

TRACK 03: PLANNING AND LAW FOR TURBULENT FUTURE

ZONING CHANGES IN RECENT ITALIAN URBAN PLANS FOR SUSTAINABLE REGENERATIONS: THE CASES OF MILAN AND BOLOGNA (1067)

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Abstract. The spatial planning of the twentieth century shows different consequences of rigid uses of zoning as technical tool that determined too homogeneous urban areas. However, in the last twenty years the renovation of that zoning has been increasingly present in the Italian urban planning. The main question is: how has zoning changed in recent decades? Starting from this query, the paper proposes some reflections studying specific sources: Italian urban Plans, in particular the recent Plans of Bologna and Milan. Here it is argued that the indispensable overcoming of traditional zoning in recent urban Plans, although it has introduced important innovations on the necessary flexibility of the instruments themselves, at the same time has weakened the rules on the physical and social dimension of urban transformations.

Keywords: Italian urban planning; regulatory plans; zoning innovations; urban fabric.

1. The multiple dimensions of zoning to regulate urban growth

The term zoning (*zonizzazione*) in Italian urban planning defines the technical tool that has guided the urban and territorial transformations through the perimeter of different zones for each of which different rules regulate the building activities: respect the intended uses, the densities and volumes, the heights of the buildings, the covered area, etc. This zoning is an instrument of regulatory plans that has multiple dimensions and properties and that can have diversified urban and territorial implications and consequences (Mancuso 1978; Mazza 1995; Barattucci 2005, 2013). As known, when it is conforming, it affects the *ius aedificandi* and can also be unequal, but despite its close relationship with rent, it is not only a technical instrument for controlling the use, value and market of land (Micelli, 2011; Camagni, Micelli, Moroni, 2014; Chiodelli and Moroni, 2016). In fact, zoning can affect not only the land value, but also the morphological design of the city, the localization and the compatibility of activities, the uses of public

spaces, the distribution of different social groups and the spatial justice, the temporality of use in several specialized areas and their accessibility through collective mobility. The same zoning can therefore be economic, morphological, functional and social at the same time: it is a tool which, depending on how it is used, with respect to the different goals to be achieved, can guide in various directions the transformation of the urban territories (Barattucci, 2005, 2013, 2021).

The Plans of the Twentieth century urban expansion have shown different consequences of rigid uses of zoning that have determined, first of all, zones too homogeneous under the physical, social and functional aspect, contributing to the spatial and socio-economic separation of the inhabitants, without functional and social mixes (Piccinato, 1974, Mancuso, 1978, Mazza, 2013, Barattucci, 2013, 2017, 2022). However, this rigid mono-functional and mono-morphological zoning has been undergoing transformation for many years: the overcoming of its use in rigid ways is now increasingly present in regional urban planning Laws and in the most recent urban Plans.

How has zoning changed in Italian plans in recent decades? Can this renewed tool, learning from past experiences, still be useful for regulating the physical and social dimension of urban transformations?

Zoning over the last century until today, has changed a lot. In Italy, its first utilization in the expansion Plans during the end of the Nineteenth century, its intense experimentation in the regulatory Plans of the 1920s, its fine-tuning in the Rome Plan of 1931 determined its introduction to art.7 in the fundamental national urban planning Law no.1150/1942, particularly attentive to the morphological dimension of urban growth (Barattucci, 2013). According to this Law the municipal regulatory Plan had to be implemented through detailed plans that had the task of defining urban forms and building types, following the Italian urbanism tradition that has its roots in architecture (Calabi, 2000).

After the Second World War and the season of emergency reconstruction Plans, in the Fifties and Sixties, during the Italian economic boom and urban growth, the few approved Plans did not allow for sufficient control of land speculations, led by private builders on coasts, hills and farmlands. Only after a series of environmental disasters, in the second half of the 1960s, the zoning changed with the main goal of regulating the speculative actions and to prohibit construction in the absence of approved municipal Plans. The Law no. 765/1967 and its implementing Decree no.1444 of 1968 introduce a zoning connected to the urban *Standards* to define the minimum quantities of public spaces and services complementary to the residence and production zones (Gaeta, Rivolin, Mazza 2013).

