

## GLOBALISATION AND LOCAL DEVELOPMENT

### Opportunities for action in mid-size metropolitan areas in developing milieus

#### 1. INTRODUCTION

This work presents, from the results obtained in a research Project financed by the Consejo Nacional de Investigaciones Científicas y Técnicas (Scientific and Technical Research National Council), located in the Facultad de Arquitectura, Planeamiento y Diseño, Universidad Nacional de Rosario (Architecture, Planning and Design Faculty, Rosario National University), some urban-territorial processes analysed in the Rosario Metropolitan Area (Santa Fe, Argentina), which are believed to be significant for a reflection on the challenge of *local development*. The work focuses specifically on the analysis of two aspects or dimensions of the Rosario Metropolitan phenomenon:

- (a) the transformations undergone by the riverside settlements in the region, which had their origin in the behaviour of the *local productive system*, and
- (b) the challenges brought about by the modifications experienced in the micro-region *natural environmental system*.

Later on, this analysis is “placed” in relation to the *jurisdictional* problem; that is to say, the opportunities and risks faced by the spatial policy of this complex urban phenomenon as a consequence of being “contained” within a plurality of local administrations are studied.

It is clear that the two *dimensions of the metropolitan phenomenon* previously described and chosen to be the “main axis” of this paper are not enough to fully explain the phenomenon. Yet, it is understood that they can be taken as the “node” aspects, and therefore their specific analysis is justified. The reasons for this selection and, more important, the basis for their “usefulness” within the framework of the pursued goals will be now explained, together with the motives why the “jurisdictional complexity” is seriously considered a central variable of the problem under study.

- i. The analysis of the transformations undergone in the riverside settlements of the region, which were originated in the behaviour of the *local productive system*, makes evident the *spatial development* of the economical activities which place Rosario in the map of the urban centres that have some relevance at a global level: the production and commercialisation of agricultural products, particularly soybean and its derivatives. The connections between this type of analysis and the challenge of local development are obvious: the follow up of the way in which these activities appropriate and use portions so significant of the metropolitan coast becomes a pre-requisite of any point of view about the “management” that the local community can/should put forward in regards to such appropriation and to the interface that originates between this coast and other dimensions of the regional life (residence, transportation of people and cargo, safety, public health, etc.).
- ii. In turn, the analysis of the challenges put forward by the modifications experienced by the natural environmental system of the micro-region, also becomes fundamental in the definition of the possibilities and burdens of local development. The certainties produced in relation to this dimension of the problem –e.g., the identification of the current or potential “environmental risks” resulting from the processes of social appropriation of the space in the area– certainly contribute to define a framework which, on the one hand, delimits the

development options, while on the other hand gives them their course, and eventually encourages them in a specific direction.

- iii. The consideration of the spatial and institutional complexity present in an urban-territorial phenomenon with metropolitan characteristics such as the one under study is destined to allow the wider assumption of the challenges met when *acting* in pursuit of a functional territorial ordering to a development strategy based on what is *local*. This analysis tries to identify with the greatest possible precision the *real* possibilities for action to tackle the problems and to develop the potential for spatial ordering in the micro-region, within the framework of a search for a *sustainable development* based strongly on the “local capabilities”. Summing up, the idea is to contribute to a greater *efficiency* in the management of these processes and the directing of these capabilities towards agreed social goals.

## 2. TRANSFORMATIONS IN THE RIVERSIDE SETTLEMENTS

The Rosario Metropolitan Area constitutes one of the main urban conglomerates of Argentina. It has a population of around 1,200,000 people –a bit more than one third of the total population of Santa Fe Province- and spreads over sixteen municipalities. More than 60% of the provincial product and 5% of the national product is generated in this area.

The metropolitan territorial organization presents in the “classic” tentacle-like manner, following the main infrastructure motility axes that reach the centre of the “mother” town, Rosario. Yet, there is a clear predominance of the north-south extension, parallel to the coast, which is the expression of the productive role of the conglomerate, structurally and historically related to the port activity. As a matter of fact, the river has conditioned a greater density of settlements on its coast –both for residential purposes as for industrial and port ones- since it has made easier the provision of water and building of sewage systems, and the availability of docks for port activities. This last characteristic has been strengthened and spatially extended as a consequence of the gradual deregulation of port activities since the end of the 1970’s, so that today there is a “port system” constituted by a large number of terminals distributed over the total metropolitan riverside, with an extension of 60 kilometres.

This complex urban-territorial system, characterized by this predominating longitudinal disposition, based on the coast of the Paraná River, is immersed in the so called “Greta Argentinean conurbation” (extending from Rosario to La Plata). From the productive point of view, it constitutes a system with signs of dynamism and of marked integration to the global economy, though very much affected by recent transformations which have made some productive localization processes, which usually characterized the region, more intense.

