile of its own compared with that of the other offices.

The Planning office, we believe, gradually took on the guise of a sort of 'workshop' of direct confrontation, pertaining to the most disciplinary and methodological aspects of the practice of 'planning by doing', but also, and above all, to the most procedural and institutional aspects of regional planning.

In the same article recalled at the outset, Gabrielli harbours "the idea that the 'real' story of a plan is that which regards the period after adoption", from approval to implementation. For that matter, the true sense of the town-planner's profession is (or ought to be) precisely that of filling the gap between conception and putting into effect, between plan designed and plan carried out. This is true in the situation of Bergamo more than elsewhere, and it is all the more true if we consider the phase of profound legislative and disciplinary revision that town planning is currently going through, so that plans, from projects to spatial prefigurations and definition of regulatory apparatuses, more and more resemble decision-making processes that involve many coalitions of actors.

Towards implementation

and management: the end of the journey, or fresh horizons to be explored?

The management phase of a plan (and of the new Pgt in particular) necessarily calls for the acceptance of a procedural conception of the plan, according to which attention is focused also on the procedure of drawing up the planning instrument, as well as the plan as a finished product.

It seems necessary to identify the new actors who join in these processes and the role that they can have, the contribution that they can give and the sense they can convey to the planning process and to the redesign of the institution and of the forms of their action.

As Piergiorgio Vitillo wrote when describing the experience of the Plan of Reggio Emilia, 'the construction of a closely-knit group of design, assessment and management' and 'the definition of a procedure' were the choices that determined a process of 'collective and

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cumulative learning, based on dynamics of interaction between assigned professionals and internal technicians' and thanks to which 'the municipal technical structure, passing from the principle of conformity to that of coherence and assuming responsibilities for interpretations and projects, found itself having to exercise roles and tasks often occurring for the first time, from assessment of project quality to the function of direction between implementing subjects'. Precisely on the reflections that the positive results that practical cases such as that of Reggio seem to have demonstrated with respect to the forecasting-managing-implementing function, the question occurs of programming the future of such a structure as the Planning office.

What form will it have to assume in the course of time? Will it have to be assimilated with the municipal departments that already exist, or continue to maintain that extraordinary status and that flexibility that have so far characterized it?

The answer to these questions must appeal to what Donolo calls the 'intelligence of the institutions' which generates fresh knowledge, new competences and a pooled sense, reckoning with the necessities of plan management and with the meagreness of the resources that the public administrations today have available.

Today the structure that has drawn up, designed and lived in the front line with the construction of the new instrument of city and territorial governance for Bergamo should be called upon for a continuity of intents and responsibilities also in the delicate, experimental phase of implementation and management, in which it must commit itself to giving definite form to the choices traced out in the new town-planning instrument with concrete actions and projects.

And this, we hope, without losing its 'most convinced and enthusi-astic nature.

Good living, urban quality and sustainability

Marichela Sepe

The urban transformation of the Novello project area in Cesena is implementing a process of renewal through procedures envisaged under the vast family of the complex programs that began in Italy in 1990. The general regulatory Plan (Prg), approved in Cesena in 2005, is leading to the completion of the strategy of reuse of the abandoned industrial area around the station, which began with the Prg of 1985. This included the renewal of the former Arrigoni and sugar factory industrial areas. The goal is to create new urban centers able both to balance in formal and functional terms the empty spaces recovered from these areas, and avoid greenfield use. The following articles will illustrate, through the words of those involved with different roles in the program, the process which is accompanying the phases of the Novello project, with its balanced mix of procedures and project ideas, as well as interventions aimed at integrating and connecting zones, stakeholders and financial resources.

Procedures and urban project

In a complex but well-defined procedural route, important issues for the area of Cesena are involved, which are emerging from the feasibility study for the area of Novello and have been taken forward with the competition of ideas and now with the urban renewal Program (Pru). Issues such as land use, densification, sustainability, social housing and quality of life, but also exchange of mobility and access to services which are vital as well as strategic.