The zoning thus becomes the most important tool of a Plan that divides the entire municipal territory into nine ZTO - Homogeneous Territorial Zones: each of them is

characterized by specific intended uses and abstract numeric indices and parameters to guide urban growth. Besides, the Plans of the second half of the 20th century were often over dimensioned for the future population growth, especially through the extension of the building zones C and the weak attention on the zones E of the agricultural land. The latter was in fact considered as a large reservoir for urban expansion and welcomed the rapid growth of the suburbs and of the low-density diffuse urbanizations (Campos, Oliva 1993, Salzano 2003; Barattucci 2004). The regulation of urban growth was made by breaking down the territory into specialized and homogeneous zones according to functional, physical and social points of view (Secchi 2013). Only from the Eighties and Nineties of the Twentieth century the experiments for new forms of Plan make their way, also with respect to a different zoning.

2. The progressive transformation of zoning in the regulatory Plans

During the Italian 1980s, the speculative sector was joined by punctual projects as new opportunities for building promotion by industrial and financial groups. Through continuous variants, indispensable for the realization of punctual projects in limited urban sectors, the municipal Plan loses some of its authority (Indovina, 1992). During the 1990s, to implement punctual projects, public-private contractual and negotiated urban planning was developed introducing complex programmes to intervene rapidly in degraded or abandoned areas, but mostly these instruments acted in derogation to the Plan. At the same time, the regional urban planning laws that differentiate the forms of the Plan multiplied, while environmental awareness, linked to sustainability, strengthened.

In this context at the end of the century, renewed relationships between Plans and Projects are experienced, between the normative and prescriptive dimension and the implementing and operational one, also with the aim of overcoming zoning (Palermo, 1992). However, it is important to remember that the importance to elaborate Plans in a different way than a rigid zoning and according to different Plan forms, was already underlined by urban planners since the 1960s, such as Giancarlo De Carlo in his Plan of Urbino (De Carlo, 1964, 1973).

During the 1980s, the reflections of urban planner Giuseppe Campos Venuti on the third generation of planning (Campos Venuti, 1987) have been crucial in changing direction, also thanks to his Plans for Pavia and Bologna. In particular, the latter represents a real turning point in the Italian panorama to use the zoning not to guide urban growth on agricultural land. In fact the Plan of Bologna does not envisage expansion zones, but chooses to identify interstitial areas in the existing urban fabric as transformation areas that can also accommodate morphological, functional and social mix. For these areas, great attention is also given to public spaces and services to be established also

considering the results of the participation of the inhabitants. With the approval of the Plan in 1986, the morphological control for the interstitial transformation areas was entrusted to a coordination tool, the DUC - Concerted Urban Design, which contains indications and rules for the physical transformations of the urban fabric (Campos Venuti, 1993).

In the last twenty years of the 20th century, other urban planning tools were experimented, not only through a greater and more minute fragmentation and articulation of homogeneous zones, but also through Plans based on structures and systems. The planner Bernardo Secchi goes in this direction, in particular with his PRG of Prato of 1996. The Plan is structured on different thematic systems, considered as layers that are articulated and cross in different and innovative ways: «The idea of an organization of the city by systems, intensively explored by some plans in recent years, arises precisely from the criticism of zoning as traditionally considered» (Secchi, 1996).

The experiments of new forms of Piano, especially those of Giuseppe Campos Venuti in Bologna and of Bernardo Secchi in Prato, were crucial for the elaboration of the regulatory plan of Rome (AA.VV., 2001). Approved in 2008, it is divided into three structural components: the environmental, mobility and settlement systems. It is not based on the future sizing of the population, but assumes demographic stability, chooses the reduction of urban expansion and the internal redevelopment of the city, pursuing a polycentric model and enhancing new centralities in the diffuse urbanisation, paying great attention to functional mix. Important innovations are also introduced for the *Standards* on public services: the equalization and compensatory assignment aim to guarantee the availability of areas for public spaces and services without resorting to expropriation. Instead of the traditional zoning with its homogeneous zones, this Plan is articulated in morphological/programmatic categories, distinguishing the actions in existing Fabrics (*Tessuti*) with their morphological features, and the possible transformations in different Ambits (*Ambiti*): in the historic city, in the consolidated city or in the city to be restructured. For the design definition of the physical dimension of the forecasts, the Plan introduces for the first time in Italy, inspired by France, the *Urban Project* as a procedure which allows, also by comparing alternative spatial configurations, the verification of the urban, environmental, economic and social sustainability of the proposed modifications in the different Fabrics and Ambits (Barattucci, 2004).

