

# **Urban changes in different scales: systems and structures**

**Scientific excursions and field trip guide**

**An introduction to the Urban Geography of NW Iberian Peninsula**

Edited by

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and

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## **Porto: a trip around the city<sup>2</sup>**

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### **The formation (from the 12th to the 16th century)**

#### **- Agents and circumstances**

Porto asserted itself with the Christian reconquering opposed to the Muslim expansion and took the Bishop Hugo as its lord (1114), who received a letter of donation from Afonso Henriques' mother in 1120. Afonso Henriques would end up being the first king of Portugal in 1139.

On a social level, the city of Porto is marked by the fact that nobles were forbidden to reside or even overnight in it, which facilitates the consolidation of the bishop's power. On the other hand, Franciscans and Dominicans settled on the west, on the right bank of the Rio da Vila (1233-38), in lands disputed by the bishop and the king. This conflict went on until the beginning of the 15th century and had the western limits of the preserve donated by Dona Teresa as its main cause, since it was the Crown's desire to make it coincide with the Rio da Vila and the Bishopric with the further Frio river. It was in the context of this conflict when the Crown established the customs and opened Nova Street (1325 and 1395 respectively) near the Rio da Vila, very close to its right bank.

The Church had an enormous power in both cases due to the possession of big areas of land, the collection of taxes (tithes) and the authority to sentence residents to death; although only two autos-da-fé had taken place in Porto (1543

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<sup>2</sup> This text was extracted from the article "Porto e Salvador: dois percursos urbanos distintos", published in the review "O Tripeiro", nº 8, 2002, and aims at explaining the city development process from the point of view of the historical urban geography.

and 1544). However, a progressive social diversification was occurring. The merchants (in the 16th century better known as dealers) increased in number and social relevance in the Porto hamlet and, owing to their richness, they shared the (economical and political) power with the Church and the nobility (dedicated to great business in most cases as well). Also, there were shopkeepers, bartenders, sellers of products on the river bank, peddlers as well as journeymen and apprentices of different trades who produced and sold the essential products of the city. The great merchants were mainly jews, allegedly converted to Christianity but prosecuted by the Holy Office. In the end, this resulted in their sensible reduction, with the English taking their position and creating the main foreign community from the beginning of the 17th century, estimated in 14,581 people then (in 1623).

### **- Urban space**

The center of settlement and growth was dual: on a high level -like an acropolis, where defense was easier-, the power settled (represented by the See Cathedral and the Cabido House) and the essential of the hamlet settled next to the river (Douro), where the main exchanges took place and a trade centre and some dwellings were set up.

The main way was that which connected the upper part of the Morro da Sé and the port. Firstly, it is the axis Baínharia-Mercadores (maybe following the old Roman road) the one that best enabled the linking between the "upper city" and the "lower city". Later, after the opening of Santa Catarina das Flores Street on Don Manuel's initiative (1521), another connection parallel to the previous one was made beyond the Rio da Vila. The Misericórdia (existing in the city since 1503) was moved to this street and on its northwest extreme, next to the Porta de Carros, the S. Bento de Avé-Maria Convent was set up, being its abbess one of the king's daughters.

There existed a first wall around the hill at least since the 11th century. Another wall was built in the 14th century by order of D. Afonso IV. This second wall left part of the hamlet outside (particularly by the river, on the west side, in Miragaia) and made it possible to include vast non-developed spaces, which allowed jews to settle within the walls in 1386.

The old wall and its gates structured the growth of the urban network, marked in its plan both by the vital importance of the radial ways and the distinct geomorphical features of the streets layout resulting from the gradual development on old ways. Notable exceptions are the royal streets opened by D. João I (Nova Street in 1395) and by D. Manuel I –in the beginning of the 16th

century- in the Jews' quarter (S. Bento da Vitória and S. Miguel Street) and in the link between the lower and upper part of the city, towards the northeast and northwest (Flores and Belomonte Street respectively).

As to the expansion of urbanization, we should highlight the role played by religious orders, since the dimensions of their facilities and the possession of several lands forced them to settle outside the most populated places. This led to the creation of settlement points, boosting the growth of the urban network. This expansion was carried out mainly towards the West by making the most of the available space inside the walls beyond the Rio da Vila.

The distribution of the different establishments inside the city makes it possible to identify a typical medieval association between streets and occupations in Porto. Standing out are Pelames Street (leather tanning), Ourivesaria Street (goldsmithing), Baínharia Street (blacksmiths of military weapons), Ferraria Street (blacksmith's, upper and lower) and Mercadores Street (merchants). In other cases, even if the name of the street does not indicate it, the concentration of establishments of the same economic activity is high: as is the case of Cangostas, where shoemakers abound.

