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The urban rule and its use: case study of Annaba city, Algeria

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Abstract

Urban spaces are continually suffering from innumerable evils caused in particular by an accelerated population explosion, followed by an anarchic and disproportionate urban growth. Indeed, in parallel with the abstract plans imposed to regulate the spaces, circumvention and diversion practices emerge and make them lose their legitimacy. This problematic has led us in the present work to verify the applicability of the urban rule in force in Annaba through case studies at different scales. This allows to enlighten the makers of the urban order to improve the urban production.

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Introduction

This article deals with a relevant and topical subject, in this case urban planning law. It is defined as "the set of rules concerning the allocation of space and its layout."(1). Its objective is the concretisation of the State's planning policy, which aims at an urban coherence and a rational organization of spaces.

The urban rule is the "substantive law" that is to say the law or norm that governs the space itself, that which frames any construction, demolition or subdivision operation carried out by public and / or private actors in construction (2). It is in the form of written regulations and graphic documents contained planning documents. It is dictated for administrations as well as for the public.

Failure to respect these legal tools of urban tissue management is on the agenda of several meetings of researchers and / or professionals. The professional planning organizations of eleven countries of the European Community grouped together in the European Council of Town Planners (CEU) believe that the current urban rules, which are supposed to ensure a more rational and more harmonious urbanization of the city, have not achieved this objective: "The application of strict zoning policies has led to monotonous land use patterns that have broken the continuity and diversity of urban life"(3). Paul LASSUS sees that the local urban rule (the land occupied plan) is more quantitative than qualitative. It proceeds, among other; it uses the maximum land use coefficient (C.O.S), the maximum height and the mandatory setbacks. All these implantation rules are stereotyped formulas that do not take into account the traditional methods of implantation and construction, which are mainly based on sunshine, prevailing winds, integration in the field and which are in fact universal rules.

Concerning the aesthetic dimension of the urban rule in effect, Mouaouia SAIDOUNI sees that the essentially aesthetic objective, once sought after, has gradually disappeared to be replaced by the one that aims at a more economical management of the grounds, and a rationalization of the operations of town planning (4). This disharmonic practice, which is in fact in favor of exclusively geometric and rational urban planning, does not regulate the shape of the city, and often gives rise to disputes. Assuredly the law cannot be enough to found the rule of urban law without taking into consideration the urban, architectural and legal aspect, which is what Michel Roy confirms: "Regulation doesn't generate built form". As for Bruno Hubert, he added: "... today the shape of the city is no longer decreed" (5). Xavier MALVERTI and Nadir BOUMAZA see in the urban rule imposed by the techno-structure a rigid tool resulting from the modern urbanism favorable to the emergence of a rule initiated by the resident competence (6). So the plan is no longer a model or type imposed but from the societal rule, and it generates the city that Bernard HUET defined as (7): "A marked space of conventions and conventional forms".

That said, urban and architectural production is often confronted with a reality that opposes the plan to the project. The second doesn't follow the first not to deprive himself of a claimed flexibility.

This urban rule doesn't take the aesthetic aspect of urbanization and currently, the aesthetic dimension has gradually disappeared and was replaced by the one that aims at a more economical management of the grounds, and a rationalization of the operations of planning (Mouaouia Saidouni)4. dysharmonic practice which is in favor of an exclusively geometric and rational urban planning does not regulate the shape of the city and often generates litigations. The urban, architectural and legal aspect is not often enough to found the rule of urban law and regulation doesn't generate built forms.

This has generated cities with unordered forms (Bruno Hubert)⁵ and therefore the urban rule imposed by the technostructure is only a rigid tool resulting from the modern urbanism favorable to the emergence of the concern for competence (Xavier Malverti and Nadir Boumaza)6.

Nowadays, the city has become an imposed model and a marked space of conventions and insignificant forms (Bernard Huet)7. A second problem is that urban and architectural production is generally confronted with a reality that opposes the plan to the project. The project doesn't follow the plan so as not to deprive itself of a claimed flexibility and the result can only be an urban disaster and a social annoyance of the population.