In Italy this Plan was important in overcoming the old zoning and it has become a reference for many subsequent plans, including those elaborated at the beginning of the XXIth century (Bianchetti, 2011, Gabellini, 2018). Today the municipality of Rome is working on the preparation of a new Regulatory Plan, while the municipalities of Milan and Bologna have already drawn them up, placing the European culture of sustainability, the reduction of soil consumption, the urban and territorial regeneration, in line with the sustainable development goals set by the European Urban Agenda and by the United Nations.

3. The sustainable transformation of zoning in the recent Plans of Bologna

The PSC - Municipal Structural Plan of Bologna was approved in 2008: its sustainability goals confirm the Bolognese urban culture of redevelopment, restructuring and reuse of the existing urban fabric in compliance with the regional law no. 20/2000 which requires the distinction between urban, rural and urbanizable territories. It is a Plan based on different restructuring figures relating to the recognition of 7 cities for the transformations that are specified by 3 Systems, 34 Situations and 189 Ambits (*Ambiti*). These *Ambiti* replace in the Plan the homogeneous zones and constitute the minimum units for regulating modifications in the urban territory to be structured, in the structured one and in the rural spaces. The RUE - Urban Building Code, has a legal joust and contains general rules to be respected in the various Ambits. In this Plan the expression *homogeneous zone* is no longer used and the possibility of functional mixes, according to different compatibilities, is evident from the Rue: this obviously does not mean that all the specialized zones must become mixed.

Regarding the most recent Plan of Bologna, approved in 2021 in compliance with regional law no. 24/2017 and called PUG - General Urban Plan, it defines the structural invariants and the strategic choices of urban layout and development for the regeneration of the existing urbanisation, for the reduction of soil consumption and for the environmental sustainability. The main goals are the rehabilitation of the building stock, the completion of underused urban sectors and the reconversion of disused buildings and areas through different methods of densification, demolition and replacement. However, this PUG is above all a strategic Plan, structured on the objectives / strategies / actions scheme for whose definition the participation of the inhabitants was also important.

With the intention of strengthening urban and territorial regeneration, the local strategies are declined on the territory in the subdivision into 24 Areal (*areali*) that are not like the homogeneous zones of the old zoning, but recognizable and mixed parts of the city. Each Areal corresponds to a technical sheet that suggests, in a very general way, different actions and explains some problems to be addressed respecting the Table of planning restrictions. The Building Code, on the other hand, is no longer a legal instrument, but a document that guides urban changes in general, regardless of the position of the buildings in the urban fabric. This Building Code also establishes the indispensable arrangements for the coordination of public policies and for negotiation between actors. The main tools for implementing the strategies and actions of the PUG are in fact the Operational Agreements (*Accordi operativi*). The regulatory Plan based on

zoning and the attribution of rights to landowners is therefore eliminated. In addition, the importance of alternative spatial configurations to guide physical transformations of the urban fabric is also absent. Despite many innovations, in the PUG of Bologna, in 2020, to allow the allocation of the façade bonus, a table was inserted showing the equivalences between the different new Areali (*areali*) and three old homogeneous zones of the D.I. 1444/1968.

In short, as in many European strategic plans, the rules to be followed for the urban transformations in different Areali, for controlling the modifications of the physical and therefore social dimensions of the urban fabric, are not sufficiently explained. The PUG is a Plan with few formal rules and, even if it is undoubtedly more flexible than those of the past, at the same time it leaves completely the spatial transformations in the hands of many operators according to public-private agreements. Although operational agreements that pay attention to urban and landscape commons are certainly possible, it is necessary to emphasize that these agreements could also favour speculative interests, even if the PUG is officially a plan for the *sustainable regeneration* of existing urban fabrics. It is also important to remember that regeneration actions on the materiality of urban parts, when not sufficiently oriented by the public administration with specific rules that respect social diversities, could cause a profound change and replacement of inhabitants, expelling the most economically disadvantaged population and intensifying spatial injustices on urban territories (Barattucci, 2022).