## **The golden age (18th century)**

### **- Agents and circumstances**

During the 18th century, the reinforcement of the role of the city was very significant in terms of the organization of transactions both in their regions and abroad, which could be mainly attributed to the fine Douro wine (named Porto wine), the main trade product then, which benefited from the Treaty of Methuen (1703) signed by Portugal and England. However, other products had a considerable importance in exports like sumac, oil, wax, vinegar and honey. Most imports were of cereals, fish, milk products and several kinds of cloths, in a trade established above all with England, Russia and Brazil.

Although the trade increase led to the ascension of the bourgeoisie, it took place while the Church gained in importance, which can be seen in the Bishop's Palace, the Clérigos Church and Tower as well as in the new convents and monasteries of the Carmelitas, Santo António da Cidade and Agostinhos (which make up a total of 15). The city turned baroque, with Nazoni conveying churches (Clérigos) or their façades (that of the Misericórdia Church), palaces and houses (the Bishop's Palace, the Freixo Palace and the Quinta da Prelada) of a great decorative richness. Likewise, the interiors of many churches were enriched, sometimes in a dazzling way, with Brazilian wood carving and covered with gold from this Southern American colony.

The number and specialization of shops and fairs increased at the same pace as the population and its influence on the regional surroundings. As a result of this, businessmen appeared as an important social and economical category, together with dealers, making part of a growing bourgeoisie. In contrast, the importance of the industry is scarce: the biggest factories are those of ropeworks (having over 300 workers) and tobacco (which supplies the whole North of Portugal), both located outside the walled city boundary, in the places presently known as Cordoaria and Fábrica Street. We should also mention the shipyards -in high activity- in Miragaia, Massarelos and Ouro.

From the urbanistic point of view, the second half of the 18th century was characterized by an intense activity, being its fundamental mentor the Marquis of Pombal. In Porto, it would be his cousin João de Almada (succeeded by his son Francisco) who would direct the operations.

### **- Urban space**

The economic growth of the city translated into an evident urbanistic expansion, which was favoured by the loss of military importance of the walls as a result of the development of artillery. For this reason, they were not a protection and boundary any more and most of them were demolished. The stones of the walls were used to build buildings or as support walls for new premises.

Urbanistically, the period of the 18th century was very rich. In Porto, under the impulse of the Almadás, new streets were opened and new squares were restructured or created in the old quarter to canalize the very end of the Rio da Vila and so free the dense urban network, enabling the connection between the river bank and the upper part of the city (S. João Street, Ribeira Square and S. Roque Square). Other streets were opened (Santo António Street) or improved (Clérigos Street, old Nativity Road), creating an important east-west axis in the space immediately outside the walls. Also, rural areas were developed, particularly to the north and east, in Laranjais and to the North of Cedofeita, according to orthogonal-base plans. Those streets which linked the city with its surroundings were either significantly enlarged or improved (Cedofelia, Almada, Santa Catarina-Bela Princesa and Santo Ildefonso). Different public furniture and fittings were built, as well as terraces over the Douro river, both to the west and the east, in Virtudes and Fontainhas.

Just as it happened in Paris, Rome, London and other European cities, the 18th century was also a particularly important time in terms of creation of new furniture and fittings which reinforced urbanity from a formal and functional point of view.

In Porto, some outstanding people in this field were João de Almada e Melo and his son Francisco de Almada e Mendonça. Around the old wall, in its immediate exterior, it was ordered to build the Casa Pia and the S. João Theater (the source) and the Appeals Court (Tribunal de Relação, in Cordoaria, on the west side). The Shelter of Our Lady of Sorrow and S. Joseph of the Abandoned Young Girls (Recolhimento das Órfãs de N. S. da Esperança, began in 1724) had already been built in the east, next to the place where there was a lepper colony and in front of the square where -110 years later- the S. Lázaro Garden would be built. The School of Navigation (Aula da Náutica), founded by D. José, also existed at that time and would end up being the Royal Academy of Navy and Trade (Real Academia da Marinha e Comércio) in the beginning of the 19th century and, later, the University of Porto –its building, opposite the Appeal’s Court, shows a clear influence of the neoclassic English architecture (although the authorship belongs to Carlos Amarante). The works made by the English John Carr by request of the influential consul John Whitehead have the same architectural mark of palladian inspiration and granite grandeur: the Santo António Hospital and the English Royal Factory.