Materials and methods

The approach followed to verify the hypotheses posed above is based on case studies located in Annaba, governed by urban rules succeeding each other in the regulatory hierarchy: Master Plan of Planning and Urban Development (P.D.A.U), Plan of Occupation of the Ground (P.O.S), and parceling. The choice of grounds was made after a survey of places revealing the discrepancy between the urban planning adopted and its application. The first work undertaken consisted of gathering a documentary set including the regulatory texts concerning the urban and architectural production in Algeria, the graphics documents, regulatory and photographic documents relating to the grounds in question.

After reading the urban rule concerned, we proceed to the verification of its use. Three urban scales were taken into consideration to identify the problem as its whole: the large scale, that of detail and the small scale. The area of Sidi Achour was chosen to concretely illustrate the difference between the rule imposed and the rule applied at the scale of the city. At the retail scale, we have targeted one operation carried out on a property base located within a zone governed by the P.O.S rule "western plain". For these two urban scales, the elaborated work was based on the confrontation of the realized projects with the regulatory tools imposed to verify the conformity and / or the lag between them.

At parcel level, the piece of land of "May 19, 1956" was chosen to shed light on the applicability of the rule in force. To do this, it was initially a question of checking on the ground, to take the necessary measures, to exploit the available documents, in particular the parcel plan and the regulation of the subdivision, the specifications residences established by agents authorities of urban planning services, addressed to residents for noncompliance. A detailed reading of the offenses was made before the development of their typology.

This preliminary work at the subdivision level is only a good survey to deduce the most frequent type of offense. It doesn't make it possible to give the real number of the overruns, because the settlements were established only in the case where the neighbors would have deposited complaints administration or the services of the town in charge of town planning. This is why a comprehensive survey was conducted in the field where only the infringements of the implantation and density rules were taken into account because they are not only fundamental but also the most frequent. This work will be concluded by an evaluation of the urban rule by emphasizing its interest and its limits.

Case study

The sites chosen for the case studies:

- The area of Sidi Achour located at the western entrance of the city,
- The western plain of the city,
- The subdivision located at the west of the city. It is limited to the North and West by the Z.H.U.N (The New Urban Housing Area) of the western plain, to the South by the Olympic stadium and to the East by the Oued Edheb city.

At the scale of the P.D.A.U

Before to discuss the case study, it is necessary to specify that the P.D.A.U is a long-term urban planning rule, established by Law 90-29 of 02/12/1990 (8). This law is supposed to give the major development guidelines at the municipal or inter-municipal level.

The problematic of Sidi Achour

Like the majority of Algerian cities, Annaba hasn't escaped the tradition of the informal that continues to rage in all areas. The development to the detriment of farmland and open space has grown and has generated disorganized tissues beyond all control.

The urban forest of Sidi Achour is the ideal example. A protected area under the rule P.D.A.U of 1998, this forest has been peppered with occasional projects giving rise to a discontinuous and poorly structured fabric. In addition to the urban disorder installed, the security situation is very unfavorable. All these conditions combined have encouraged local authorities in search of land, to target this forest area from the roundabout "Pont-Blanc" to the "Farouk-Park", to urgently implement a large-scale housing project.

Thus, the road CW22 which goes along Sidi Achour, prohibited to urbanization by the rule of the P.D.A.U of 1998 (9), became by the force of things, the support of growth of the city of Annaba even before the revision of this rule.

Development of the area

The development of the suburban area of Sidi Achour was supported by the Housing Improvement and Development Agency (A.A.D.L). In 1999, this public developer benefited from two areas of land located in Sidi Achour, with a capacity of 1.60 Ha, and 2.70 Ha. The "hire-purchase" type of formula has been adopted for the realization the housings.

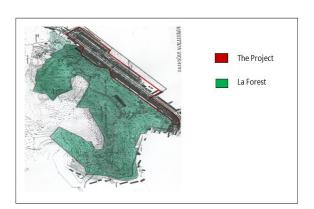


Fig. 1. Development plan of Sidi Achour area. (Source: P.O.S West Entrance II, 2002 and personal treatment).