4. Zoning transformation for urban regeneration in the two last Plans of Milan

The PGT - Territorial Government Plan of the Municipality of Milan, following the Regional Law no.12/2005, was approved in 2012 and is divided into three main documents: DdP - Plan Document, PdS - Services Plan, PdR - Rules Plan. The main objectives are consistent with the European culture of sustainability and tend towards the goal of zero soil consumption by 2050. The idea of the metropolitan city to be pursued is polycentric and reticular, in contrast to the city broken down into social and functional zones - enclaves and the centre-periphery dichotomy. It is a Plan that pushes towards the densification and redevelopment of areas no longer used. Great importance is attached to the functional mix, to subsidized housing, to sustainable mobilities. And the priority attention to environmental and social sustainability is also connected to the participation of citizens, through various listening practices, to define shared choices and to rebalance the provision of public services.

Regarding the overcoming of the old zoning, in the Plan of Rules it takes place in different ways, both in the lack of perimeter of homogeneous zones and in terms of economic value of the soils. The territory is in fact divided into various Ambiti (*Ambiti*) which concern the entire municipal territory, and which include those subjects to

transformation, but also some for new urbanization on free areas. As regards the land value, the application of building rights in an equalized form is envisaged, thus choosing a principle of basic economic equality of the land. The determination of land uses is also overcome by providing for the indifference of the intended uses which become freely settleable for greater flexibility, even for different compatible activities, but only where there are no explicit prohibitions, such as in areas with environmental protection.

But the most substantial innovations are contained in the latest PGT Milano 2030, approved in 2019 in compliance with Regional Law no. 12/2005 and its recent amendments and additions (Regional Law n. 31/2014 for the reduction of soil consumption and the redevelopment of degraded soil; Regional Law n.18/2019 - incentive and simplification measures for urban and territorial regeneration and for the recovery of the existing building heritage). Still articulated in the three documents DdP, PdR, PdS, the Plan directs the modifications of the municipal territory by promoting urban development in the nodes of the collective mobility network. This is mainly a strategic Plan too, in which the environmental strategy is the strongest one to guide the ecological transformation of different urban areas, while the regulation of the physical dimension of the transformations is also secondary here. The term *regeneration* becomes the protagonist for the transformation of the entire city, but above all for the improvement of the urban quality of the suburbs and for the increase in public and social housing. The goal of reducing the soil consumption is expressed even more strongly than in the previous Plan, both by eliminating the possibility of urbanization in different Ambits and by returning many lands previously destined for urbanization to agricultural land. Once again, the distribution of intended uses and functions is not determined by zoning, but completely free and the determination of land value is entrusted to urban equalization.

The new PGT is therefore not based on functional and morphological zoning, but once again on the identification of precise Ambits (*Ambiti*) in which regeneration is possible thanks to different methods of intervention, between demolitions and densifications. Alongside *large urban functions*, the Ambits refer to a municipal territory that is no longer divided into homogeneous zones, but into 88 districts generally referred to the NIL - *Nuclei di Identità Locale* - local identity centers - with the main goal of strengthening its identity. The only presence of homogeneous zones is found in table Ro2 of urban planning indications, added later, which indicates, just like the PUG of Bologna, the equivalences between the *Ambiti* and the ZTOs of the D.I. 1444/68 because in the 2019 budget law for the assignment of the facade bonus it is necessary to identify the homogeneous zones A and B.

In short, even in the last two Plans of Milan the old relationships between population sizing and regulation in homogeneous zones have been transformed, between technical

implementation regulations and urban planning standards. These are important changes that attempt to overcome the frequent ineffectiveness, rigidity and non-economic planning of the regulatory plans of the past. However, even in this case, one can legitimately wonder whether this Plan will be capable of guiding the physical and therefore social transformations in the different Ambits, according to which criteria the new volumetric quantities to be built will be established, which settlement rules to guide the spatial configurations will be followed in the regeneration actions, especially with respect to what compatibility between different activities. In fact, each regeneration will be regulated and designed on a case-by-case basis, in the absence of indications of intended uses or settlement principles and trusting the public administration in the coordination of all public, private and other different actors.

