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The Plan as a program for the complexity

Elio Piroddi

In a strategic pivotal position on the so-called Gustav Line, and already wasted by land battles, the city of Cassino was literally raised to the ground in seven hours on the terrible 15th of March 1944. The same Anglo-American bombing that had practically destroyed the famous Benedictine Abbey of Monte Cassino exactly one month before.

The celebrated Abbey is one of the most visited places in Italy and was rebuilt as it was and as it had to be. But in the case of the city this did not happen. Initially it was to be rebuilt completely differently as a bland 'rationalist' area or as one of the so-called 'historical suburbs' of Rome, which were developed during Mussolini's fascist rule.

In the Reconstruction Plan (by Nicolosi) the actual urban centre took the characteristic articulated form of a letter X (via Dante and via D'Annunzio) with a system of main squares (i.e. piazzas De Gasperi, Labriola, Diaz, 14 Febbraio, Garibaldi).

The growth of the city was fairly rapid (by 1951 20,000 inhabitants had already returned in the postwar period, compared to 33,000 in 1981). The population density progressively increased during the years of the great expansion, continuing until recently, and occupying nearly all the available spaces within the current city limits.

The city and its region

The hinterland of Cassino occupies one of the southern margins of the region of Lazio. Directly bordering on the province of Caserta, from the historical, anthropological, geographical, and economic points of view the hinterland or territory around Cassino

represents a transport corridor and is a pivotal area between Lazio and Campania Regions which looks more to the nearer city of Naples than it does to Rome.

In the demographic hierarchy its 32,762 inhabitants (2001 Census) make Cassino part of a second rank group of cities in Lazio (apart from Rome), and it is the second city of the Province of Frosinone. In an urban hierarchy which takes the range of services, companies, productive activities, and population into consideration, if the capitals of the provinces are considered as first level centres (excluding Rome which belongs to a different rank), Cassino is a second level centre.

Cassino is the leader central place for services in an area, which has 24 minor local authorities (known as communes in Italy, governed by a mayor who is assisted by a municipal/ local council) directly depending on it, composed of 120,000 inhabitants including the population of Cassino (approximately 33,000). Furthermore, Cassino is part of an area in the General Territorial Plan (in the 1980s), identified by the Regione Lazio composed of 34 communes in southern Lazio including Cassino, which is the first ranking central place for tertiary and service activity in terms of qualified personnel and companies.

Socio-economic profile and demographic prospects

According to the only official data currently available, the 'legal population' censored in 2001 was 32,762 inhabitants that had largely remained unchanged from the 32,787 of 1991. In spite of not as yet being comparable with the population census, according to data from the census of Industry and Services in 2001 Cassino

has a working population of 12,339 (37.87% of the 'provisional' population of 32,586 inhabitants) located in 2520 Local Units (4.20 employees/Local Unit) and divided as follows: 25.71% in industry, 14.22% in commerce, 29.12% in other services, and 31% in institutions.

This data confirms that notwithstanding the weight carried by the location of (large) car industry (Fiat), Cassino is economically anything but a 'monocultural' city. Its centrality in a large area and its rank in the regional and provincial urban hierarchy provide a wide ranging spectrum in the cultural and economic fabric. Consequently, there is reason to believe that, in a 'historic' perspective, the Fiat crisis at Cassino will be overcome by a decisive strengthening of what are already the present day strengths of the city: its esteemed tertiary activities (higher education, research, rare services), its quality tourism, and its transport infrastructure.

The Plan as a territorial offer and Programma complesso

Maturing during recent years and largely shared by town planning critics, the philosophy of the new Plan is drawn from a critical evaluation of many effective, or rather, ineffective *Piani Regolatori* (town development plans) implemented in the preceding decades and their concrete results in managing city and territory. Moreover, the example of Cassino is similar to that of many other cities, particularly those of southern Italy, and speaks volumes in terms of the town development plan largely remaining on the drawing board with the real city taking a different shape to the planned hypothesis. This was not so much due to technical inability of the authors, who were often

very prestigious people, but to a different philosophy. This philosophy is essentially founded on unlimited trust in public action, and moreover the idea that the job of the plan was to respond (à la carte and on the map) to demand for growing expansion and transformation independently from the effective availability of both the financial and technical resources of the public operator.