The area is part of an urban planning restructuring of the land between the historic city and the railway zone. Due to its adjacency to the junction that leads from the Secante highway to the railway, the area has become the main entranceway to the city and a link with all major functions of Cesena. At the same time the area stitches together the different landscapes with their different patterns: small-holdings, the hills, the old town, the Savio river. The procedural pathway of Novello begins with its inclusion into the scope of redevelopment in the Prg of 2005 and the start of the feasibility study that ascertained the feasibility of establishing a Company of urban transformation and formed the basis for drafting the international ideas competition launched in 2007.

In order to create a comparison on an international scale, the ideas competition launched by the Municipality was designed with a specific question which the project teams had to answer. The winner of the group had to study the measured and effective options which responded to the requirements.

The project thus became the occasion for the reorganization of the city and urban open spaces of high quality. The issue of the Secante highway, the undisputed pro-

tagonist of the idea for the competition, and the creation of a new center for the city become the guiding principle of the Project, in which the measure is determined by the design of open spaces, rather than the nature of the built environment.

Identification of the peculiarities of the landscape project provides the elements for the idea of the urban park as part of the landscape and environmental system. Empty space, or the park project, assumes strategic value, offering new opportunities and a creative stimulus for its users.

Self-sustainability

With the conclusion of the competition of ideas, the Municipality proceeded to establish the Novello Company for urban transformation, with the task of drawing the Pru in 2010 and obtain approval of the Program agreement. Economic, social and environmental self-sustainability becomes one of the guiding principles of the program for the new Cesena.

At previous phases in decision-making, the objectives of the Pru and areas of intervention were defined and the economic resources and financial mechanisms studied to ensure that predicted project revenues were able to balance public and private costs. A social housing program is currently under study to confirm the financial sustainability of the project. The idea is to ensure a social mix and allocate, with the help of public assistance, at least 20% of the homes to the most vulnerable classes through the use of various forms of letting. Furthermore, there was the participation of those involved in the different stages, a fundamental factor for the success of the operation.

Finally, environmental sustainability. The new neighborhood is designed as sustainable energy-wise, able to minimize emissions, waste and heat in order to reduce its carbon footprint on the environment.

Presentation

Paolo Lucchi

With the Novello project an essential step has been taken to complete the grand design for redeveloping the city, which started with the Plan of the historical centre in 1977 and continued in the large area adjacent to the disused railway, with the recovery of industrial sites and the Arrigoni factory. Through its planning, Cesena has had the ability to guide the tumultuous process of development that has transformed a small agricultural town into an agroindustrial centre with European credentials, thanks to the area's entrepreneurial vitality, its infrastructure development, the creation of the university and interventions aimed at strengthening social cohesion.

The Novello project has followed an exemplary path because it was preceded by a rigorous study that laid down rules and conditions for feasibility, by an international competition to select designers and by the establishment of an operational tool, the Company for urban transformation (abbreviated to Stu in Italian). The project represents a veritable laboratory of best urban practices, able to meet the challenges of the future: energy efficiency, environmental sustainability, social inclusion, with particular attention to the issue of social housing, and cycle paths through urban greenery as an alternative to the use of the car. This is an ambitious project that we have called Novello after Malatesta Novello, the great lord of Cesena, who in the 15th century completely renovated the city and established the Malatesta library, the town's most important asset.

The Pru construction process

Anna Biscaglia, Edoardo Preger

The Novello project is part of the political regeneration of the city which started in the 1970s with the Plan of the historic centre. Under the general Plan of 1985 the issue of recovery of disused industrial areas was initiated, brought to full maturity by the new general regulatory Plan of 2000 (Prg), which identified as an 'urban redevelopment area' a huge area around the railway of more than 100 hectares, almost entirely used for agriculture and industrial activity, now moved into new commercial and industrial areas outside the city. Town planning in Cesena is thus aligning itself with the more advanced policies in Europe with the aim of restricting the use of greenfield sites, giving priority to the reuse of sections of the city today abandoned.

Background

The transformation of the area occupied by the Arrigoni factory and regeneration programs on the area of the former sugar factory were the first interventions in Cesena's new planning stage. Arrigoni occupied five hectares between the station and the old town. It was purchased by the municipal and provincial authorities in order to host the main high schools and the Faculty of psychology, recovering part of the old industrial structures, and creating the suburban bus station opposite the railway station, and several car parks.

