New keywords, new topics, new models: New cities?
New keywords, as was reflected in the invitation to the congress, have gained ground in the discipline and have become part of the everyday vocabulary of the planner.

This, which is reflected mainly in the thematic terms of planning research, in papers and in congresses, has in turn led to a certain predisposition on the part of those who are involved in the study of urban issues towards an analysis of these questions, above all dealing with questions considered to be innovative.

Whatever the characteristics of the city under consideration, there is often a tendency to concentrate almost exclusively on these points. Hypotheses are put forward, then checked through the intelligent selection of examples that evidence the universality of the processes involved as well as the global impact of the issues dealt with. The possibility of a common denominator then appears shedding light on the changes undergone by each and every one of the cities that make up this great system. These theoretical products spread rapidly and have a great influence on planning work and on the work of the city planner or planners of other areas where planning is very often different.

The outlining of these new concepts create a disciplinary perspective from where current city and planning reality may be visualised. The ‘technological’ changes and their spatial implications pose the questions for the planner with regard to the city and the possibilities and approaches to town planning. These questions refer mainly to the detection of changes as such as well as to the definition of new models for interpreting and executing town planning.¹

¹ However, do these new keywords refer to processes applicable to any city, any region, or any country? Do these new topics explain the current situation of land? Can these questions that are seen as global be considered as transferable to new models of interpreting reality? Have new cities been created?
Without neglecting this fresh approach to urban problems, and remaining sensitive to this issue, the work presented here stems from an awareness that all the processes that are currently in the spotlight are closely linked to others that are still very much present in city and regional planning. Some of these may today seem to be somewhat ‘removed’ from the mainstream of interest and from the innovative approach to debates on urban planning or at least that which is able to transcend the boundaries of a merely local consideration. Any theories related to these processes should be seen as critical tools rather than goals in themselves.

This study reflects part of the work carried out on the metropolitan area of the city of Rosario, Argentina, where the idea was put forward of analysing an area as a system consisting of varying entities - the cities of which it is made up -, that constantly interact and that form a whole with its own dynamics where new planning processes can be seen.

Planning indicators were used to reflect the differences in the urban development existing between the various areas and through this to characterise the current individual functioning of the metropolitan system. These allowed us to establish the conditions, tendencies, problems and possibilities of the area, in this case urban-metropolitan. They also allowed us to go beyond the use of generic principles, reviving the meaning of the urban scale and constructing of a specific experience on the planning processes and the new conditions.

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2 There is vast experience in the use of Planning Indicators applied to the understanding of land. Currently, one of the most widespread is that used by the United Nations Habitat 2000 Project, which is applied to a significant number of municipalities around the world. However, the approach of this research is aimed at the creation of a ranking of cities that, depending on similarities, enables the subsequent application of specific planning policies to achieve higher levels of urban quality.

3 An indicator is a practice and concrete form to express the typical features of a phenomenon, and to measure, in general, different properties of this study object. By comparing similar types of indicators in different cities of the territory, it is possible to define the different relations of the space to be planned. In this work the indicators are defined with an initial selection of censual variables. They establish the conditions, tendencies and socio-economics problems, to describe a situation or a tendency. Two big groups are defined, one (1) for the social, health, economics, institutional and public service variables, and the other (2) for the territorial variables. This question is, in fact, an essential problem. That selection is more important, if the only information for the work is censual information.
Rosario forms part of a group of medium sized cities, the total metropolitan area of which does not exceed 1 500 000 inhabitants. It is made up of 17 cities, which according to the 1991 National Census on population, correspond to the following order: Rosario -908 875-, Villa Gobernador Gálvez -63 078-, San Lorenzo -41 160-, Capitán Bermúdez -26 078-, Granadero Baigorria -22 097-, Pérez -20 715-, Arroyo Seco -17 869-, Fray Luis Beltrán -11 985-, Puerto General San Martín -9 383-, Roldán -9 382-, Funes -8 952-, Pueblo Esther -3 383-, Alvear -2 669-, Ibarlucea -2 349-, Soldini -2 211-, General Lagos -1 448-.