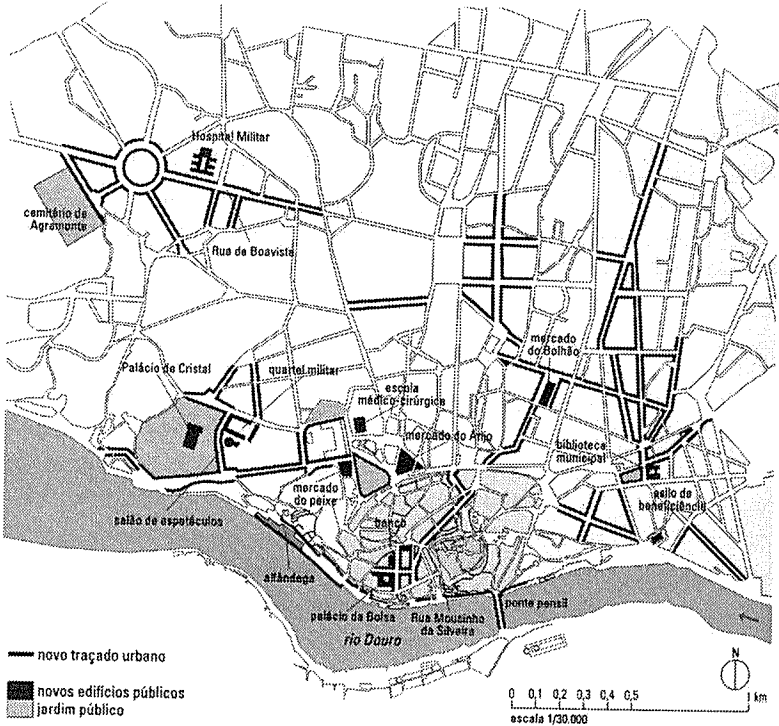


Figure 37. Urban growth 1764-1818

Just as it happened with the main public furniture and fittings, it was also in the exterior of the "old city", in Porto, where faires gained more importance and were gradually developed and specialized. Batalha and San Lázaro (on the east), Almeida Garrett and Liberdade (on the north) and Cordoaria, Carlos Alberto, Gomes Teixeira and Guilherme Gomes Fernandes (in the current toponimy) are some of the main open spaces outside the wall where goods were traded, particularly agricultural goods from the rich arable lands of the surroundings (corn and wheat bread, bovine and porcine cattle, herbs, straw, milk, seed and farming tools, vegetables...).

The hardest jobs were normally entrusted to Galicians. At the end of the 19th century there were around 3,000 Galicians in Porto. They lived in the oldest buildings and most of them worked as servants, especially in the occupations of shopkeeper, water-seller and coachman.

The other extreme was filled by the English, whose economical interests were related to trade and finances. They settled to the west of the river port (towards Foz), but were usually seen during the day next to English Street (present Infante D. Henrique Street), where they had their factories and created a close community, with its restricted access "club", its chapel as well as its own cemetery and hospital.

## **The construction of the modern city (19th and 20th century)**

### **- Agents and circumstances**

The beginning of the 19th century was a time of confusion, which resulted in a demographical and economical drawback due to the political and military turmoil. Besides the disputes and battles of the so-called Peninsular War, the disputes between liberals and absolutists filled a great deal of the 20's and 30's, being one of its main episodes the Siege of Porto (1832 and 1833), which the liberal troops commanded by D. Pedro (IV of Portugal, I of Brazil) were subjected to.

The liberal victory had notable impacts on the society and the urban organization and clearly marked the end of the Old Regime. Cultural institutions benefited from this: the Municipal Library (1833), the Central School (1840) and the Porto Museum (1849) are among the most outstanding initiatives. Not less important was the prohibition of burials in churches (responding to sanitary requirements already implemented) and the creation of civil cemeteries, with the opening of the Prado do Repouso Cemetery in 1838, on the eastern side, in the old Quinta do Bispo and the Agramonte Cemetery, in 1855, on the opposite side of the city.



The extinction of religious orders, decreed in 1834, is also good evidence of the intensity of the changes occurred in this time. It would favour the ascension of capitalism, in which different people who had returned from Brazil took part. They were known as "Brazilians" and some of them, once enriched, purchased properties and built palatial houses with profusion of ceramic tile, melted iron and painted tile. Most of them were active businessmen, namely in banking, in several "companies" (insurances, transport, lighting and mining) and industrial and commercial firms. Some were dedicated to philanthropy like Joaquim Ferreira dos Santos, Count of Ferreira.

Some owners of estates, which were not remote any more due to the city growth, introduced the liberal ideology that advocates for the free initiative. Thus, they developed these lands either totally or partially, helping establish a soil market consolidated along the century. Some dealers invested on the emerging industry and the abundant national and foreign capitals (coming from the emigration to Brazil and the trade of wine) foster the creation of new and modern industrial and commercial establishments.

