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Expansion of the City of Resistencia. Its Metropolitan Process

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1 ABSTRACT

The city of Resistencia since its inception has had a strategic location. Today it can be considered an intermediate city, in scale, population, etc services. It is also currently a conurbation and a metropolis that is formed by the unification of several municipalities in the beginning of its history were separated, as is the case in the cities of Fontana and Barranqueras.

Today they live in this metropolitan area for approximately 40% of the total population of the province of Chaco. If the note along with the city of Corrientes, provincial capital and also an area that includes neighboring towns, we are talking about an urban center that is located at the intersection of bi-oceanic corridor and the north-south route of Mercosur. If we add the population of Corrientes and the Greater Metropolitan Area of the Great Resistencia, is it possible to speak of a metropolitan region of nearly one million inhabitants, which shows its importance and its strategic positioning in northeastern Argentina. The aim of this paper is to highlight the factors from history help us understand the reasons why this city became head of a metropolitan area and an important part of a metropolitan region.

2 INTRODUCTION

Undoubtedly the process from the establishment, consolidation and expansion of a settlement is quite long and is always anchored to a nucleus, in this case the Resistencia Cologne, home of the successive territorial governments, then capital of the province, now known as Chaco. While the original village of regular grid pattern, it was rapidly densified, always had a large colony that gave rise to successive settlements, some missing and other integrated now, but always remained an indispensable relationship with the two outputs via river to the port of San Fernando on the Black River and the most important thing about Barranqueras leaving the Riacho Parana River. This connection river since 1908, was also reinforced by another connection, the railroad, which greatly expanded the influence of the city of Resistencia inward provincial and facilitated the communication of the same with cities south of the country.

The rail link allowed the installation of factories engaged in the exploitation of quebracho extract also led to the creation of towns like Puerto Tirol (1904) Fontana (1916) and Puerto Vilelas (1917) In a demographic study published in 1974, although called "Resistance and its population" and comprised three administrative units: the municipalities of Resistencia, Puerto Vilelas, Barranqueras and those who called or REBAVIL RBV.

This name, when analyzing the decade of the 60 (Meder-GUTIERREZ), and to draw strength as the city's largest population flow in the Northeast with Barranqueras, Puerto Vilelas and its extension to Fontana, was amended and that census records are called that core composed of four municipalities Gran Resistencia. This name is still preserved in plans that fix the location and boundaries of districts and towns of Great Strength published in 1991, which clearly shows the expansion of settlement beyond the limits of the national route 16, towards the town of Fontana.

In the year 1998 (Scornik) issue "as the first hypothesis and coinciding with the" General Planning Area "defined for over twenty five years by the Physical Development Plan of Resistance and its Metropolitan Area, considered as a study area the territory covered by the municipalities of Resistance, Barranqueras, Fontana, Puerto Tirol, Puerto Vilelas, Margarita Belén and Colonia Benitez and rural areas between them. "Expresses this inclusive: "If it is true that the development process that has been materializing in the top five municipalities is quite different from the last two, you can not overlook that any strategy would you want to deploy in the medium and long term, should include at least seven settlements mentioned and the urgent consideration of linkages with currents that contribute to enhancing the competitiveness of a cluster of more than 1,000,000 inhabitants in less than a decade "

Currently it is proposed that this broad area, "taking the heart of its structure to the city of Resistencia, which concentrates most of the administrative, commercial and service in general and is supplemented by manufacturing, storage and transportation predominate in the ports of Barranqueras and Vilelas one hand and in the town of Fontana on the other, giving rise to a sprawling conurbation "is completed by the industrial park located in Puerto Tirol, being still not integrated the two remaining locations: Margarita Belén and Colonia Benítez.