The origin of the current constitution of the metropolitan area goes back to the settling down in San Lorenzo (a town to the north of Rosario municipality) of Yacimientos Petrolíferos Fiscales, YPF, the State-owned oil company. This company, created in 1922, began a great expansion process by the mid 1930’s<sup>1</sup>. A port with a considerable depth for the shipping of cereal and preserved meat existed since 1882 in the northern region of the metropolitan area. The oil company installs next to it its storage plant in 1936 and the crude oil distillery in 1938. Both plants initially received the raw material in tank ships from the south of the country, but in 1960 a fuel/gas pipe connected the oil fields. Anyway, the fluvial transport continued to link San Lorenzo facilities with other ones the company had, and continued to be the main means of export.

Later on, the location of YPF facilities made possible – in the 1950’s and 1960’s- the creation of a large industrial centre, being the petrochemical, paper, metal-mechanic and ceramic industries the great protagonist.

When in the 1990's YPF's facilities in San Lorenzo were sold, a deep reorganization took place. Thus, while in 1945 and 1960 almost 1500 people worked there –a figure that remained constant in the 1980's- the company reorganized by the new owner has only 300 employees (which, nevertheless, was not an impediment to duplicate the historical production levels).

Besides, the activities of shipping of cereal and its activities also have an extensive history in the region. In 1948 already existed facilities for this purpose in the municipalities of Puerto San Martín and San Lorenzo. During the 1950's and 1960's a strong centralization in the port of Buenos Aires and of Bahía Blanca takes place, and thus the Rosario region reaches its historical minimums. With the integration between storage plants and port services, some companies take advantage of the first grain trade liberalization in the 80's, a situation which becomes more serious with the privatisation that took place in the 90's (Iriarte, Brieva 2001). An increase in the participation of the Rosario region in the national total can be successively noticed, together with a progressive relative diminishing of Rosario Port itself (located in the municipality of Rosario).

This increase of the regional weight has its origin in the dredging of the navigation channel in the Paraná River. BUT this tendency is later on stimulated by the decisive modification in the national port policy, which goes from the deregulation of the activity, the drastic reduction of the State interventionism in it –a consequence of applying the “subsidiary principle”- to a strong encouragement for the development of private ports.

Still, the significant development of the agro-exporting activity is not enough to compensate the regional production and employment crisis that result from the breaking of the import substitutive model predominant during many decades in the country growth strategy. An evident standstill in the 1970's begins to show signs that this model is running out, and will thus result in the subsequent regional crisis: the industry in 1974 shows the same number of employees that in 1955, and 25% less premises (Castagna et al. 1996), but since then the standstill got even worse. A 1985 survey shows a fall of 14.5% in industrial employment and 13.6% in the number of premises in relation to 1974. By 1994, the data for both these variables are -29% and -25% respectively. The most clear evidence that the deterioration in the regional industry is only very slightly compensated by the growth of other production areas, is given by the evolution in the percentage of economically active population with employment problems (unemployed or underemployed): between 1974 and 1980 that percentage is both semester around 10%, between 1981 and 1991 it is around 15% and in the 90's it is over 20% (recently reaching 30% in measurements).

The regional crisis is clearly a consequence of the end of a development model under which Rosario had become a first level protagonist. The general economic re-structuring that successively took place and its consequences –already started in the second half of the 70's and deepened in the 90's- faced Rosario and its region with the challenge to re-accommodate which was hard to assume from its experience. On the contrary, those opportunities related to the marked expansion and intensification of the port and agro industrial activities process which has been previously described do not appear as yet clearly identified nor collectively assumed as challenges to the local society.

This port and industrial activities have become so important that the land devoted for those purposes in some municipalities of the metropolitan area largely exceeds the usual predominance of the demand for residential lands (demand which in the last decades has characterized the creation of urbanization policies) In Puerto San Martín, for instance, 54% of the total urbanized area is occupied by industrial and/or port enterprises. Thus this shows an extreme specialization, both as regards the strategies for the location of the companies as well as for the urban structures of these municipalities.

This specialization in the region is the result of the confluence of two important changes in the use of the territory: the displacement from cattle breeding to growing of oleaginous crops, with soy playing a predominating role, and the privatisation of services that support exports, particularly of port terminals. The concentration of plants generates what has been called “friction space”<sup>ii</sup> between the area that facilitates the shipping of products and the agricultural area that provides them.

Therefore, there is a double challenge as to the ordering of the territory. On the one hand, and at a macro-economical level, it is seen that the agro-exporting activity plays an outstanding role in the set of the national economy, reaching an intense dynamism and a marked expansion in the last years, as a result of its high competitiveness. On the other, location is a key factor for the oil industry, since the “space strategies are more and more selective in relation to the resources offered by the local spaces, which makes evident the need for the design of industrial and territorial ordering policies that support both the company as well as its environment to achieve a better articulation between the public performances and the functioning of the industrial system” (Iriarte, Brieva cit.).