The general growth of the area is low in comparison to other Latin-American regions. Nevertheless, its strategic position, its high industrial growth as well as the existence of a market which, while modest in absolute terms, is interesting from the point of view of a comparison with other areas of Argentina, afford it the necessary requirements for it to be considered differently within the framework of regional integration known as Mercosur 4.

This process of national economic transformation that began at the end of the 80s, made a significant impact on the region. The consolidation of what has today come to be known as 'el complejo oleaginoso', (The Oil Complex): the opening and expansion of private harbours, and mainly the development of technically advanced docks, have substantially modified the industrial profile of the area, creating a new regional economic system, clearly immersed in international markets and the ‘global economy’.

This transformation was also accompanied by other changes, mainly the privatisation of the public service industries (gas and water), high pressure electricity and gas distribution and conversion networks

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4 Mercosur, inspired by the existence of the Common Market (current EU), was created at the end of the 80s and is made up of: Brazil, Argentina, Paraguay and Uruguay.
5 ‘El Complejo Oleaginoso’ by Farruggia, Lattuada and Guerrero, Cel, 1999, Rosario.
The metropolitan phenomenon, urban conditioning.

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(TGS), freight rail transport, and an oil refinery (YPF). This led to a different structuring of the region as did the setting up of ‘clean’, technology and service industries on a large scale.

However, the impact of large investments of both national as well as international private capital - which these initiatives involve as the ‘initial’ development of new economic activity, is not reflected in the socio-economic growth of the metropolitan area. The cities in this area are similar to those that were recorded in the early studies of the 60s. This situation has worsened over the years as the initial problems persist and new conflicts have arisen.

Urban sprawl, the substitution of an economy based on industry for ‘computer based production’, the ‘change’ from ‘mechanical mobility’ to telecommunications, are issues which have not yet reached us.

New methods are reflected in new high technology but strongly polluting industrial installations, in the transformation of infrastructure, in the exponential increase in the demand for services linked to new residential consumption, in the spatial requirements of the service sectors linked to large scale consumption, in the increase in complexity of the rail network, and in the tremendous increase in the number of motor cars as well as in the increase in citizens’ demands after the improvement in conditions in the cities.

These new procedures are linked to the already existing phenomena of the spread of low density urbanisations, of highly deteriorated outlying areas, of upward growth and complexity in the historical centre, of industrial installations in residential areas and the high demand that exceeds the existing capacity of urban and territorial infrastructure.
This new condition of territory is characterised by the co-existence of new and old procedures in the same area, procedures that due to their intrinsic differences lead to deep tension in the area, and new dynamics. Economic concentration and decentralisation of production, agglomeration of consumer and social services as well as urban sprawl are the key factors in this ‘transformation’.

These new procedures are lead to new guidelines for the establishment of each specific activity, creating more imbalances in the urban development of the cities in the metropolitan area. However, these on their own do not define a new city or a new area but, overlay an already existing area, similar to a palimpsest. The problem is then recognising this complexity and not simply the new reality that emerges with contemporary society.
The usual description of the metropolitan phenomenon refers to an appraisal of the major physical components of an area, to an understanding of the formation of an area, the processes of transformation, and its delimitation.

In the case of Rosario, this approach limits understanding of the general urban dynamics and of the complicated network of relations existing between the cities in the region and overshadows an issue which is fundamental in this understanding: the individualisation of the varying levels of urban development achieved by each city, reflected in the ability to control the new processes underway and also to cater for the citizens’ demands.

Focusing this working hypothesis merely on the appreciation of elements and infrastructure limits the units of analysis to mainly physical variables and to quantitative data. An awareness of this phenomenon as a system of constantly inter-related urban centres that is in contact with the surrounding area is ignored. This is complemented by the use, elements and infrastructure to satisfy social requirements.

6 In fact, it is possible to appreciate the individual relationships that exist between the different cities in the region, which to a varying extent are also reflected in degrees of dependence of the metropolitan condition for urban, social, economic and cultural development.
The determination of indicators for the RMA was based on an initial selection of statistical variables and census data. Two large groups were established, one (1) corresponding to social, health, economic development of public and institutional service variables and another (2) to physical variables.