5. Strategic plans for sustainable regeneration of existing urbanizations and zoning

In recent decades, the importance of overcoming the old zoning in new forms of Plan has increased significantly. Obviously, urban planning has also changed with its goals on territorial transformation, today increasingly oriented towards the regeneration of the existing urbanisations and soil saving, it is therefore very far from the urban planning of expansion which developed this tool (Barattucci, 2005, 2013). However, in the framework of European sustainable urban planning of the last thirty years, studying these recent Italian Plans one could legitimately wonder if they hide a dangerous trend towards an urban planning oriented by neoliberalism (Harvey, 2015, 2016, Perulli and Vettoretto, 2022). One might ask whether sustainable urban regeneration of the existing urbanisation can really be implemented only through public-private operational agreements. Whether it is possible to act in a way relevant to specific contexts in the absence of sufficient rules guiding in each urban part the compatibility between activities and possible spatial alternatives considering spatial justice for the different income brackets of all inhabitants.

This apparent victory of the strategic Plans also in Italy is based on the awareness of the impossibility of forecasting, on the uncertainties regarding the future and on the instabilities of the present. However, the observation of the ineffectiveness of a regulatory Plan based on strict zoning, although it has led to an undoubted improvement in the flexibility of the tools and the social and functional mix, must not lead to the drastic elimination of important rules relating to urban morphology which is always physical and social at the same time. Will the operational agreements be democratically effective in the transformation of the inhabited territory in all its parts and physical and socio-economic situations?

A Plan approved by a municipality is always an important reducer of uncertainties for urban and territorial transformations, but the indispensable overcoming of

homogeneous areas does not mean having to give up regulating the regeneration of existing urbanization for the good of all. Furthermore, regulatory Plans have always served to direct private initiative, precisely to defend the territory from massive land speculation which in Italy has played a fundamental role since the second half of the 20th century. Will these recent Plans be more effective than those of the past in controlling speculative actions?

It is certainly true that urban planning in contractual and negotiated forms, based on operating agreements, in recent years has guided the regeneration of large urban portions with often positive results, also in the necessary compliance with the requirements of the municipal Plan (Gaeta, 2022). But despite this, the recent municipal Plans here studied show that a greater balance still needs to be struck between the strategic plan and the punctual design of parts of the city, between public/private operating agreements and the framework rules established by the public administration to protect the commons and spatial justice. For democratic and ecological regenerations guided by these Plans, careful public management is therefore necessary which does not allow itself to be overwhelmed by the chronic scarcity of resources of the public administrations. These latter, in the framework of not only economic, but also environmental and social sustainability, must defend, even through the careful evaluation of possible spatial configurations, those non-negotiable values relating both to the landscape and territorial common goods and to the diversified interests of all the inhabitants.

These recent Plans invite us to reflect further on the undoubted need for the old zoning to be transformed and overcome, but also that this technical tool can still be useful, if used in different ways than in the past, guaranteeing social and functional mixes and regulating possible governance for each part to be transformed (Mazza, 1995, Barattucci, 2005, 2013, Bonfantini, 2022). Although, in fact, there is a certain need for new tools, more suited to the objectives of sustainable regeneration of the existing urban planning, a profoundly renewed zoning - and which can also be called differently - can still regulate land use in different parts and situations according to renewed relationships between Plan and Project. Orienting the regeneration of settlement fabrics also through alternative spatial configurations remains an indispensable operation (Barattucci, 2021, 2022; Infussi 2022). The important thing, however, is that Italian urban planners have now learned from past experiences and therefore know how to use this tool in very renewed ways, with attention and competence, as technicians and intellectuals, but also with a necessary critical look at the political decisions of the public administrations for which they work.