Also, in the current situation of this urban-territorial system, the control of the advances of the residential uses over old industrial location areas, the careful and unbiased attention of the permanent conflicts between neighbours and companies in the industrial locations cause the demand of a rigorous prevision of complementary services, the regulation of heavy transport in the hinterland of the urban areas, are central questions in the framework of a policy that encourages productive investments, and therefore, the development of the area. At the same time, and in spite of the fact that the concern to attract new investments in the industrial area appears as a recurrent subject in the speeches of the different local actors –public and private- the predisposition of infra-structured land with the appropriate access conditions and, above all, the protection of the land already available under those conditions has not had the same importance in the concrete political actions.

In those same towns, the development of activities and services related to the transport of cargo is frequently manifested with barriers or obstacles to the urban development and the quality of life of its inhabitants, an expression of the “negative externalities” produced by such activities. The residential and commercial activities are extremely sensitive to these external pressures, and are the ones that more easily come to conflict in cases of environmental deterioration. Besides, many experiences show “that the transport infra-structures are incapable of supporting by themselves the economy and vitality of a significant town. Thus the serious contradiction that investing in such activity could create the conditions that would induce to urban decadence by means of environmental deterioration could take place”.

Which is the role to be played by territorial ordering within this context? There are some promising manifestations of a modification in the role that local administrations play in the management of their own territory. First, there is a predisposition to place greater demands on the companies settled in the corresponding municipalities as regards the payment of local taxes: the most affected towns have made significant improvements on this aspect, being able not only to increase their incomes but also to regulate the cargo transport access and motility systems. Second, some initiatives can be seen on the part of the population to have a greater participation in the control of decisions regarding the location and enlargement of companies’ facilities.<sup>iii</sup>

On the contrary, this is not the situation as regards the updating of the territorial ordering instruments and of control of the use of land. Though some municipalities have produced “Strategic Plans” circumscribed to their own territory –and which usually lack a “project” and fragmented vision of the metropolis, lacking a policy and regulation framework for the balanced development of the territory-, most of the towns remain tied to a generation of

Regulatory Plans from the 70's and 80's, plans which, apart from being almost exclusively centred in the "classical" urban processes –the expansion of the urbanized plant, the control of the building aggregate and the zoning of the urbanized area- lack the updated vision of the new processes and new responsibilities to be faced by the metropolitan area as a complex urban fact.

### 3. MODIFICATIONS IN THE NATURAL ENVIRONMENT

The metropolis of Rosario is in a peculiar position from the point of view of the original natural conditions. To be precise, in the interface between two clearly distinguishable and differentiated environmental systems: the *llanura pampeana* (the Pampa plains) and the Paraná alluvial valley. Thus, this complex urban-territorial phenomenon participates in, and is influenced by, both environmental systems. This double "belonging" in a sort of environmental "hinge", strongly characterizes the Rosario metropolitan space in a plurality of dimensions: ecological, physical- morphological, historical-productive and even anthropological.

On the one hand, to belong to the Pampa plains – that is to say, to be located in a place at the east border of that plain- has marked the city and its micro-region from its very beginning: the existence of a natural port in the middle of those fertile lands has been the real "founding" force of this urban fact. And that mark of origin still characterizes the present, for Rosario metropolitan port system connects, today, most of the agricultural area devoted to the production of soy in the country with the international commercialisation channels for this product and its derivatives.

On the other hand, the Delta alluvial valley has been an essential part of Rosario landscape from the origins of this urban fact. Both ecological and perceptive aspects of this vast islands territory located at "the other side" of the main course of the Paraná River have forever defined the framework and the horizon of the urban life settled at "this side" of the river. In closer times, and as a consequence of a growing recreational and tourist use of that territory, this has been acquiring, apart from the already mentioned contextual and contemplative value, a meaning of *use* for the metropolitan community. Therefore, each time there are more inhabitants from the Great Rosario who go to the islands to perform their sport activities, for a week end recreation and even to materialize their week-end houses, and there is also evidence of an incipient tourist development which attracts more distant residents.

Next, the distinctive features of these two environmental systems which come to contact in the Rosario Metropolitan Area will be presented, to later move forward towards the identification of the risks pending over them as a consequence of the current and potential transformations they are subjected to.

#### 3.1 Rosario and the Pampa plains

The Rosario Metropolitan Area is located on the east border of a region<sup>iv</sup> characterized for being particularly flat, with almost imperceptible undulations. The maximum height in the region is of only 90 m over sea level, and its rises and falls are rarely over 1,5 m/km.

This plain is frequently crossed by watercourses and gullies perpendicular to the Paraná River, into which they flow. To be more precise, the area is part of the watersheds of the Carcarañá River, and the San Lorenzo, Ludueña, Saladillo, Frías y Seco<sup>v</sup> watercourses. The second most important watercourse – the Carcarañá- describes a pronounced arch to the north, flowing outside the metropolitan area itself. The rest of the water courses in the region

have short courses and flow during the rainy periods of the year; some of them are canalised. The average slope is surprisingly mild, oscillating between 2% and 3%. In general the land presents slow draining. In the Northwest area, the waters reach the Paraná River through a series of temporary parallel gullies that have a Northeast direction with slightly seen watercourses and generally canalised. Generally, these gullies are in less pronounced valleys than those in the West or South areas. A plain area with gradients not over 0.5% and some draining problems extends to the West of Rosario.