The area of the sugar factory covers over 23 hectares in a very central area. The project aims to create a new centre, expanding the traditional functional boundaries of the historic centre. One third of the functions envisaged are public (university and administrative offices), one third is for management and commercial use, and a third is residential, almost entirely devoted to social housing. Four new bridges were also built in order to improve communications in the city.

The third and decisive step for redevelopment was construction of the Secante, the new road flanking the via Emilia, which crosses the city in a tunnel next to the railway station, avoiding the classic ring. The solution of a tunnel also allows a large wooded park to be created on the surface, which will overlook the new quarter of the Novello. Also in the area around the railway station another project is being developed, which also includes the construction of the new bus station area, thereby freeing up the large square outside the station, in preparation for its redevelopment planned within the Novello project.

The Novello area

The area of Novello will be the largest urban project in Cesena (86,000 sq.m of built space on about 27 hectares) and is also an innovation in terms of urban sustainability, social inclusion and urban safety. The centrality of the area, its privileged entranceway to the city and the

predominantly public ownership were the factors that led to identify it as an ideal place for the redevelopment of the city.

Within the Arrigoni area public spaces will be improved by building underground parking lots, in order to be a true 'campus' for the high schools and the university. The area outside the station will be redesigned to be a natural square leading into Cesena.

North of the railroad the redevelopment will extend into the area of the old vegetable market and along the section affected by the secante. This will be the gateway to Cesena from the north, with the possibility of creating a park above the tunnel along with a cycle path through urban greenery from the river to the station. The new district will be predominantly residential, but with integrated business and commercial services, and directly connected to the centre by means of three wide cycle-pedestrian railway crossings.

The design process

The project was initiated with the preparation of a feasibility study for the establishment of a Company for urban transformation. The study, approved in 2006, specified the scope of intervention, the quantity, end-use and nature of the infrastructure works required, verifying their economic and financial feasibility, including works of more general interest. The feasibility study formed the basis for the international competition of ideas, concluded in 2008. After a preselection based on resumes, 10 groups were allowed to stage the competition, which was won by the group coordinated by Simona Gabrielli. The winning proposal, according to the jury, was the one able to strike the best balance between urban public space and the system of buildings, the trump card being the relationship between the park and the city.

After the competition, the Municipality immediately established the Novello Stu, a wholly public company in the first phase with the task of drafting the renewal Program and planning project, already assigned to the winning team, to be submitted by 2010 for program approval. The relationship between the Stu and the Municipality is governed by an agreement, and provides for close collaboration, since at this stage the Stu is a mere operational tool of the Municipality.

The Municipality of Cesena owns 45% of the industrial areas, or as much as 65% if the unavailable property of Italy's road network manager, Anas, is included, corresponding to the area abutting the secante on which part of the park is located. Other public areas chiefly belong to the Italian state Railways (Ferrovie dello stato), which are willing to cede the areas to the Stu. The remaining 25% is divided among private landowners, the three largest of which have stated their willingness to join the program.

The draft plan has been the subject of extensive debate at the political level, with citizens and social stakeholders. The largest private landowners have stated they will take part in the program, while the Italian state

Railways intend to cede their land without participating in the Stu. With the company that manages the main local services all the projects relating to network infrastructure are being developed, seeking the most efficient and environmentally sustainable solutions.

In march 2010 the program agreement was formally initiated. With the final approval of the Agreement, the public procedure will be initiated in order to open the Stu to other shareholders, and then move on to the execution phase of the program.