CONCEPT OF METROPOLITAN AND METROPOLITAN REGION

Traveling through the extensive literature on the implications of the names and METROPOLITAN REGION METROPOLITAN see that the former has several definitions from different perspectives: geographical, functional or legal-legal but always found a town hegemon and interrelated as is expressed in this definition: "The metropolitan area is interpreted as an urban region with dependency relations in the metropolitan area on the central city (Arroyo, 2001). "

From the point of view of its population, should include at least one city of 50,000 or more, or if there are two cities with contiguous boundaries, and despite having a population less than 50,000 inhabitants, having the least to have at least 15,000 inhabitants.

Also states that the density of occupation must be 120 inhabitants / ha. But these data are insufficient to define and clarify the metropolitan area because it is a concept that was changing, as expressed in the following text: "Despite the obvious difficulties in the delimitation, it is possible to raise some general issues, such as interpretation of the metropolitan areas as dynamic spaces, fuzzy boundaries and dynamic, with a high concentration of population, which detects a functional organization that can demonstrate, inter alia, the dissociation of the workplace and residence located in distant areas, resulting pendular movements daily basis with the importance of community internal movements (Martin and Allende, 1986). Therefore, they are areas where communications systems charge a special role and where rapid change is occurring not only real, but also in the perception of distance and spaces in which the creation and improvement of decentralization tract manifests as an explanatory factor determining the current and future metropolitan dynamics (Fair, 2004).

Importance is the degree of exchange and is defining the degree of communication between them should be the cities that comprise it, because this interdependence would require to maintain a coordinated and joint action, which is consistent with the following definition: "In fact, an area would be an urban metropolitan complex, as a sum of different administrative territorial units, which would be a primary objective coordinated unit operation and management for certain competitive environments. "This urban agglomeration, should therefore consider a common goal, to act in an interdependent manner, assuming various roles within a functional structure, in order to consolidate a competitive environment. And finally a more general definition that says a metropolitan process occurs when a city regardless of size, grows and expands its territorial limit to absorb the neighboring towns, or put another way, when a city urban growth expansion used in soil that belongs to the boundary with the municipalities. For the shape and characteristics of this growth process, which characterizes the metropolis is the loss of its integrative function, it changes the trend towards the discontinuity and fragmentation, not only exists in physical space but also in society that inhabits it. Functional specialization promotes marginalization and exclusion of social sectors, and evidence of a duality between center and periphery, or between areas that are not related.

Taking the other end, region, it is possible to understand from the geographical and from the functional. But in general "will refer to sections of a territory within which sits a human group that is part of a larger social formation, general mind conceived within the modern notion of national government. Of which will also be a variant but with a certain degree of autonomy that will allow you, in turn, become a distinct social formation. This group historically determined social or subsystem, print their particular stamp on the organization of that territory, resulting in specific spatial forms will be nothing that regionalization of the different social processes. Their size, shape and relative position, not explained by physical laws, but by those that govern these social phenomena according to the dominant mode of production Ultimately, the region is, so to speak, a conceptual resource ... allow achieving understanding, because, although it is used commonly to refer to sub-areas, generally denotes the various parts of the geographical reality which has place of human existence."





If you look at the great natural regions we see that the Chaco and Corrientes belong to different regions, with a real separation as is the Paraná River channel, but by connecting both sides with the interprovincial bridge, gradually and functionally there was an exchange of persons, properties and relations, whose interdependence is palpable evidence, where that single connection is temporarily suspended (for picketing, accidents, repairs, etc)

In this case, the two provincial capitals, serve as hegemonic metropolitan area, but in turn make up a metropolitan region, set on a certain territory, with a number of cities, of different categories, the seat of urban population live and / or work in them.

4 EMPLOYMENT STATUS AS A PHYSICAL FACT

To understand this process metropolis, in principle, the area known as Gran Resistenica, are taken into account certain variables, the first being the gradual occupation of their physical environment. Resistance colony, settled in an area of approximately 10,000 hectares, with a hundred of them for village, on a site that had two natural harbors, that of Barranqueras, on the Parana River and San Fernando on the River Black. This native support was not an ideal site, since both rivers were a strong natural boundary and their cyclical floods and floods threaten populated areas, in addition to the many inland lagoons and a low floor and flooding, with a closed forest and crossed in all directions by ravines, lakes and marshes.