While the minimum necessary pluvial flow for non-irrigated crops is around 500 mm per year, the region presents an average flow between 900 and 1000 mm, regularly distributed all along the year. This makes these lands exceptionally suitable for agricultural activities.

The permanent agricultural exploitation that has been taking place for over a century has deeply transformed the native vegetation. The natural landscape of the region is notoriously homogenous, but can almost only be found in the railroad embankments and on the margin of watercourses. The areas liable to flooding with saline and alkaline soils also had their native vegetal formations modified due to pasture, though in a lesser degree.

The main elements that characterize the region nowadays are a consequence of superposition of these later transformations over the original state. It is worth pointing out in particular the characterizing power of:

- Exceptional natural conditions for the development of agriculture.
- A road and railroad infrastructure design specifically for the export agriculture.
- An agricultural structure derived from colonization and immigration.
- Incorporation of technology for extensive production.

Large sowed extensions and marked tendency to monoculture characterize the current agrarian landscape, still linked to the foundational intention of colonization in the XIX century (to develop an economy related to external markets). This explains the geometry of the plantations and the regularity of the landscape: its characteristic homogeneity is a manifestation of the regularity common to this kind of exploitation. That is to say, that the shape of the territory, its destiny and use were sealed by the colonization operation.

Cereals have been predominating crops for many decades, but soy has experienced an outstanding development since the first campaigns in the 80's. In very few cases cattle breeding –aimed at the production of meat- is combined with agriculture, with the percentages devoted to one activity or to the other fluctuating according to the behaviour of the market.

Now, which are the risks pending over this environmental system (and particularly, which are the ones that could have a more direct incidence over the Rosario Metropolitan Area affecting its development)? As regards this, three phenomena can be distinguished, all of them consequence of an agriculture that lacks preservation practices:

- Loss of nutrients
- Water Erosion
- Contamination of subterraneous and superficial waters.

If these deterioration processes are not controlled, the physical and economical losses will tend to increase, seriously compromising- maybe irreversibly- the soil capacity in this important region.

The effect of this on the development perspectives of the Rosario Metropolitan Area are both indirect –e.g. mediated by the deterioration of regional production- or direct. This means that,

on the one hand, the loss of productivity in the soils would affect the performance of that important factor of local economy that is the oleaginous complex, which in time may reduce the importance of Rosario in the global scenario (today marked by the importance of this complex). And on the other hand, a reduction in the environmental quality –contamination, alteration in the hydro regimens- would affect the perspectives of metropolitan urban development, making certain areas inappropriate for urban use.

### 3.2 Rosario and the Paraná alluvial plain

The fluvial valley of the Paraná, which accompanies the Rosario Metropolitan Area<sup>vi</sup> to the East, totally belongs to the jurisdiction of the province of Entre Rios, and in particular the isles sector in the Victoria Department. It is a flat and liable to flooding region, geomorphologically complex, with the shape of a spindle, which extend longitudinally –in a Northwest/Southeast direction- for around 300 km, and transversally –precisely in front of Rosario- for around 60 km. The resulting landscape is the one characteristic of an old and wandering river, with large deposits of sand material and a great quantity of irregular watercourses.

Even at this point, the main watercourse of the Paraná River is characterized for being of fluvial-maritime navigation. The area of the valley closest to it is a bit higher and has more arboreal vegetation than the one resting on the East border, which is more depressed and practically lacks any vegetation. The alluvial valley as a whole –covered with water streams and small lakes bordered by ridges of fertile land- is liable to flooding with the annual swellings and is also completely uninhabited.

The use of this territory is strongly conditioned by those cyclic rises of the river level. This makes the small and medium scale intensive and extensive exploitation that can be seen in the area be subjected to also cyclic interruptions and displacements, which clearly limits the productivity of the activities. It is necessary to add the logistic and administrative difficulties to which both the very few inhabitants as well as their activities are exposed. The land in the area is mostly privately owned, but there are also large extensions of fiscal land belonging to the Province of Entre Rios.

Summing up, this state of affairs is the basis of a diffuse perception as to the fact that the Delta territory is under-utilized in relation to its productive potential. The recent concretion of the Rosario-Victoria<sup>vii</sup> link has generated expectations in relation to the possibility to revert that situation, by generating development opportunities in the area. Still keeping in mind that this kind of impact is limited and proportional to the distance between the new road axis and the territory to be developed<sup>viii</sup>, it is necessary to point out that this kind of opportunities also imply some important risks for this environmental system, and therefore for the Rosario Metropolitan Area and its perspectives for sustainable development. Following there is an attempt to individualize such risks.

The expectations generated by the concretion of the previously mentioned link can be divided in three groups, all of them already existing in the weak isles productive net, the development of which –it is believed- can be improved as a consequence of the road connection:

- Agriculture
- Tourism
- Housing

As regards the first one, the leading idea is to diminish the hazard condition of agricultural activities being performed nowadays, to incorporate new surfaces for production, to diversify activities and incorporate technology.