The legal-administrative feasibility

Renato Perticarari

The Municipality of Cesena, in compliance with article 7 of Law no. 21/01, commissioned the preparation of a Feasibility study designed to investigate the feasibility of establishing a Company for urban transformation (Stu) to implement the interventions related to the 'intermodal rail-road hub'. This study concluded that the most appropriate tool with regard to the objectives to be pursued was precisely the Company for urban transformation, as laid down by art. 120 of Legislative decree no. 267/2000. These conclusions were reached for several reasons that can be briefly summarized as follows:

- major subdivisions of private property within the perimeter of the urban renewal Plan (Pr) which suggested a tool that would allow shared directing of the implementation phase, at least for implementing major infrastructure works and extrastandards;
- the presence within the perimeter of a large amount of municipal property; this was why it was appropriate to consider how to achieve the best possible enhancement, also with a view to sustaining, together with the involvement of the private sector, a considerable number of works of public interest. Indeed, it is clear that the mere sale of such real estate would in no way benefit the potential of area renewal;
- the difficulty of managing an operation of such large dimensions and complexity within the framework structures, albeit valuable, of the municipal administrative machinery;
- the possibility afforded explicitly by art. 6 of regional law no. 19/98 to have a specific company for urban transformation manage the participatory phases with the private sector in drafting the Pru;
- the immediate establishment of the company offered the opportunity to provide a practical response to society's perceived expectations about the real willingness to implement the urban redevelopment scheme in question;
- not least, the significant operative benefits from corporate support given to the urban planning phases of the Pru.

Hence the Municipality proceeded to establish, on 26/7/08, the Company for urban transformation (Stu) 'Novello Spa', as sole shareholder, and giving to the same, with a special Convention, every useful function to make the urban renewal Program fully effective, and then, after final approval of the planning implementation instrument, open it to private participation.

It is worth noting that the Municipality of Cesena agreed with the choice, as suggested in the feasibility study, to establish the Stu, remaining the sole shareholder and assigning it the tasks outlined above, based on an interpretation of art. 6 of Regional law no. 19/98, then confirmed by the changes introduced by Regional law

no 6/09. This entirely reasonable approach was indeed confirmed by the enhanced new configuration that Regional law No. 6/09 attributed to the Stu following the complete substitution of art. 6 of Regional law No. 19/98. This represents a real 'revolution' that makes the Stu a most advisable tool for implementing the Pru.

Financial feasibility

Stefano Stanghellini, Valentina Cosmi

In the preliminary phases of the urban regeneration Programme's financial assessment, the intervention' objectives and areas to be regenerated have been defined; than the financial tools have been studied so to assure the project's self sustainability, verifying the amount of revenue derived from the project in order to cover either public and private costs.

Public works of general interest represent the base of the whole Programme. Their total cost of nearly Euro 23 million is a 'fix cost' of the urban regeneration Programme, independent by the project's choices in each singular section. In each section, fix costs apart, the cost to be sustained consists of private works' realisation, while the revenue derivable from selling them is represented by the building value of the new functions. The analysis of the investment's financial sustainability had three constrains; adequacy of promoter's profit (the urban transformation Company), the present value of the intervention areas and the equal treatment of the landowners, sharing the fix cost in proportion to the building rights. The financial model has found the breakeven point among costs to be faced and possible revenue, verifying so in positive terms the Programme, applying a methodology of the Cost volume profit analysis (Pvca)'s kind.

The results' substance is based on the identification of some variables able to affect the project's feasibility; the building density index, the building's costs and the buildings' selling prices, the new functions to be settled in the area.

The financial results for the Municipality are the following: the acknowledgement of the intervention area's market value, the Company's profit, the public costs financial coverage, the major tax revenues.

Economic and social assessment has widen the analysis to the benefits-costs for the whole community, taking under consideration either the Cesena's population resident near the intervention area and the people who will use the equipment and services previewed by the project's for professional, study or leisure time purposes.

Proposals, features and contents of feasibility study of Stu Interchange road railway hub

Piergiorgio Vitillo

Feasibility study identifies action area, involved by Stu, pursuing the following goals: definition of the transformation and urban redevelopment process of the Stu; investigation of the city economic development needs; identification of negotiation process between public organizations involved in urban transformation; verification of whether and how to involve the private sector and its resources in financing; definition perimeter of action area; verification of the procedures used for a mixed public-private partnership for the construction, financing and management assistance.

The study was divided into two logical-temporal phases: know and interpret (first phase) and orientate (second phase). The first phase defined the priority and needs to be covered. Second phase verified transformations urban sustainability (as well as economic, financial and legal-administrative sustainability) and defined guide lines for subsequent processes, subsector of implementation, ecological-town planning rules, new spatial configurations, possible solutions derived by competition procedure.