The colony had three tracks and surveying, in 1875 the first measurement, which did not respond strictly determined by law, must be new in 1879, entrusted to John Dillon, and then again in 1882, commissioned Carlos Tassier, which was completed and approved in 1884. Reached an area of 46,000 hectares, divided into farms of 100 hectares and urban plant is for 400 hectares divided into 256 blocks with a central square of four blocks. The streets were wide and twenty meters from the center of the plaza four blocks departed whose amplitude was thirty meters. Its structure was a rectangle of 23 kilometers by 20 kilometers, the Black River falls within the colony, crossing in the NW trend.

In 1880 the urban population had 172 residents in the same, with precarious buildings that almost did not respect the urban raised.

The expansion of the first period was to ensure their connection to another town center with more services and that connection by river define its expansion into the two ports, one on the Black River and another on the Riacho Barranqueras, a tributary of the Parana River. The urban network of the northern provinces and especially in the Chaco begins in the last quarter of the nineteenth century, still national territories and the network is consolidated, taking as a center for resistance, with a number of towns such as Colonia Benítez, the Popular Puerto Tirol, Puerto Vicentini, Puerto Bobis, Amalia Colonia, Villa Jalón, Lucinda, margarita Belén and Fontana. If some colonies are named ports, communication was the river pre-eminent, but not ignored roads and trams were also used, in principle-drawn, then steam and finally power, until the railroad in 1904 appears Resistance rural.

In the early twentieth century the city than the original village, reaching north to the Park February 2, at the time, municipal cemetery and near the Black River natural limit.

To the south came to the streets now called Alvear and Castelli. The largest extension occurs to the east, reaching Villa The Lilies.

Access from the south of the country was on the river Paraná and from the city of Corrientes was possible then navigate the Black River, gaining access to locations such as Puerto Tirol, Puerto Bastiani, etc.

This was completed with water communication streams and lakes that showed changes in levels presented by the sector, although many tended to deny it and force it fills and natural subjugation of the rigid grid were imposed almost seamless to expand the settlement. A river communication, that trend growth of the settlement to the town of Barranqueras by the year 1909, said railway communication with the railroad north of Santa Fe to the Savannah, with a branch to the city of Resistencia.

In general communications, which were among the priority concerns of its inhabitants, were unsatisfactory because the city was located on rivers, streams and lakes, suffered periodic floods and overflowing rivers flooded by rains as well because of the slight slope. This period will start densifying the grid, from the central square in 1906, and the responsibility of the municipality of the city, is being improved to ensure greater access and use it as a place of recreation for the population . Already had a hospital whose location

beyond the Laguna Arguello, was a large farm, beginning where the consolidation of the relationship with Barranqueras, through Decauville. Two tracks of railway lines, one north and one south, ensured communication with other urban centers and also the Chaco production output. The growing trend towards the east, looking for the port and to the south, crossing the railroad tracks, having as limit the Araz River, demonstrate the search for higher ground as the north, the Black River and many lakes large, were difficult to consolidate land and people.

In 1921, the Aero Club established the communication was made possible also by air, but had no scheduled flights.

Also in 1921, connected by roads Resisencia to Colonia Benitez, Margarita Belén, Puerto Vicentini and

In 1960 resistance had only one paved road that connected the port town of Barry and Route 16, which was done in stages, first joined the Puerto Tirol's capital, but the key communication channel linking the capital with the new interior is paved in the stretch-Quitilipi Resistencia in 1968, part of it being used to connect more fluidly on route to Puerto Tirol.

So since 1980 Puerto Tirol suffers a population rebound, thanks to only 5 km separating the Gran Resistencia and efficient communication with the capital city via route 16 and the rail network through SEFECHA.

Taking the second process, such as metropolitan area exchanges also came from the early settlement of the nucleus, as were the torchbearers correntinos working in this area. After the connection is reinforced by Barranqueras river, which is the output port Chaco production and confluence of rail and road networks.