As regards tourism, the new infrastructure could make possible a more intensive use of the islands for that purpose, encouraging the appearance of investment projects of a certain importance (now stopped, due precisely to infra-structure limitations). And finally as regards housing, the expectations are aimed at the systematisation and encouragement of the offer for “week-end” homes for those living in the region (which should also be possible as a result of the better access materialized by the new link).

Which are the risks that the eventual concretion of these expectations would have on the fluvial valley environmental system – and for the region as a whole? First, it is necessary to remember how fragile the Delta environmental system is, how subjected it is to permanent variations as a result of the cyclic flooding and the continuous erosion and sedimentation processes. It is also necessary to consider how important the characteristic “natural green” of the islands territory in front of the Metropolitan Area of Rosario is for the regional landscape.

A process of “intensification of usage” in the fluvial valley would put the stability of the environmental and landscape value of the system in risk. Naturally, it is not a matter of postulating here the intangibility of the system: the transformation of its habitat is inherent to the human being. It is about *administering the transformations* with a sense of “synchronic solidarity with today’s generation and of diachronic solidarity with the future ones”, according to an ethic basic principle that refers to the “problem of the fair access to the resources and their re-distribution” (Sachs 1988:63). Naturally, the territorial ordering can become a tool at the service of an action, to this sense.

#### 4. THE QUESTION OF JURISDICTIONAL COMPLEXITY

The territory of the Metropolitan Area of Rosario presents itself –expression of its own spatial and institutional history- as a mosaic of political-administrative entities, some of the them of a very reduced economical and technical capacity to administer their own territory, and therefore, to carry on a local development policy.

But also, the conception of the territory implied in the public policy decisions in the area are connected to the environment and to the compromises assumed by the traditional local administrations, which are exercised within the limits of the local jurisdictions. Seen from the point of view of the problems previously analysed, it becomes evident that this point of view is not sufficient, since the problems and opportunities that characterize the metropolitan phenomenon are not contained by those traditional instances, as can neither the actions be aimed at facing those problems and opportunities.

Therefore a certain displacement between the special phenomenon and its management instances can be verified. This displacement is clearly a historical product: the organization ways of the local public management had consolidated in the constitutional, administrative and political history long before the appearance of the metropolitan phenomenon, and the institutional inertia itself delays the adapting of the container (the management instances) to the contained (the metropolis, with its double challenge).

It is then worth analysing two aspects here: that of the forms the metropolitan institutionalism may or should acquire, and that of the contents, or the “commitments” of that institutionalism.

As regards the first aspect, it is possible to identify, broadly speaking, three institutional modalities aimed at “handling” the metropolitan question:

1. *Specific structures for the metropolitan government.* They are *ad hoc* structures provided with the necessary technical and political capacity, with the only and excluding mission of understanding at the metropolitan scale.



2. Superior coordination structures. These are cases in which there exists some instance of metropolitan management “above” local administrations, and in which the attributes seem to be distributed among the local administration and that superior instance. A variant to this form is that of *metropolitan municipalities*, which are a “two level” municipal instance, clearly distinguishable and with their technical bodies: the metropolitan level and the district one.
3. *Cooperating Structures between the different local units that constitute the metropolitan phenomenon*. They are more or less voluntary associations between local administrations.

Analysing the international experience on the subject, it is possible to verify a lack of confidence in the “heavier” structures (the ones described in 1). These changes are certainly related to the mutation in the paradigms for the definition and organization of “the public” at a general level, as well as with the emergence of new –and more complex and dynamic- problems and opportunities within the framework of the metropolitan urban phenomenon. Now, the emphasis on the search for the adequate tools to “handle” what is metropolitan tends to be placed, at an international level, on certain institutional economy; the tendency is to prefer low or medium complexity organization forms, provided with a greater flexibility in the face of changing scenarios.

It is worth mentioning that Rosario has had its experience in relation to the search for an answer to the displacement between the institutional and the phenomenological dimensions of “the metropolitan”: in 1969 the Provincial Government of Santa Fe created the Prefecture of the Great Rosario, precisely with the purpose of institutionalising a metropolitan government of this complex urban system. Apart from the importance of this local experience, and of its pioneer character, it is useful –in the face of the challenges now put forward by the institutionalisation of the metropolis- to observe some of its characteristics. First, it is necessary to notice the fact that this is an initiative originated in a dictatorial government, evidently permeable to certain developmental approaches present in the political cultural predominating at that moment. Second –and obviously related to the previous one- is a decision that follows the *up-down* scheme; in other words, it is a decision taken at the “heights” of an authoritarian state (though its content was legitimated in the preceding technical studies) and from there it is “lowered” to the local community for its execution. Last, it had the same limitations, as regards competence and concretion capacity, which affected each one of the municipalities separately.