Location and role of area

Interchange road railway hub would be one of the new urban centralities of the city. The action area is located between historical city and railway zone. The original role of the intermodal hub is derived from the specific location of the area in the north-west of the city, particularly in three respects: proximity to railway station and to one of the two main exits from Secant axis; placement of the central area between residential area, public activities, service sector of the city and the production, trade and activities related to industry and agriculture; location on the north-south axis of via Ravennate, way of the historical development of the city.

Objectives and actions

There are three specific objectives pursued by Studio: the reorganization and the completion of the intermodal area near railway station; morphological and uses re-configuration of the areas occupied by the abandoned market areas; the creation of an urban place that can express the future of economic and social system of the city.

- the completion of the Secant substantially change the circulation in the city. The reorganization of the interchange road railway hub, complemented by an effective pedestrian network, is a priority objective of the program.
- market areas lost their original uses and will be radically transformed, with the creation of a linear park on the Secante; urban transformation towards service sector of

ex market area; urban transformation towards residential uses of Agrifrut area; open spaces regeneration of ex Arrigoni area; redevelopment of north-south axis of via Ravennate-Comandini; creation of a new operating municipal services and civil protection in the release of the Secante.

- the new polarity will be characterized as a place for innovation and excellence. The new settlement will eventually be characterized in terms of social sustainability and to be strongly defined in terms of environmental sustainability.

Masterplan of feasibility study for Stu of railroad and railway interchange

Paolo Galuzzi

The second phase of feasibility study of Stu ('orientate') is relevant to possible spatial configurations of action areas. Planning and building parameters, as well as environmental rules should grant a high quality to projects in each area.

Masterplan defines guide lines and indicates two transformation models: strategic transformations (ex market area, transport interchange area, university campus, north parking) and urban and environmental transformations (above secant park, new main residential district, new public activities centre, previous programmed planning).

Strategic transformation areas

Ex market area. Ex fruit and vegetable market is definitely a strategic area for its localization and accessibility, despite its small dimension. A new settlement characterized by urban uses and quite high densities could be planned in this area, which plays an important role because of its central localization and accessibility.

Transport interchange area. Masterplan relocates bus station on the old railway yard. This area is linked to infrastructures and interchange parking can be built under new bus station.

Public spaces plan, University campus. It's a strategic area owing to current uses and its relationship with built areas, in particular historical ones. The value of this area consists in open spaces and their relationship with school activities (a potential university campus). An underground interchange multilevel parking can be built in the area used by temporary parking.

North parking. At north of railway station, Masterplan suggests a low-density settlement characterized by trade and service sector. Existing buildings would be replaced or improved and they would be linked to a new multilevel parking.

Urban and environmental transformation areas

Above secante park. Two relevant matters: park features and relationship between park and built areas. Accessibility and parking have to be planned in harmony with park and its uses. It's necessary to connect above secant linear park with Savio river park. Themes and uses would be define by project competition. Industrial and trade areas in front of railway would harmonize with programmed transformations in the course of time.

New main residential district. Sais (part) and Agrifut areas are situated in a qualified urban edge. Transformation rules, consistent with Prg 2000, are defined for these redevelopment areas.

New public activities centre. New public activities centre would qualify Savio urban area. Project would be careful to quality and to impact of new settlement and relevant

open spaces (new city gate).

Previous programmed planning. Ex Manuzzi area would be redeveloped by a qualified and careful design, with particular attention to relationship with urban built areas and to public benefits to whole city.

The first spatial configurations

Feasibility study defines rough sketches and preliminary design relevant to transformation areas.

Three detailed explanatory boxes define for each area: matters and questions, features of built and open areas; references and themes for project.

It deals with first ideas and proposals to be verified in the next steps, with particular reference to idea competition as regards design and typological aspects. Environmental and ecological directions add information and complete detailed explanatory boxes.

Development from the International competition to the detailed urban plan; urban, functional and environmental contents

Simona Gabrielli

The idea for the Novello district came about from a solid and wide margin of strategical prospective, created in such a way thus making it easy to implement each step in coherence to the original idea.