The paved road ratio combined with river transport, extends to the port of Antequera, located in front of Corrientes, noticeably shorter communication on both sides. From the bridge connecting interprovincial General Manuel Belgrano in 1973 moved the connection to the north, via saturation that is currently in the process of conversion into two-lane highway speed traffic and access roads to residential areas, which gradually urbanizing lands bordering this route interprovincial.

EXPANSION PROCESS AS HISTORICAL FACT

When comparing the dates of its foundation, are contemporary to the Resistencia, Puerto Tirol, Colonia Benitez, Margarita Belén and Barranqueras, for mediating between these about ten years apart, all founded in the late nineteenth century. Only Puerto Vilelas and Fontana are early twentieth century.

However, there was some functional dependence with respect to the capital city, because in 1959 he created the towns of Barranqueras, Puerto Vilelas and Fontana, becoming independent of that. If we compare the foundations of both provincial capitals, undoubtedly temporary differences are greater, and a difference of two hundred ninety years involves historical, cultural, economic and social weighed.

PROCESS OF ECONOMIC EXPANSION MADE AS PRODUCTIVE

The initial stage of the colony strength was not founded on a clean slate, because people were already settled in this area, basically Corrientes and Santa Fe, which is devoted to forestry and indigenous groups working on roaming clearing and collection woods.

In 1884 after a triple measurement of the city, which slowed and complicated urban growth (Colazo) that actually was eighteen houses located on neighborhood trails that connected with the rural area, where the colonists actually settled that living on farms and farm work in farms and that had the ports of San Fernando and Barranqueras.

"Until the eighties, extended the stage of genesis and definition of metropolitan areas. This period was characterized by the steady increase in the attractiveness of workforce central municipality and the decrease of absorption capacity to cause silting, which imposed an extension of the metropolitan phenomenon for its successive crowns overflow. In essence, the central city attracted more economic activity and population that was capable of housing within its municipal boundaries, and, while employment was concentrated in the metropolis, residential growth was distributed to the peripheral space."



7 GROWTH TRENDS

The total population of the province of Chaco according to data from 2001 was 964,446 distributed in 99,633 km2 with a population density of 9.9. The trend to 2006 exposed a population of 1,033,865 inhabitants with a population density of 10.4 h/ha. In metropolitan population data presented on Barry Township, just add the population of Resistencia, Barranqueras, Vilelas and Fontana is 361,985 inhabitants, but taking into account all the municipalities of the Metropolitan Area theoretically account for 380,883 inhabitants, which represents the 39.49% of the provincial total.

This amount of population, important from the standpoint of percentage, is mainly concentrated in the three municipalities of 1 category, but with a noticeable variation intercensal which shows sustained growth in the City of Fontana, and the fact that the municipalities of Resistance and Barranqueras is the lower growth in the area.

This is consistent with what happens in the process of expansion of the economic-productive, as there is greater supply of labor in the cities of higher grade, but in parallel the cost of urban land in them, prevents legal access to vast sections of population that they reside in more remote areas and lower property values, evidenced in variations of up to 168.2% between censuses in a small municipality and low daily movement such as Cologne Benitez.

8 CONCENTRATION OF FACILITIES THAT ARE CONCERNING URBAN

Another important point are certain core facilities that were defining the importance and attraction to them of vast sectors of the population, in search of better work situations, educational, cultural and benefits of improved services.

1912 and successive years of growth are sustained. We read in the book of the municipal records, the demarcation of the land of Tyre Federal land acquisition for the Central Market and the extension of the contract for rural tram.

Resistance begins to emerge as a colony with a strategic position as a link between the colonies located in the south and the advance of the colonies that penetrate the interior of the Chaco forest. The first thing that appears above is the July Perrando Hospital, as a major step in providing public health services, but even their implementation, these services were only possible in the nearby city of Corrientes.