Still, it is enlightening, in the face of the current challenges, to compare that situation with the one that takes place nowadays. On the one hand, today the Provincial State does not seem to be concerned about this problem: the question is not included in the agenda of the provincial political class, regardless of party differences. We might be facing the seed of a process inverse to the one that preceded, in the 60’s, the creation of the Prefecture: that is to say, a process from the bottom up, which –we know- offers more efficiency guarantees in the formulation and implementation of this kind of initiatives. It is worth pointing out, in this sense, the special interest the economical sectors have in this problem, for they seem to have understood more clearly and certainly with less institutional inertia, the need to actively assume “the metropolitan question”.

Most of nowadays debates about the constitution of a metropolitan government or of a manner of integrative management for the territorial problems and strategies that are beyond the restricted scope of the municipal and communal districts which conform the Rosario region, end up in the analysis of an options menu, but do not make a pronouncement about the most appropriate option for the current situation. Yet, as we have attempted to show throughout this work, some aspects cannot be left aside.

The first one is related to the fact that we are now facing a new type of location dynamics, different from those that characterized the preceding decades. The localization of great infrastructure works as that of great industrial investments and the one of a more dynamic port movement suggest that the relation that takes place today between the different locations that constitute the metropolitan area is one of mutual dependence. When confronted with these proofs, the complex urban system as a whole must assume that it has a lot to win, and probably a lot to lose if it does not incorporate the metropolitan dimension as the optimal scale to tackle local development strategies.

The second aspect has to do with the verification that the challenges brought up by the modification of the natural environment where the Rosario Metropolitan Area is “located” are not contained in the institutional space normally considered “local”, but it is at a higher level, free of institutionalism: a “by horse” space of municipal, departmental and even provincial limits. It seems necessary to deduce from this that the answer to such challenges call for an adequate institutional level, which cannot be exclusively the municipal/communal level. As a matter of fact, both the risk of deterioration in the plain where the Rosario metropolis is physically and productively settled as well as the risk of deterioration in the fluvial plain that exists in its border are expressed with total disregard for the “local” administrative limitations (strictly speaking). The risk of weakening the productive potential of the agricultural plain more directly in contact with Rosario, for instance, or the potential contamination of superficial or subterranean waters in the region, are localized phenomena in vast areas and with imprecise and changing borders. Also, the possible loss of environmental and landscape values that constitute the isles environmental system is a phenomenon which, though localized approximately in only one jurisdiction, is “played” –caused and suffered- by radical actors in different jurisdictions. All of this makes us think that the answers and attempts to find a solution require also a collocation within an adequate institutional space, which we could define as *the enlarged local*: that is to say, the metropolitan space.

Therefore, the need for a radical change of approach becomes obvious: it requires, as it has been previously pointed out, an inversion as to how the problem is put forward, which implies working on the subject of the “commitments” of this new institutionalisation (the second one of the promised reflection aspects).

Opening the debate on the commitments implies acknowledging that the pyramid is being put upside down, and that one of the main issues of local development at a metropolitan level – one of the strengths of institutionalisation of a metropolitan instance- does not consist of the re-centralization of the functions that the municipalities already have for themselves, but basically of the possibility to build a “receptacle”, first for the fixing or shared ordering and development policies; second, for the regionalizing policies from the State higher levels<sup>ix</sup>. After all, it is about conceiving new organization instances, and in this double game of integration and rationalization, such instances will allow for the facing of problems that cannot be assumed by the local sectors in a fragmented manner.

The consideration of the development territorial dimension becomes central in this perspective, given the fact that the local development policies – formulated both from the provincial as from the municipal sector- suffer from a certain “economical” distortion, which tends to leave aside the determining role that territorial potentialities play today in the making of decisions about regional and local development policies. On their part, the “classical” tools of urbanism that are now applied in the region remain tied to a municipal point of view –i.e. limited to jurisdictional limits which now result functional only for some very limited aspects of the administration of the city- and are centred in the attention to the demands traditionally attributed to the local scope –urban hygiene, regulation of building activities, elaboration of public equipment projects, control of expansion over urbanized areas-; approach which, though legitimate and necessary, is not enough to promote economic and social sustainability of the group of towns that constitute the metropolitan area.

A sort of “professional deformation” of the physical planner might show the relation between the *territorial ordering* and the *development* in unidirectional terms, and in a precise sense: a relation in which the territorial ordering is *cause* and *motor* of the development. On the contrary, this work has tried to characterize that relation in more complex terms, that is to say, in *bi-directional* terms, of *reciprocal influences*. This implies acknowledging the existence of a space where to act independently over each one of the two aspects, and therefore, also the possibility to operate with the *spatial planning* so as to produce an effect as regards development. It is within this framework that planning is seen as a *tool at the service of local development*.

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<sup>i</sup> For the development of YPF refinery and formation of the petrochemical pole we have used a great portion of Percy Flaherty's work called *La ciudad de San Lorenzo y la Refinería de Petróleo. La ciudad de la industria. (The city of San Lorenzo and the Oil Refinery: the city of the industry)* Policopiado inédito, Taller Martínez de San Vicente de Teoría y Técnica Urbanística, FAPYD-UNR, 2000.