References

- Aa.Vv. (2001), *Urbanistica*: 116.
- Barattucci, Chiara (2022) Il progetto urbanistico per gli spazi pubblici delle diversità nel contesto occidentale europeo. *Crios*, 23.
- Barattucci, Chiara (2021) Strumenti urbanistici per la rigenerazione delle aree produttive come nuove parti di città. *Territorio*, 99.
- Barattucci, Chiara (2017) Lezione: Lo zoning nei Piani italiani degli ultimi cinquant'anni, Milano: Politecnico di Milano.
- Barattucci, Chiara (2013) Zoning/Mixité. Alle radici dell'urbanistica italiana e francese, 1870-1945. Roma: Officina.
- Barattucci, Chiara (2005) Le zoning dans l'urbanisme italien et français du XXe s. *Urbanisme*, 344.
- Barattucci, Chiara (2004) Urbanizzazioni disperse. Interpretazioni e azioni in Francia e in Italia, 1950-2000. Roma: Officina.
- Bianchetti, Cristina (2011) Il Novecento è davvero finito. Roma: Donzelli.
- Bonfantini, Bertrando (2022) Zoning. *Urbanistica Informazioni*, 301.
- Calabi, Donatella (2000) Storia dell'urbanistica europea. Torino: Paravia.
- Camagni, Roberto, Ezio Micelli and Stefano Moroni (eds) (2014) Diritti edificatori e governo del territorio: verso una perequazione urbanistica estesa? *Scienze regionali*, 13.
- Chiodelli Francesco and Stefano Moroni (2016) Zoning-integrative and Zoning-alternative transferable development rights: Compensation, equity, efficiency. *Land Use Policy*, 52.
- Campos Venuti, Giuseppe and Federico Oliva (eds) (1993) Cinquant'anni di urbanistica in Italia, 1942-1992. Roma-Bari: Laterza.
- Campos Venuti, Giuseppe (1987) La terza generazione dell'urbanistica. Milano: F. Angeli.
- De Carlo, Giancarlo (1973) L'architettura degli anni Settanta. Milano: Il Saggiatore.
- De Carlo, Giancarlo (1964). Questioni di architettura e urbanistica. Urbino: Argalia.
- Gabellini, Patrizia (2018) Le mutazioni dell'urbanistica. Roma: Corocci.
- Gaeta, Luca (2022) Urbanistica contrattuale. Criteri, esperienze, precauzioni. Milano: F. Angeli.
- Gaeta, Luca, Umberto Janin Rivolin and Luigi Mazza (2013) Governo del territorio e pianificazione spaziale. Novara: De Agostini.
- Harvey, David (2016) Il capitalismo contro il diritto alla città. Neoliberalismo, urbanizzazioni, resistenze. Verona: Ombre Corte.
- Harvey, David (2015), *Cities and Inequalities in a Global and Neoliberal World*. London: Routledge.
- Indovina, Francesco (1992) La città occasionale. Milano: F. Angeli.
- Infussi, Francesco (2022) Per una apologia dell'esplorazione progettuale. In Montedoro, Laura and Michelangelo Russo (eds), *Fare urbanistica oggi. Le culture del progetto*. Roma: Donzelli.

Mancuso, Franco (1978) *Le vicende dello zoning*. Milano: Il Saggiatore.

Mazza, Luigi (1995) Chi ha paura della zonizzazione? *Urbanistica Informazioni*, 140.

Micelli, Ezio (2011) *La gestione dei piani. Perequazione, accordi, incentivi*. Venezia: Marsilio.

Palermo, Piercarlo (1992) *Interpretazioni dell'analisi urbanistica*. Milano: F. Angeli.

Perulli, Paolo and Luciano Vettoreto (2022) *Neoplebe, classe creativa, élite. La nuova Italia*. Bari-Roma: Laterza.

Piccinato, Giorgio (1974) *La costruzione dell'urbanistica. Germania 1971-1914*. Roma: Officina.

Salzano, Edoardo (2003) *Fondamenti di urbanistica. La storia e la norma*. Bari: Laterza.

Secchi, Bernardo (ed) (1996) *Laboratorio Prato PRG*. Firenze: Alinea.

Secchi, Bernardo (2013) *La città dei ricchi e la città dei poveri*. Roma-Bari: Laterza.

For the Plans of Rome, Milan and Bologna: websites of the municipal administrations.