Since first reading the announcement, the quality and precision of the request, based on a feasibility Plan, seemed unusual in the normal running of a competition. Therefore the project was structured with the concept of giving specific responses to each demand, to study a series of well-thought and effective choices, yet not disregarding the spirit of architecture, hence bringing to the fore a sort of 'overturning' where the design of open space is determined by the dimensions and characteristics of the construction.

As a matter of fact, the investigative process during the competition and planning stages did not cause any substantial variations from the general concept, and so, there have been few changes made to the formal solution, actually at first sight they are hard to distinguish.

The main theme is to create a new urban centre for Cesena and a park above the Secante, the new tunnel that passes (east to west) under the city, the infrastructure which brought about the need for a design competition, in itself a rare event in Italy.

The general design of the concept is one of finding a basis in the 'void' project, where the park takes on a precise strategical value in terms of spatial as well as environmental and functional reasons, offering new opportunities for urban life—junction between inside and outside, between nature and city, and between development and sustainability.

It is also the bearer of new values which the current situation demands, in order to renew the area's identity, and leaving a clear point of reference, whilst being able to unite with traditions and memories.

The old roman centuriatio system helped suggest a geometrical settlement, based on a new urban centrality which responds to contemporary life and also to historical roots.

The new project models the area as an immense rolling undulating carpet whose limbs reach up to the north and south of the city.

This great terrain would connect all the points of the project and would characterise, via changes in the gradients (hollows and reliefs), set paths (the centaurian pattern), ornamental orchards (the farming areas), water areas and river vegetation (the river).

The idea is that the new district would work in the best possible way as a self-sufficient ecological system, able to exploit the actual existing resources on site (the sun,

water and wind) and to maximise the use of external energy sources by the study of high efficiency building (class A and B) and to reduce refuse, emissions, discharge and heat by means of recycling and re-use, as a way of cutting down on the ecological impact in the environment and as such improving the social aspect.

The most important choice is the one of a complete pedestrianisation of the whole internal area with the objective of having an external traffic system.

The area subject to the urban Planning (about 268,000 sq.m) is divided into 5 parts for residential and functional purposes.

To the north of the railway, area of the old market and disused factory sites, a new district is planned, entirely facing the park. The residential area is dominant but integrated with shopping precincts, private businesses, executive and accommodation facilities.

In-depth research of different residential structures and typologies is aimed at reaching the demand for detached houses, at the same time avoiding traditional tower blocks as the only viable alternative. The buildings are three or four storey, all facing south, towards the centre or the hills, making great use of the roof garden model. The variety of new accommodation takes full advantage of the park, of new technologies to avoid waste and to provide private spaces with terraces, gardens and balconies.

Adjacent to the new entrance, north of the station, a new car park interchange has been considered. To the south of the station executive facilities in one high rise structure have been projected; providing business activities, sport and recreation, linked to the public space and underground parking which would replace the actual car park which occupies the whole area next to the school grounds.

The design of green and public spaces

Andreas Kipar

The new parco Novello, within a wider program for Urban renewal (Programma di riqualificazione urbana), represents an outstanding strategic chance to redefine the contemporary themes of environment and landscape for the city of Cesena and its territory.

It is understood that the change of functions in such a large urban area, that turns from a place of production into a site for leisure and spare time, forces to a close dialogue between past and present.

The interpretation of the postindustrial landscape and the choice of a new urban function for it, necessarily promotes the research for a new landscaping language. A language able to match the demands of the macroscale (the connection to the ecological-environmental network) with those of the microscale (the establishment of a system of living spaces), in order to reach a urban-environmental quality to be perceived in the daily life of the city.

The role of landscape therefore takes on several functions and sets new challenges, but also rises unexplored questions for the disciplines of landscape architecture and, in a more sensitive way, of urban and territorial planning. These opportunities of change have to be considered indeed by focusing on the landscape that, between urban planning and architecture, may turn out to be the real solution.

The organization of open spaces in the new neighbourhood is not only seen as a simple redevelopment of the site, but rather as the growth of a larger design working at a much wider scale, that redefines the relationship among the established city, its outskirts and expansions, and the whole surrounding landscape. The project becomes a unique opportunity for structuring the city, not just arranging quarters and streets but building a real networking of the urban structure and the landscape through a quality design of open spaces.