The terrain has a linear form, and has a recreational purpose. It is served by the structural axis CW22, which also allows to deserts the city of July 5, Sidi Harb and Belaid Belkacem, it connects the RN44 to the penetrating west and thereby facilitates access to the northern area without passing by the city center. The planning principle is deduced from a critical reading of the mass plan. The latter was developed with a dual purpose:

- Preservation and enhancement of the forest,
- Planning of the main axis (CW22).

Five elongated islets have been projected. Each block is made up of residential buildings whose levels vary from R + 9 to R + 16. These towers and bars sheltering mixed activities are arranged along the main axis thus constituting gigantic urban facades. This imposing urban ensemble where habitat, showcases, squares and greenery combine, offers to Annaba another entrance to the city.

The regularization

The important planning operation of Sidi Achour was carried out as already mentioned, outside the perimeter of urbanization. Given that the logic of planning is "downward", it was first necessary to integrate the peri-central area into the new perimeter of urbanization to be able to submit it to the prescriptions of the planning rule (the P.D.A.U) which is located at upstream of the regulatory rule (the P.O.S). To do this, one had to go through the revision of the P.D.A.U rule (10). However, this procedure is slow and time-consuming, and the local authorities were obliged to urgently implement the important housing program. This is why the revision of the P.D.A.U rule was made downstream of the project. Afterwards, a study of P.O.S "West Entry II" was launched as regularization (10).

Certes, toutes les procédures administratives et juridiques en faveur de cette régularisation trouvent leur justification dans l'intérêt général, qui est pour l'essentiel l'extension du parc logements l'atténuation de la pression sociale, cependant la règle du P.D.A.U a été transgressée. Admittedly, all the administrative and legal procedures in favor of this regularization find their justification in the general interest, which is essentially the extension of the housing and the alleviation of social pressure; however the rule of the P.D.A.U has been transgressed.

At the scale of (The P.O.S)

It is instituted by the framework law 90-29 mentioned above. It is instituted by the framework law 90-29 mentioned above. It must be developed in accordance with the provisions of the P.D.A.U rule. The P.O.S is an urban rule in the short and medium term. It is instituted by the framework law 90-29 mentioned above. It must be developed in accordance with the provisions of the P.D.A.U rule.

Elaboration of the rule and administrative slowness. The will to verify the applicability of the urban rule in this case that of the P.O.S, led us in this article to choose a case study: a public facility located in the western plain of Annaba. This site housing the Z.H.U.N of the city, it was covered by a P.O.S developed by BET (Technical studies office) "Mila" (11).

The P.O.S was approved on o7/08/2011, which has obviously led to its overtaking. All these administrative procedures are generally slow and heavy, and which in addition are associated with other constraints such as non-mastery of the study, non-compliance with contractual deadlines, the low rate of late penalties, contribute to the inefficiency of the rule.

The P.O.S, a rule vulnerable to transgressions

- Description of the case study

The ground of plate is located in the "plain west" near the clinic El Djazaier. It is a common ground which extends on a surface of 600 m². See attached map:

The equipment in question is a monoblock consisting of four levels. The whole is articulated around a central space of a patio, thus allowing a fluid circulation within the building. On the ground floor and the first floor, they are offices, archive rooms and toilets. The second floor includes the executive office, the meeting room, the secretariat, the toilets, and the offices. The last floor includes the housing of strain.

- Analysis

The regulation recommended by the P.O.S rule, to erect the equipment, consists in applying the general rules of planning and urban planning. That is, respect the distances "d" calculated from the property line to the limit of the neighboring building. These distances are based on the height "h" of the building. In case of openings, "d" must be greater than or equal to h/2

with a minimum of 4 m, and in the case of a blind wall, "d" must be greater than or equal to h/3 with a minimum of 2 m.