Also educational services, since much of children of settlers from the interior, with economic opportunities to complete their primary education, should be moved to the capital city to do so. Primary education in the early twentieth century, was divided into three cycles, the child level, which included the first two grades, the elementary level through fourth grade and above who came through sixth grade.

"The vast majority belong to the basic type, while the top was met only in schools 1 and 2 children. There was Council support to equip and provide them with libraries, they stressed the Resistance, who in 1918 Zorrilla school treasured about 2,000 volumes, an oasis literature in the area. "If primary education was a point of attraction of the capital city, then was gradually secondary studies and degree courses.

In this case, the above studies were conducted largely in the nearby capital of Corrientes, settling only in 1956 as the Northeast National University with a seat of power in both capitals. Today, university services, are presented as a regional competitive advantage and one of the elements that reinforced the idea of metropolitan region.

In 1884 he created the government of Chaco, and implied it be the seat of government and municipal authorities and therefore it was necessary to have public buildings (house of government, municipality, court, civil registration, prison) and to accommodate not only administrative functions but of education and worship.

These activities gradually make this capital city in great generator of jobs in administration and services, shifting to other municipalities in the industrial sector activities.

The concentration of extraction of raw materials and labor and the establishment of the first industries, gave up a dynamic resistance in all kinds of activities, but with special emphasis on business. All these activities and their continued growth would not have been possible without the presence of banks. As in other cities in fast formation, was the National Bank (banking institution founded by Pellegrini) that comes first. On July 22, 1905 installed the 1st National Bank branch in Resistance. The humble little house in the beginning

becomes the present building is in an area of splendid location, facing the Plaza 25 de Mayo. The growth of industry and trade are closely linked to the presence of the National Bank and then in 1910, creating Bank of Italy and Rio de la Plata. One building that contributes to the development of buildings of the city and its changing face from others is the French railway station. The exploitation of tannin and the creation of people into the territory, it became parallel to the extension of the railroad tracks. This was a comprehensive nationwide network that connected the main points of the interior to the ports of Buenos Aires. In this way, a transport network that allows to implement the liberal model of extraction, as a national system.

The Chaco was an emerging area of development. The location of resistance and its relationship with the ports of Barranqueras and Vilelas allowed the development based on exploitation of natural resources. The city's growth was directly related to the growth of the railroad tracks. His farm occupied high 10 blocks movement of surface, of which only a few remain. In 1907 the railroad reached Santa Fe Resistance, and its extension to Puerto Barry. This building which is the French railway station, now preserved as testimony to this time, he totaled others who were dedicated to the functions of administrative offices, depots and warehouses for group homes for employees of the company. Under the current quarter Paikin currently the foundation of France Argentina annin factory, which the station formed a single unit. Currently this building, like others in the country, has been rework and used as living exhibits. Remains broadly as it was originally. Has been painted and improved, without altering its appearance mostly original construction. It is part of the list of buildings considered historical heritage of the city of Resistencia.

The municipal market was first built on the corner of Avenida Avellaneda and May 25. It had a tile roof and a flat palm of bricks. The same was inaugurated in 1895. The building you see in the picture, was that a new market was built in 1913 José María Paz street, corner Obligado. By 1933, resistance and has a radio (Radio Chaco LT-5) and telephone lines that connect with the interior of the province. Other works mentioned are those done in the port of Barry, which are mainly port infrastructure including docks and warehouses. The company "Z". builds on their own the road between Vilelas with Barranqueras Between 1920 and 1945, is built play equipment, including clubs, Social, Progressive Club, a rock and some libraries attached to clubs, two of Racing and spa.

Opened in 1898, the mother church is remodeled in 1940 and then renovated again, awarding it looks today.