(1) Social, health, economy, development of public and institutional service variables:

1. **Population**: Number, NBI indexes NBI (Basic Unsatisfied Needs), educational levels achieved, number of institutions per level, presence of institutions.

2. **Health**: population covered, number of centres, capacity available and quality of services.

3. **Economy**: analysed in industry, commerce and services, number of jobs, capacity and type of enterprise, volume of exports, presence of innovative activities, capacity and quality of premises.

4. **Development of public services**: analysing public services, degree of technological development of the machinery used and services.

5. **Institutions**: considering whether local governments promote de-centralisation, government policy as a whole in the metropolitan area, the presence of outside organisms controlling local government action, co-operation among cities, or international associations.

(2) Physical Variables:

1. **Infrastructures**: analysing the presence of paved areas, gas, electricity and water supplies, sewer systems, calculating the percentage of homes with access to each of these infrastructures and those in temporary settlements.

2. **Ground use**: analysing improved land, that which is occupied but not improved, that which is not improved and that which is...
improved but not occupied.

3. **Environmental town planning**: analysing the presence and the routes of means of transport (global percentage of types), of general plans (computers, codes, etc.), treatment of waste.

These variables were analysed by relating them to **parameters** that were determined so as to subsequently characterise with greater accuracy the individual features of each of the cities, and the relationship existing between each of them and Rosario. The definition of these parameters is directly linked to those aspects that were felt to be relevant for qualifying these relations and refer to:

- **the functional size** - linking the number of inhabitants to the evaluation and measuring of services, elements, and infrastructure, accessibility that can show the capacity of cities to cater for the needs of its inhabitants.
- **the condition of centrality** - in relation to the city’s capacity for effectively influencing its immediate and surrounding environment.
- **urban dynamics** - in relation to the recent evolution of each of the cities.
- **urban quality** - through a series of quality features, this analysis is aimed at determining the capacity for future adaptation of the nuclei and its ability to cope with its immediate development.

Establishing **standards** was linked to the need to find a measure of quality from where to differentiate between each of the urban realities of the cities studied.

- **Links between the region and services and the city** (as the physical organisation of a set of places for the settlement of different social sectors).
- The relation between standards and needs of the various social sectors.
- The link with functional and formal aspects between standards of services and levels of economic and urban development.

As a general guideline, the work reflected that the type of relation that existed between the cities that make up the RMA does not merely depend on its geographic proximity to Rosario, where the most specific social services are located. The current internal dynamics of RMA is determined by more complex relations that may be recognised by moving away from the traditional models which, by establishing a city's hierarchy in terms of the size of its urban population.

Some of the conclusions that may be derived from the analysis of two specific cases are presented. These show in an extreme manner how the application of these systems establishes significant limitations for the understanding of metropolitan functioning. This is also reflected in a limitation for the interpretation of the reality of the new processes affecting the region.

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This refers to W. Christaller's theory of localisation and its application to the metropolitan phenomenon.
Two cities in the RMA and the analysis of their relationship with Rosario serve as an example of some of the similarities reflected in this work.

Villa Gobernador Gálvez -VGG- is regarded as the second city in the metropolitan region, in terms of population. In relation to this hierarchy, the administrative power and capacity is defined as well as the allocation of both national and regional resources, issues that determine the priorities for town planning.

Together with the city of San Lorenzo -SL-, third in the ranking, both constitute the main centres for the concentration of population in this region after Rosario.

If the appraisal of the urban development of each of these is carried out individually, it can be seen that there is a certain disparity in the levels of ‘progress’ achieved. What is more, it only takes a walk through the streets of these two cities for one to realise the level of urban poverty in VGG in comparison to that of SL. This is the main conclusion to be drawn through the analysis of the general census data and ‘physical’ variables of urban development that are generally used to characterise a city.