<sup>ii</sup> Particularly, as regards Rosario riverside front, it is worth mentioning that "Generally speaking, when it is about the transport of raw materials to the factories, this cost is assumed by the farmers, while the fees from the factory to the ports of shipment, have been internalized by the companies, either by means of contracts with the railroad concessionaires or taking part in their ownership during the privatization process (Iriarte, Brieva cit.).

<sup>iii</sup> Among others, it is worth mentioning the example developed by Flaherty (cit.) in relation to YPF Refinery. The author documents the case of a popular consultation that, in relation to the location of the fuel/gas pipe destined to connect the port plants with the refinery, was promoted by some sectors of the citizenship in 1998 and 1999. Consultations of this kind do not take place in any other opportunity in the 50 years of existence of the refinery, since when the National State decided to construct the plant, the municipality had no participation in this decision. The new company, instead, had to guarantee the safety of the population living around this and to perform the infra-structure works for this.

<sup>iv</sup> For this characterization INTA has been particularly taken into account (1988).

<sup>v</sup> This is the origin of the historical name of the region: "Pago de los Arroyos".

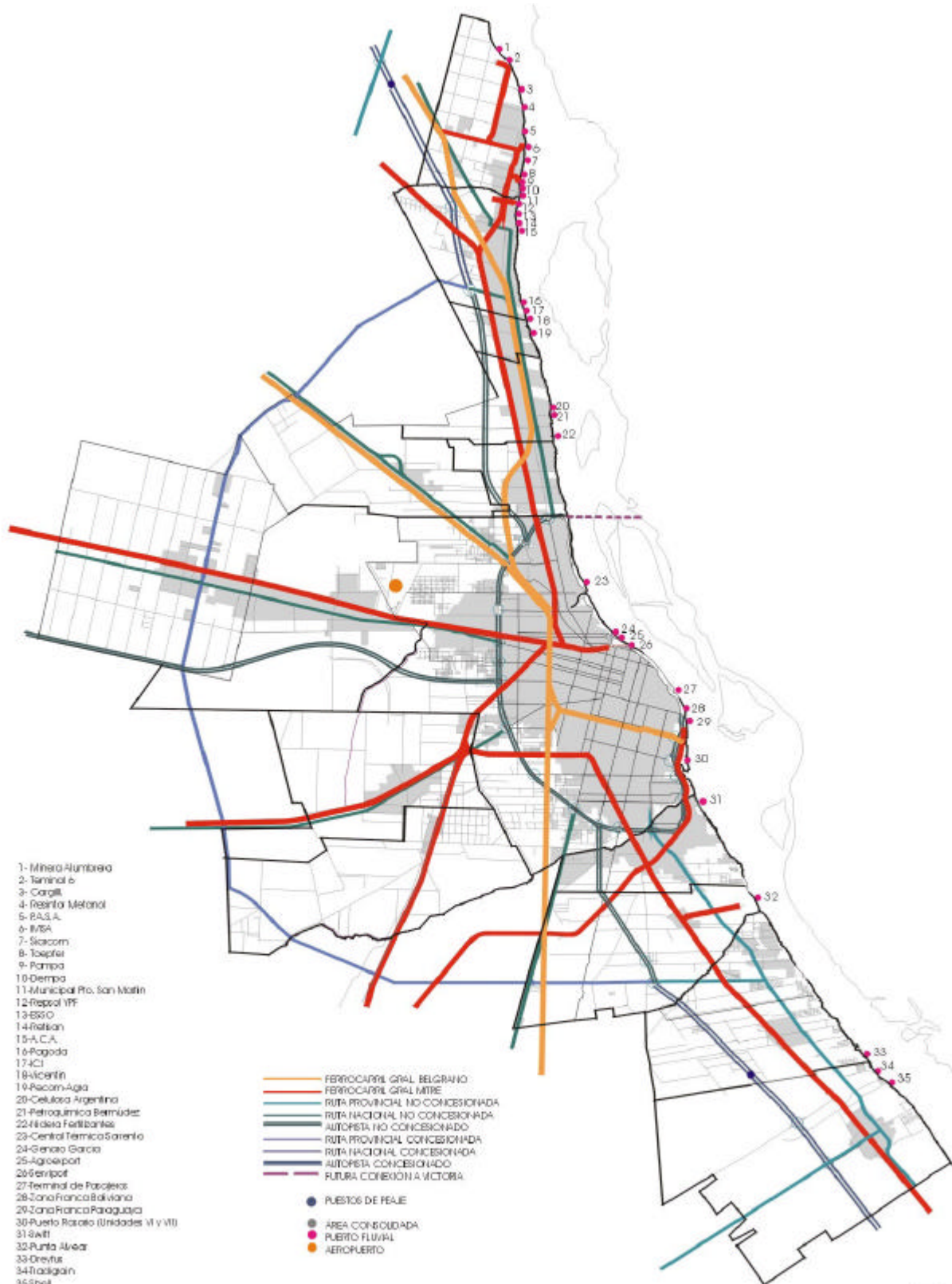
<sup>vi</sup> For the following characterization we have basically appealed to the Agreement Argentine Nation – Santa Fe and Entre Ríos Province (Convenio Nación Argentina – Provincias de Entre Ríos y Santa Fe (w/o date).