Is installed in that year (1940) the bishops and also the architect Bruno Delmonico made the plat of the square and the implementation of perimeter tile sidewalks. In this way and gradually shows an improvement of a social, civic and administrative center of the city. Prison and cemetery are located higuienista respecting the vision of the nineteenth century, who preferred location away from the urban area of these features considered hazardous. Jail operated until 1935 in a modest house, opposite the city's central square. The original building did not meet health and safety conditions necessary to accommodate a growing prison population. The City donated the land on the outskirts of the city (Marconi Avenue, corner av. Las Heras) the same way as the cemetery, (av. Hernandarias and Columbus Street.)

"In the first three decades of city life, residents bury their dead relatives in the original cemetery on the site now occupied by the park on February 2. When the same was insufficient in 1913 enabled the City West Cemetery, current San Francisco Solano, in an area that at this time was far from the town center. Three years later he issued the regulations for the construction of tombs and mausoleums. Although some architectural quality built, the cemetery was not until the fifties an area fenced with barbed wire, often covered with weeds." "The Honorable Regular Session of the City Council on 5 October 1911, clarified that it was paid the sum of 6,000 pesos and Mr. Rabbi Stewart deeded the property in favor of the Municipality on a property of 5 hectares the location of the new cemetery"

The first municipal ordinance that establishes the closure of the North Cemetery and the empowerment of the West Cemetery dates from the 28th of December 1912. Today both the prison and the cemetery have been included within the city, given the sustained growth it has experienced this from the beginning until today.

If some equipment have been ranked and awarded the centrality of the city of resistance within the metropolitan area is now also possible to think of an interaction of equipment at the metropolitan region, as are the Universidad Nacional del Nordeste, Resistencia Regional Hospital and Current Teaching Hospital, the Heart Center of high complexity of Corrientes, Resistencia International Airport.



9 CONCLUSION: THE PROCESS OPPOSING VIEWS METROPOLIZATION

The actual process of metropolization the area, begins in the city of Resistencia, in the stage that extends from 1920 to 1945, and continues in the period of the two governments of Peron, until the revolution in 1955 and subsequent years . From 1920 to 1945, resistance is industrialized and the population working in industries are located mainly in the new neighborhoods. They are peripheral to the central hull is formed by the four avenues and squares for those who invade the farms that originally surrounded the city. "There was a densification of the buildings in the central radio. Housing demand also encouraged the speculative nature and the subdivision of former agricultural plots. The urbanized area exceeded the central hull and quickly spread to areas of estates or farms, the villages or neighborhoods emerging oldest Resistance. This was done in three directions: Northeast of the central hull and surpassing the Santa Fe Railroad line, formed Villa del Carmen, San Martin and Don Rafael.

To the southeast, between the State Rail tracks and the creek Arazá, formed Centennial neighborhoods, Progress, and North Central.

Finally to the west and along the road connecting with the interior resistance, May 25 villas, Villa Alta and Piccili Perrando"

The metropolitan process., Continues with the saturation of urban interstices between Fontana - Resistance, and Barranqueras.

In 1932, it paves the road connecting the city with the port of Barranqueras, which allows for subsequent years the urbanization of some areas surrounding the route.

"The 8 kilometers between resistance and Barranqueras are lined with villas, factories and cottage, with a nice view for traveling."

This situation changed radically and the urban landscape that is described in the above passage will disappear when the lands that lie between the city and its port districts and are occupied by people coming from the provinces after the fall cotton and tannin in crisis. The process of metropolitan region is also necessary when a reference in a material particular inter-connection by the General Belgrano Bridge.

But there is this belief and that union objectives? Or are we only talking about a number of assumptions that are handled in academia?

10 REFERENCES

FARIAS de FOULKES. 1983. Ana Rosa "La segunda generación de inmigrantes italianos" IV Encuentro de Geohistoria Regional-Septiembre.

GUTIERREZ, Ramón. 1983. El Patrimonio de los Argentinos. Tomo II. Nordeste. Instituto Argentino de Investigaciones Históricas. IRÓS Guillermo M.-OSTCHEGA Marcos G. y otros. 2002. "Región Metropolitana de Córdoba" Impresión Triunfar. Córdoba.