Two points are to report

- Urban rules are stereotypical formulas applied to both dwellings and equipment. While the practices in housing, the need for air and sun are not the same for equipment.
- The rule applied is based on the property limit. But in our case, the rear ownership limit of the parcel intended for the equipment is contiguous to an unassigned space, which overlooks the gable wall of an apartment building. A building whose base belongs to the municipality and whose structure was ceded to the tenants. How are we going to calculate "d" if we don't have the vocation of the bordering space? Will it consider as a public space? In both cases, "d" isn't calculated in the same way. In the case of a public space, it isn't conditioned by any distance, it can create openings or create even limit. In the case of land dependent on another property, we must apply the formula h / 3, or h / 2 depending on the presence or absence of openings.

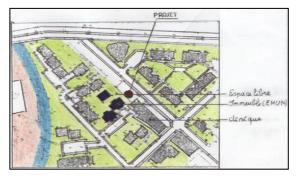


Fig. 2. Mass Plan (Source: P.O.S West Plain, 2009 + personal treatment).

This situation sheds light on the land issue, which is closely linked to the rule to be applied. Unallocated and unrestricted land (free space) can create ambiguous situations for the building permit dossier instructor, or conflicting for citizens. This deserves a reflection on the part of law makers. Because it is not a question of producing rules to regulate but also to anticipate contentious situations. See Mass plan attached.

At the subdivision scale

Urban and regulatory context

The subdivision of "May 19, 1956" includes 314 lots of which two lots are intended for investment, and three others for collective and semi-collective housing. The surface of the individual parcel is between 80 m2 and 264 m2. The specifications of the subdivision make available to the user, a series of articles that focus on (12):

- The occupation of the grounds, the depth of the building, the relation between the free surface and the built surface (the C.E.S) or the relationship between full and empty.
- The height of the buildings, the number of levels, the possibilities of withdrawals and advances.
- The use and the type of habitat, the type of activity.

After the recognition of this urban rule through the reading of its recommendations and prescriptions, it was intended to exploit the formal notices concerning the transgressions registered and recovered at the level of urban sector III in the municipality of Annaba.

Result and discussion

Identification of offenses of the rule through the exploitation of formal notices

The reading of the notices served to establish the following table:

Table 01. The offenses (Source: Urban Sector III of Annaba Commune, 2011).

Nº	Type of offense	Effective	Observations	
Order	7.1	(n)		
01	Failure to respect implantation	15	Case: individual dwellings	
02	Exceeding the C.O.S	12	Case: individual dwellings	
03	Modification of the facade	07	Case: individual dwellings	
04	Modification of the internal distribution of the construction	04	Case: individual dwellings	
05	Modification of the structure of the construction	01	Case: individual dwellings	
06	Failure to respect the height under ceiling	01	Case: individual dwellings	
07	Construction of a water tank on the property limit	01	Case: individual dwellings	

N° Order	Type of offense	Effective (n)	Observations
08	Fence construction without a building permit	07	Case: individual dwellings
09	Encroachment on others' land	05	Case: individual dwellings
10	Fence construction without a building permit	04	Case: individual dwellings
11	Unspecified offenses	04	Case: individual dwellings
12	Divers	03	
Total		64	

Analysis

- Levels of reading offenses

The exploitation of the formal notices served to determine two levels of reading of the offenses. The first concerns individual dwellings and the second concerns collective dwellings. The number of offenses in relation to individual dwellings (60) is much higher than that of collective dwellings (04).

- Typology of offenses
- ✓ Offenses of the substantive rules (technical): concern all that concerns the architectural side of the construction including the exceeding of the C.O.S (46 cases).
- ✓ Offenses of the rules of procedure (administrative): this category of offenses includes the construction of buildings without a building permit (11 cases).
- ✓ Unspecified offenses and miscellaneous: in certain cases, the urban planning inspector does not specify the nature of the offense and is content only to report it. For the various, it is in particular the deposit of embankment on ground of others and destruction of the network of waste water during the stripping of the lot (07 cases).

This preliminary work necessary before beginning the analysis, made it possible to note the most dominant type of offenses concern the technical rules (technical):

- ✓ Failure to comply with the ground rules (construction in isolation margins).
- ✓ Failure to comply with the density rules, ie exceeding the C.O.S.