The bad agricultural years and the high natural growth are followed by a deep economic development of the city and the increase of mobility (especially with the railway), favouring the rural exodus and the consequent demographic growth of the city: its population passed from 90,527 people in 1864 to 192,000 in 1910. The city also served as a platform of privileged relations with Brazil, like an "exports office" which "worked intensively and with a picturesque simplicity", in the words of Ricardo Jorge. At that time Brazil was the first destination of the Portuguese emigration and virtually the only one for those who left from the North of Portugal until the mid-20th century (from this time on this emigration stopped being predominantly transoceanic and began to go to other European countries).

We could consider two responses to this dramatic population growth. In the beginning, the exit of the residents of the oldest part of the city to less densely populated areas allowed the substitution of assets by the families coming from outside the city, with a progressive intensification of occupation. Later, the main destination of the populations with less resources, coming mostly from inland, would be the interior of the delimited lands, where they made the most of the investments of numerous owners, as the latter did without the land behind their houses to build small houses for renting disposed in a row perpendicular to the street, with common toilets, making out groups called "islands".

The English community, on the contrary, built spread houses with gardens, so arising a residential area of one-family dwellings on the west. This mark of prestige and quality favoured by the English resulted in the increase in land value, which acts as a crucial element in the construction of a residential

segregation. Such segregation tended to settle the socially most "distinct" ones -and the economically more capable of affording the high prices set for lands, houses or apartments- towards the sea.

This growth continued throughout the 20th century but at a lower pace. From the urbanistic and architectural point of view, the principles of the Garden City and the Letter of Athens characterized deeply the city and, particularly, the efforts to produce social housing.

At the end of the century, the city adopted a particular form of "building its periphery", either in its intensity or in its close connection with the surrounding municipalities, in a relationship made of agreements and disagreements on urbanity and suburbanity, dependency and centrality, far more complex than the simple logics of centre-periphery relationship.

### **- Urban space**

During the first half of the 19th century, the society and the economy were deeply marked by the strengthening of capitalism and the triumph of the bourgeoisie, being its power highly represented, from a symbolic point of view, by the grandeur of buildings like the New Customs (Nova Alfândega, initiated in 1859 on an earth dam), the main office of the Trade Association (Associação Comercial, 1842) and by the presence of the first banks (being the first one the Banco Comercial do Porto, opened in 1835). Within the economic network, the gradual separation of the work place from the residential place, the loss of importance of peddlers and craftsmen and the growing force of the segmentation of production and sale led to a deep economic restructuring in all towns as well as to the emergence of industrial areas and commercial streets.

The predominance of the textile sector over the other ones became obvious. This sector employed 2/3 of the factory workers registered in 1845 and 1852. The number and relevance of such factories increased significantly during the second half of the 19th century and the city turned into a remarkably industrial one: in 1881 there was a record of 37,377 factory workers (compared to a total town population of 111,667 people in 1878) and big textile factories spread everywhere -mainly cotton plants, but also metallurgy, ceramic and food factories, among other sectors-, either in the outskirts of the city or within the boundaries of the municipality (Bonfim, Cedofeita, Massarelos, Lordelo...), or outside the city, in Matosinhos (where the canning industry was concentrated), or next to the railway stations, where center of certain importance can be built like in Devesas (Vila Nova de Gaia), in Senhora da Hora (Matosinhos), in Rio Tinto (Gondomar) and in Ermesinde (Valongo).

The second half of the 19th century is determinant for the assertion of the established trade. Fairs were forced to migrate to more peripheral spaces (Boavista, Corujeira and Arca d'Água), thus leaving the land free for "more urban" uses such as several squares and gardens, which is the case of S. Lázaro and the Cordoaria (in 1834 and 1867 respectively). These and other forms of street sale were forbidden in the new center. New fixed markets were conceived instead (the Anjo and Bolhão markets, in 1839), while fixed commercial establishments -with a strong European influence- spread, becoming more specialized and refined. In this way, many long and rectilinear arteries in the upper part of the city, outside the walls -in many cases built or financed by the Almadás- became densely full (particularly Santo António, Clérigos, Santa Catarina, Almada and Cedofeita). Only very few commercial arteries in the old town -except for Flores Street- became important.

Trade contributed to the assertion of a new center. This center became slowly consolidated outside the old town, in its upper part. In the beginning it was mainly dedicated to administrative purposes (the Town Hall is located here since 1856) and social purposes (some well-known intellectuals and politicians were regulars of the cafés in this center).