MAEDER, Ernesto. 1996. Historia del Chaco. De la Colección: Historia de Nuestras Provincias. Nº 18. Editorial Plus Ultra. Buenos Aires.

MAEDER Ernesto-GUTIERREZ Ramón. 2003. "Atlas del desarrollo urbano del nordeste argentino" Instituto de Investigaciones Geohistóricas-CONICET-UNNE- Resistencia.

SCORNIK Carlos O. consultor. 1998. "Diagnostico Urbano Expeditivo del Area Metropolitana del Gran Resistencia AMGR", IPLIR

TARANTINI, Jorge . 2004. Arquitectura ferroviaria. Remedio para melancólicos. Summa Historia. Documentos de Arquitectura Argentina.. Bs. As.

Albun Grafico Descriptivo. 1935. El Chaco. Editado por la Voz del Chaco. Talleres de la Compañía Impresora Argentina. Archivo Histórico de la Provincia del Chaco. Resistencia. Chaco.

ALGABA CALVO Antonio ". 2001. "Las nuevas dinámicas metropolitanas. el estudio de los cambios acontecidos en el área metropolitana de Barcelona a través de algunas publicaciones recientes." En Revista Bibliográfica de Geografía y Ciencias Sociales Universidad de Barcelona Nº 271, 25 de Enero.

Atlas Argentino. 2003. Programa de Acción Nacional de lucha contra la desertificación.

BECK Hugo H. Gobierno de Anselmo Zoilo Duca (1958-1962) Nordeste – Segunda época- 2- UNNE-Facultad de Humanidades FOULKES, María Dora, LEIVA, María Ester. 1978. Resistencia: conjuntos habitacionales. Revista DANA Nº 6. Departamento De Historia de la Arquitectura. Facultad de Arquitectura y Urbanismo. UNNE.

Geográfica 3- 1974. "Resistencia y su población" Instituto de Geografía- Facultad de Humanidades-UNNE.

PALACIOS Juan José. 1983. "EL CONCEPTO DE REGIÓN: La dimensión espacial de los procesos sociales" Revista Interamericana de Planificación Nº 66 .Junio -México DF.

Revista Estampa Chaqueña. 1930. Nº 39. Resistencia. Chaco.

SANCHEZ DE LARRAMENDY Marta Isabel Historia de la traza y construcción de la ruta nacional Nº 16 Revista Nordeste 2da época. Nº7-1997

VALENZUELA DE MARI Cristina. 1991. "Los problemas de la expansión urbana y demográfica de la ciudad de Resistencia, desde la perspectiva geográfica, a partir de 1960" en Cuadernos de Geohistoria Regional Nº23 IIGHI. Resistencia.

- COLAZO María Susana. 1978. "Resistencia entre 1880 Y 1895 .Folia Histórica del Nordeste Nº 3- Instituto de Historia Facultad de Humanidades-UNNE.
- DE COS GUERRA Olga "SIG y Evaluación Multicriterio: propuesta metodológica para cuantificar el grado de metropolización en el territorio" Departamento de Geografía, urbanismo y ordenación del territorio-Universidad de Cantabria.
- POMPERT DE VALENZUELA. 1998. La evolución de la sociedad resistenciana. 1878 1920. XVIII Encuentro de Geohistoria Regional. IIGHI Resistencia Chaco.
- VIERA, Lidia, GARCIA, Tomás, BIANCONI. Matías. 2004. El trazado de los cementerios de Resistencia y de La Plata. Ponencia presentada en el XXIV Encuentro de Geohistoria Regional. Resistencia.
- Libro de Actas Municipales. Bibliorato Nº 1. (1884 1917) Archivo Histórico de la Municipalidad de Resistencia.
- PUTALLAZ Julio E. 2004. "Gestión ambiental integrada para el desarrollo sustentable de un área metropolitana" Tesis de Maestría FAU-UNNE-
- VALDES Paula. 2007. "La ordenación de espacios metropolitanos." Material inédito Tesis doctoral-Universidad de Barcelona-España