- Exploration of lots in transgression

For the work that follows, only the substantive rules will be taken into account. Field visits indicated that not all of the 314 planned lots were constructed.

Offenses identified on the 270 built lots are as follows:

Table 02. Subdivision offenses (Source: authors).

Number	%
40	40,82
24	24,5
15	15,30
10	10,20
6	6,12
1	1,02
1	1,02
1	1,02
98	100
	40 24 15 10 6

According to the data cited above, 1/3 of built dwellings are in violation. Exceeding the C.O.S represents the highest rate, will come in second position the non respect of the alignment due to the encroachment of the construction on the setback.

- Interpretation

The careful observation of the subdivision made it possible to determine the criteria of the built-up parcels which are important for the interpretation of the infractions. These properties can be intrinsic such as the shape, surface and topography of the terrain or relationship such as the location relative to public space, the number of setbacks and the number of building levels.

• Exiguity of parcels and exceedance of C.O.S

The exiguity of the parcels forces the inhabitants to climb up to find a little more spaciousness in the house. But only plots with enough space in front of them or served by main roads or at the corner of two secondary roads, which are concerned, except a few rare cases. On a numerical basis, out of the 45 cases of exceedance of C.O.S, 39 cases were recorded concerning corner plots, plots on the main road and on an alley and / or on a free space. Here we detect the competence of the

inhabitant who is even profane in terms of regulations, he is anxious to preserve privacy and ensure maximum ventilation and sunshine to housing. Except that the problem of aeration and sunshine will arise from the back side, knowing that the setback is four meters. See diagram attached.

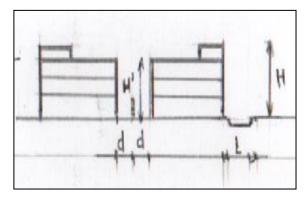


Fig. 3. Prospect diagram (Source: authors).

Compared to the wide way, the problem doesn't arise because H = L. On the other hand, on the back side, d is less than $H \neq 2$ whereas it should be equal. This raises a question, that of the surface of the plot and the tolerated height, which must be studied carefully during the establishment of the study of the subdivision to anticipate any overtaking.

• Logic of the inhabitant vis-à-vis the overtaking of C.E.S.

For construction in the setbacks, plots with two setbacks are involved. In numerical terms, out of 35 cases of encroachment on the front setback, 31 cases have two setbacks (front and back). The inhabitants of the lots burdened with two servitudes, do not respect the easement of the before. On the other side, for lots with a single setback, the inhabitant doesn't encroach on this margin. The objectives sought by the designer and the aspirations of the inhabitant are divergent and that is why the rule is transgressed.

In the case where the plots are small, the inhabitants proceed to densification and horizontal extensions, encroaching on the setback margin. 5 out of 6 cases were identified at the subdivision level. In the case where the parcel doesn't have a front margin, the inhabitants encroach slightly on the public space and don't rise in height. This shows the resident cunning that makes it possible to earn a little more space.

Conclusion

Defining the possibilities of land use, the city rule governs the development of cities or neighborhoods. An essential tool for forecasting and regulation, it has always been criticized for having overemphasized functional and segregative measures, for the poverty of its solutions, its slowness, its restriction, and its rigidity. Most often, not meeting users' expectations, she is most often transgressed. Panerai and Mangin have made it clear: "The urban rules have always been accused of all the evils: ineffective or absent, they are accused of not being able to stop the speculation and the abuses, too present they are denounced as unique causes of architectural mediocrity" (13)

In other places, theorists and practitioners have worked tirelessly to improve and / or create tools to harmoniously and effectively manage the urban. For example, the urbanism of norms, whose practices have proved obsolete and out of sync with the dynamics and reality of the field, has been replaced by a project urbanism which, contrary to conventional urban planning, it doesn't oppose the plan to the project (14). Project planning prevails today like a profound change in the culture of the urban project.

It can be concluded that, through the developed theme, this research proposes a method of work and provides some clarifications as to the urban rule adopted in Algeria through the example of the city of Annaba.

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