The city and the territory have responded to this paligenetic approach which, in this form of rigid dirigisme, has been limiting in the better cases and destructive in the worst. Particularly in central southern Italy, the response has also followed the road of illegality which is not explained and even less justified by the rigid and abstract nature of the Plan, but which has certainly been nourished by the parting and separation of the real city from the Plan. Today the operational context has profoundly changed. A complex reality must be managed in which time, the plurality of subjects and the availability of resources play a fundamental role in a complex framework where the problem is no longer physical growth but the qualification and recomposition of the city. It is no longer nor so much the meeting of primary needs that the city fulfils in the economic system (not only local) and expresses in the citizens (not only residents) as the quality of the 'offer'.

In the light of these premises the plan has been shaped by the three principles of feasibility, flexibility, and effectiveness. Feasibility means staying within the realms of reality, not restricting the territory, and creating expectations and avoiding 'waiting rights' (which are then transformed into 'vested rights') planned for unlikely developments.

Flexibility means formulating a 'territorial offer' in which it is possible for both the administrators and the developers (including the hoped for external investors) to choose the times and places of development from a range of preestablished possibilities. Effectiveness is primarily based on the possibility of passing directly from the plan to the achievement of it, avoiding the intermediate step of the detailed planning wherever the state of town planning allows this (urban centres, urbanised or built up areas, out-of-town extraurban areas with isolated detached building). But the new plan contains another factor of effectiveness, the so-called *Programmi Complessi* (Integrated Programs ex Law 179 and similar): an instrument now used in many Italian communes which, as noted by the experts, allows the traditional detailed plans to be substituted by instruments of transparent negotiation able to verify the quality and feasibility of operations immediately. Therefore, so as not to avoid the 'complexity' of these instruments, they are nowadays considered to be one of the few concrete responses to the complexity of the operational situations. This means the whole Plan is on the same level as a large-scale *programma complesso*. Lastly, the Plan has attempted to take several steps in the direction of impartial fairness, and more precisely in addressing the indifference of the owner to the choice of locations. Essentially and above all, it avoids unnecessary choices, or rather those that are better put back into the hands of private initiative, no less than the choices of future public initiative. Then after this, it involves extending the principles of equalisation and the transferability of the

development rights as far as possible. It is now fact that in modern town planning the city is planned beyond what may be considered to be the natural limits of the urban centre. This has come about because of the above mentioned diffuse phenomenon, but even more so because new growth poles are about to be located or have been located in the territory, such as universities, hospitals, low cost housing areas (PEEP), the Cassino 2 commercial centre, and transport network nodes. All this leads to the idea of an urban system composed of a great many parts, defined and integrated coherently into the network infrastructure. These parts are, firstly, composed of the actual urban centre. Secondly, there is a subsystem of 'satellites' which are essentially composed of public service areas already in existence or planned, and in part of planning initiatives based on and guided by the 'rules of the offer' predetermined by the Plan. The necessary condition for this centre and the satellites system to function lies in the efficiency of the network. The primary components of the network are the state highway Ausonia, the motorway to Sora, and the Casilina state highway, in addition to the relevant nodes: the motorway node, to be reorganised, and the absolutely crucial link between the motorway to Sora and the state highway to Casilina sud. The margins of the urban centre are defined by the system of parks: the River Rapido park, the Terme Varroniane park, the archaeological park, the park of Montecassino, and lastly the park of the 'old city' in which the traces of the old city destroyed during the Second World War can be seen and have been redesigned using available

documents and the material remains. The centre is subdivided into three areas. The first is composed of several areas of the early reconstruction which deserve to be conserved because of the urban qualities they possess, prevalently composed of public housing and including the unitary layout. The second is composed of the areas in the reconstruction Plan in which predominantly mediocre private building development has taken place on individual lots on the basis of the road network and so took place in the period immediately succeeding the first. Plan allows considerable urban and building remodelling in this area, including the increases in size. The third is composed of more recent development areas, analogous to the type in the previously mentioned area but more intensive, and now saturated so that they are no longer able to increase, in which the Plan although it provides for improvements to redesign and equipping of public spaces, only allows restructuring and maintenance work with no significant increases in size. The guiding idea in the new Plan is that the city centre can (and must) offer real opportunities for renewal. This is especially so in areas of rushed reconstruction, designated "remodelling of volumes", to replace the banal character given it by this reconstruction while maintaining the rare tracts of architectural and urban quality. The intention behind this was to give the city the chance of a second reconstruction with redesign of the style and identity of the city centre, including the architecture. The spread of the city beyond its historical-geographical limits defined by the railway,