Yet, this conclusion reveals little to us about how this urban reality is transformed, what impact the new procedures have and principally how the people experience such different realities. This point is crucial to an understanding of urban dynamics, which in the case of metropolitan areas, should not neglect the fact that it belongs to a region where urban services and the use of elements together with public as well as private infrastructures tend to balance out. Logic dictates that all individuals strive to achieve a standard of living in accordance
with their needs, with the ‘social paradigms’ of their environment, which leads them to optimise the resources they have available and that are afforded to them by the city in which they live. If this is not possible, their needs shift to the neighbouring region. In the case of a metropolitan area, this is even more so.

Territorial dynamics enables differences to be ‘balanced out’. With the work of the indicators, we were able to establish clearly the level and kind of ‘interrelation’ existing between these two cities and Rosario which, acting as the focal point, evens out these ‘differences’. As far as individual planning does not reflect this, even more differences and demands of populations from other cities that continue to generate greater demands for equal economic and social resources. Two more examples are offered.

VGG has a population of well over 80 000 inhabitants who reflect the youngest population pyramid, with the highest number of people at an economically active age in the whole area, although 33 % of its inhabitants are below the poverty threshold. SL, third city in the RMA, has a population of just over 50 000 inhabitants. Its population pyramid is similar to the provincial average, and NBI indices do not exceed those of the regional average.

The application of the indicators in VGG revealed the function of this city as virtually an outlying area of the city of Rosario. It lacks any minimum nucleus of services and has no urban passenger transport routes of its own. The layout of paved streets enables communication between the different urban areas of the city to Rosario, but does not afford any inter-connection within the city itself. It lacks the administrative capacity for the management of official city documents and there is an absence of any kind of town planning. An analysis of the
location guidelines of the different uses evidenced how industrial plants from the largest through medium sized and down to the smallest are located in relation to the flow of goods and services in Rosario and how roads are laid out in terms of regional requirements and not those of the internal dynamics of the city 9.

In comparative terms, the city of SL has several service nucleuses. Its municipality enjoys a high level of administrative development and manages its own public services, has its own urban and rural property register, as well as its own urban planning scheme from where plans for urban expansion are controlled quite effectively. The level of social as well as public and private services is above the provincial average and fully meets social requirements.

It is important to point out that the presence of an ‘extreme’ metropolitan conditioning in VGG is mainly due to the existence of elements and infrastructures in other cities that can be used by the population of that municipality. This reflects the link between urban development and regional configuration, and reveals the existence of regional relations that give rise to these differences in the capacity of each of the various cities.

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9 Plans for urban development reflect the projects for public housing drawn up at a regional scale with virtually no participation from local government.
Our aim has been to reflect the dual nature shown by cities that form part of a metropolitan area. This makes it essential to search for new fields of work that show the differences arising inside the metropolitan phenomenon and that enable us to understand the complex network of relations that exist among the various cities.

Nevertheless, it is possible to draw some general and methodological conclusions which may help to guide research along the right lines, in the case of investigation into areas that encompass several cities. These may be summed up in the following instrumental points:

1. The definition of **urban indicators** that relate the data with which cities are traditionally characterise.
2. The determination of certain **parameters** that subsequently enable a more accurate characterisation of the singularities of each of the cities and the type of relations between them.
3. The identification of **standards** that, in conjunction with those laid down by international organisms, reflect the individual characteristics of the different places within a metropolitan area.

**Finally.**

If the format and characteristic of the paper require a synthetical condition and a specific nature in a theoretic and methodological option, sustained in the recognition of the Urbanistic Theory, - in the double condition of the discipline of the reason and the experience, as remembers F. Choay - the essence of this paper is enclosed in: the necessary and specific attention to the concrete circumstances of definition of the different metropolitan realities, and the relative instrumental validity - methodological- of the analytic and interpretative disciplinary models about more contemporaneous metropolitan global process.

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10 This work is a part of a general research about the urban troubles, that intent to transcend the specific analysis about Rosario, Argentina, and the value of this work lies mainly on its basic ideas, rather than on the presentation of a complex reality and the quantitative data that describes this reality.