<sup>vii</sup> It is the physical connection Rosario-Victoria, an ever desired project that links both margins of the alluvial valley at the widest point, constituted by a road embankment in the island territory plus a set of bridges (the most of which is over the main course of the Paraná River, in the coast of Rosario).

<sup>viii</sup> It seems evident that the contribution the new connection may make in this sense will be limited to a stretch of land in more or less direct contact with it; beyond the limits of this stretch of land, such "beneficial" effect would inexorably tend to disappear.

<sup>ix</sup> The question has been brought about in I.Martínez de San Vicente and J.Murillo "Hacia una nueva concepción del planeamiento regional. Aportes a una política de descentralización en la Provincia de Santa Fe, Argentina", Cuadernos Metropolitanos, Serie Documentos de Trabajo N°8, Instituto de Desarrollo Regional, Rosario, 1998.

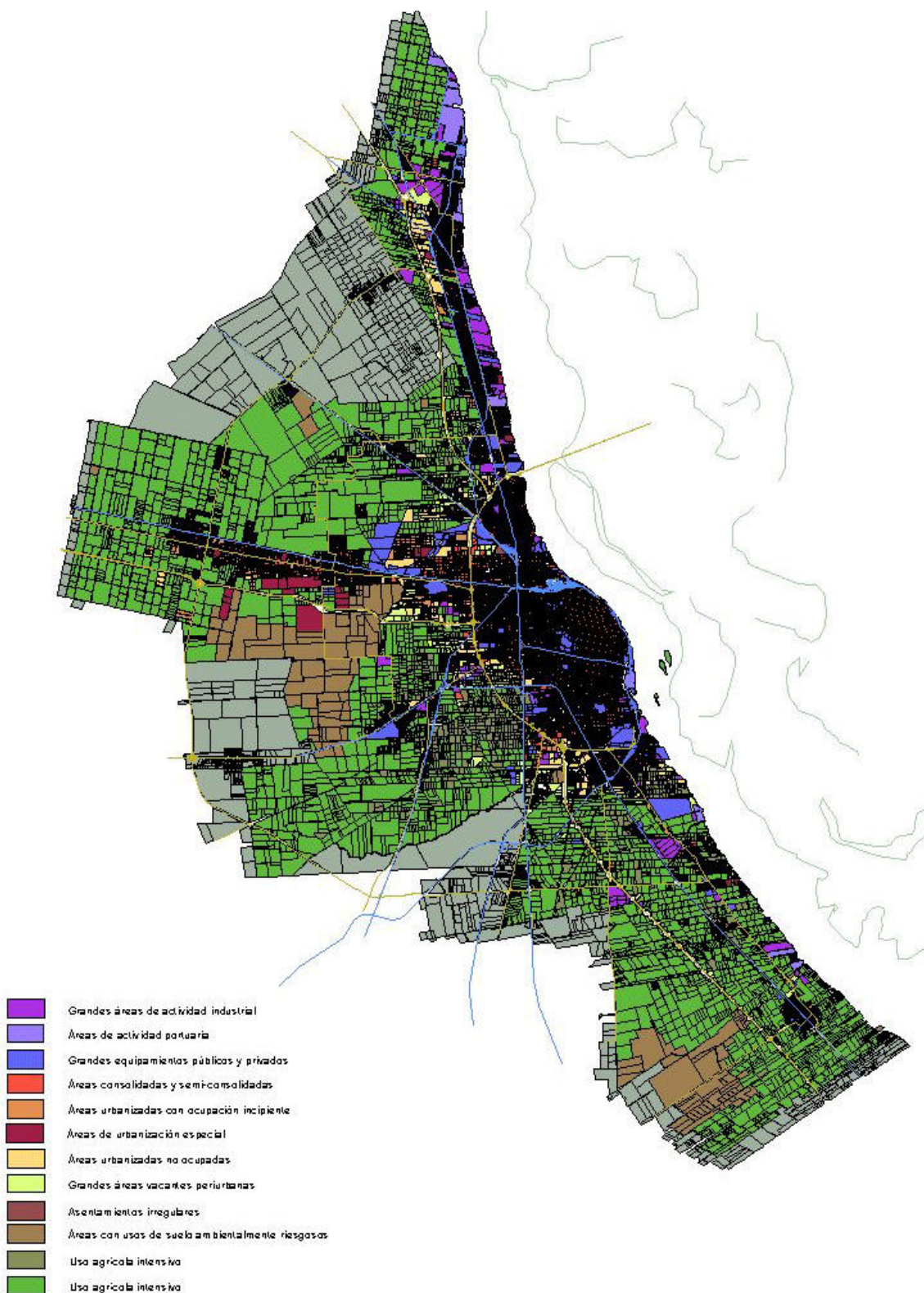




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