The individuation of the landscaping elements of the project, that re-edit and represent the most characteristic aspects of the territory, provides the ingredients for the articulation of the urban park as an integrated part of a complex landscaping and environmental system. In fact the park does not only represent a place of leisure and regeneration, but also a 'green artery' in the system of slow mobility for the distribution of urban flows.

The design of the park, through a critic interpretation of its context, reconnects the lines and the weave of the landscape in order to joint and establish new relations between the historical city, the suburbs and the surrounding environment. The project naturally gets into the territory, constructing a new landscape, domestic and innovative, shaped on the functions and the services that will give life to the Novello neighbourhood and the whole urban context.

The parco Novello is also shaped on the superimposition of different levels of fruition, for the many different potential users of these spaces. The new spaces that the park generates are defined by a simple structure, that recalls the traditional sceneries of Cesena, but also offers the chance to funnel the requirements and the desires of a contemporary citizenship and the needs for a networking of the urban structure.

Renewing the renewal. The plan for the ex-Arrigoni area

Benedetto Camerana

In the general framework of the Novello Project, sector 5 responds especially to two fundamental principles of recent urban governance: the shift within the city of the search for limits to growth and densification in places of greater mobility intensity. Widely discussed by the most important international urban studies (from Saskia Sassen to Richard Burdett), these theories find specific landscape value as a barrier to land use in widely urbanized areas of northern Italy.

In this sense, for the past ten to fifteen years, a substantial part of urban development programs have focused on areas within the perimeters of our cities, according to an approach that was at first random and then more conscious.

A pioneering example was the Environment park of Turin in 1996, which was moved, as a program, from an outside greenfield location to an internal historic industrial plot.

In sector 5, there is also the peculiar reiteration of the recovery program of the disused Arrigoni area, whose urban transformation centred around the installation of the university. Today once again, the administration wants to boost the transformation of this urban complex, a strategic hub for the city of tomorrow, as one element of connection between the historic town and city on the Secante.

The program is to complete the university campus along the lines of an urban campus (sports, leisure and small businesses). Under the proposed scheme, existing parking spaces at ground level will be relocated into a large multistorey underground structure, and the bus terminal will be moved. With such decisive action, the freed-up areas can be redesigned with urban landscaping enhanced by routes on various levels and pedestrian areas.

In the northern part, the main element of the project is the airy and inviting ramp down to the railway station underpass. In the southern part, the square features ramps, several levels and a tower building, suitably small to match the context of Cesena, for private offices. The latter will be the source of funding to cover the cost of the large car-park.

The operative development of the project

Edoardo Preger

With the approval of the programme agreement, the Company for urban transformation, now entirely public, will be open to new members by public offer. The City council will give its property to the Stu, which will have two tasks: to carry out interventions as a real estate promoter within its two property sectors (1 and 5) and maintain the direction of the entire project, with the completion of infrastructure works of general interest. Other sectors will be created directly by private owners (the companies Vico and Sais).

It is expected to implement the program in ten years, with three intervention phases:

- by 2016 the completion of the first plot in sectors 1 and 3 and the whole of sector 5;
- by 2019 the completion of sector 3 and of a second section of the sector 1;
- by 2021 the completion of sectors 1, 2 and 4.

Taking into account the new situation in the housing market, in-depth analysis of the economic and financial plan is under way, in order to self-finance all the interventions, leaving the social housing program to public contributions from regional and state funds. The objective is to build at least 20% of dwellings for the disadvantaged sectors of society. Meanwhile a first section of the park north of the railway station has already been completed, with car parks also built.

With the housing Plan approved by the government, an alternative project execution through the Stu is also under consideration. The project would be executed through a 'local' real estate fund, with the possible participation of the new National property fund, whose shareholder is the Deposits and loans fund, to the maximum of 40% of the equity. Thus a significant portion of social housing could be built, and at the same time a more evolved form of project financing could be promoted, which will benefit the quality and duration of the works, in order to ensure the growth of value over time.