Montecassino, and the old course of the River Rapido, in addition to its fragmentary expansion into areas outside the city limits, are now irreversible phenomena which the Plan has had to take into consideration. The new Plan has confronted this situation using a strategy essentially aimed at safeguarding the larger part of the territory that is still intact and confirming the existing legally recognised activities with appropriate flexibility. The Plan puts order into the building sprawl and also meets the persistent demand for extraurban residential development. Furthermore, a potential offer is made for areas predominantly designated for services without this predetermining new development rights. This strategy is reflected in the zoning of the Plan. The territorial coverage to be protected includes the parks and local green areas, the "Areas protected from over regulated constraints", and "Prime agricultural areas" which are areas where the dominant activity is still agriculture. In total these areas represent 56% of the surface area of the communes (approximately 4,700 out of 8,356 hectares). All the extraurban territory that remains after the above mentioned specific land use designations is agricultural land of modest fertility with more or less dense building sprawls, and is subdivided into 13 Compartments, of which 11 are 'ordinary' and 2 are 'special', with surface areas of 2,636 ha and 291 ha respectively. The regulations applied over this territory confirms the larger part of the extension of the building load in the agricultural areas provided for in the previous PRG (General town planning scheme), and also re-ordering and bringing the construction sprawl into a legal framework, as well as forming a reserve 'territorial

offer' to meet expected market demand in the future. For this reason the subdivision into compartments, in that they are composed of similarly 'homogeneous' areas in terms of landscape and real estate values, means the principle of transferability of development rights can be applied. The boundaries of the compartments exclude the areas burdened with over regulated restraints and usually follow the preexisting natural and minor networks, that is, the structure on which the form of the territory is based. Within the compartments the plan provides for further building restraints on areas of respect for the road or which are environmentally delicate. The same development rights as in unrestrained areas are conferred on these areas, but forbidding these development rights from being used in loco although allowing them to be sold or their rights transferred. In the ordinary compartments the areas have rights differentiated according to their belonging or to the road bands along which a tendency for settlement has already become evident, or to the rest of the areas. A road band is identified in the Plan by the name "Low density residential completion zone", excluding the important territorial and long distance roads, and including minor roads which provide access to existing residences. A width of 75 ml from the verges of the road on both sides of these road bands is earmarked for a low density completion zone (Building ratio 0.05 cum/sqm, minimum lot 3,000 sqm, height max 7 ml). The same construction regulations already in force provided for agricultural areas in the existing PRG apply to the remaining areas in the compartments, covering by far the larger part of these compartments

(Building ratio 0.03 cum/sqm corresponding to a Building Ratio of 0.01 cum/sqm, minimum lot 10,000 m²). Transferability is only allowed within each compartment subject to the tied up land use designation of the area in which the rights are granted. In addition to construction on individual lots, the Plan allows 'aggregated' construction within compartments when the operator has acquired building rights for a building surface of at least 1,600 m². In this case and under the conditions provided for in the Technical Rules (NTA) among which is the undertaking to bear all the costs of urbanisation, a 30% increase in the construction area is provided for as an incentive to concentrate construction and safeguard the territory. In order to meet the standards, the aggregated operations are equalised to the homogeneous areas C and when building surface is over 8,000 m², the requirement of the Detailed Plan comes into force in accordance with Regional Law 99. In the 2 special compartments (the above mentioned 'satellites') so designated because of their periurban character and because they have better access to the primary network, the Plan makes 'rights' available to the Commune. The Commune may grant these rights to public or private operators who present proposals under the *Programmi complessi* procedure (Literary 'complex programs', a program of urban reorganisation joining private and public funds to respond to the rigidity of traditional plans), even when in competition with each other, to construct infrastructure for public services or for public use under a maximum construction ceiling varying from a surface area of

25,000 to 36,000 sqm. These initiatives will be carried out using the Detailed Plan after being drawn up by the Commune and the developer. The building allowed in the compartments, whether individual or concentrated, is always subordinated to purposes compatible with the landscape and observance of precise regulations for public utilities (standards, assignment along road corridor, masts and masting, soil permeability). In conclusion, the mechanism provided for the compartments avoids the formation of rights which with the passage of time become vested rights and irrevocable, and guarantees the maximum equalisation possible allowing free space for entrepreneurial initiatives on the basis of precise regulation of the game. The Plan is thus developed as work progresses by using the same yardstick as the large-scale complex program, and assumes an interactive form which seems to be the most appropriate in responding to the current demand to transform the territory.