The beginning of the 20th century was a period of intense urbanistic activity, with the opening and normalization of the central arteries favouring the spaces which contribute to steady a new architectural image, house the increased movements of people and goods and establish the trade and services premises which were increasing and specializing at that time in response to the greater needs and demands of a population with more knowledge and desire for novelties: fashion items "just arrived from Paris", miraculous solutions (syrups and stain removers) or hats advertised as "fresh in summer and warm in winter". In a time characterized by big works, bridges were built and lands next to waters were conquered. However, the most emblematic work of all is the opening -according to the project by Barry Parker- of the Aliados Avenue in 1916, in a ceremony attended by the President of the Republic, where the governmental buildings would later be built on its northern extreme.

Regarding the economic activities, the proliferation and specialization of establishments led to the reinforcement and expansion of the territorial model created in the 19th century, which made of the central area of Porto (around Aliados Avenue and between Santa Catarina and Cedofeita) the undisputed regional center, gradually expanding and specializing (particularly in the financial sector and the retail non-food trade, "expelling" the residence, the small industry and the general food retail trade). The industrial areas became consolidated around the main urban network and the relevance of the more remote centers increased. Meanwhile, the residential areas showed two main

differences: between the old center, depreciated, and a periphery where the dominant residential model was the isolated house, until half of the century; and the second difference, between the western side, more urban and "English", and the eastern side, more rural and "Brazilian".

The restructuring that was taking place and the considerable growth of the urban network were financed by means of high investments on essential infrastructures like water supply, sewage and electricity as well as public transports. All of these services reached the whole urban area, according to sanitary needs and the promotion of "free transit", which resulted in the canalization of rivers and the opening of new ways, as happens with the channeling of the Rio da Vila under Mouzinho da Silveira Street (1872/92), the modern way in the connection between the lower and the upper part. The opening of this way, as the enlargement of Bonjardim Street on the stretch now called Sá da Ribeira, is also associated with another vital element of the industrial city: the train, since this way was aimed to connect the New Customs (opened in 1868) and the whole lower part with the new station projected for the place of the S. Bento Monastery. But the first stations to start working in the city were Devesas, on the south, which linked the Minho and Douro rivers (1875), and Boavista, on the west, which linked Porto with the northern coast up to Póvoa de Varzim (1875). The network was finished with the construction of the D. Maria Pia Bridge -following the design of the house of Eiffel (1877)-, which connected Devesas and Campanhã, with the opening of two tunnels enabling the link between Campanhã and S. Bento and the New Customs, in Miragaia, as well as with the extension of the Póvoa Line, up to Trindade (in the northern part of the city centre).

Apart from its fundamental role for traffic, the railway and road bridges (by D. Luís I) are equally important elements of an iron architecture that was very common at the end of the 19th century, even in markets such as the Ferreira Borges market (1888) or in exhibition pavilions such as the already demolished Cristal Palace (1865).

The creation, diversification and expansion of the road and railway networks were followed by the modernization of transports. Except for stagecoaches, which run regularly to Lisbon since 1855, or the sporadic and not very regular forms of transport like the "carroção" (kind of ox carriage), it can be said that the start of the urban collective transport is associated with the beginning of coach trips on railways and led by mule, a kind of transport inspired on the model used in the United States, hence called the *americano*. Porto would be the first city to use this transport in the Iberian Peninsula (1872). The *americano* went along the right bank of the Douro river, between the old center and Foz (next to the meeting of the Douro river with the Atlantic Ocean).

The first *americano* line was electrified in Porto in 1895. Along the 20th century, the lines that went beyond the municipality limits were expanded. This boundaries were established with the present outline in 1895, at the beginning of the external ring road (Estrada Exterior de Circunvalação), beltway which linked the posts where taxes were charged for the entrance of people and goods into the city.

Well into the 20th century, the electrical single and double-deck *trólei-carros* would come to Porto, as well as buses, which used a wonderful network mainly linking the inner and outer periphery of the city with its center. This means of transport deepened a center-periphery relationship of advantage for the central area and favoured the increase of pendular commuting trips.

Cars appeared in the transition to the new century. In the mid-20th century, the progressive increase in the number of cars resulted in great investments on the road network. The most outstanding examples of this are the creation of a new axis to cross the city by motorway in the west of its central area. In order to do this, the Arrábida Bridge was built in concrete (1963) and the National Road nº 1 from Lisbon was connected with Porto de Leixões and Pedras Rubras Airport, also inaugurated in the Northwest of town, in 1945, next to the road to Vila do Conde, Póvoa de Varzim and Viana do Castelo. This road, called "Via Rápida" (fast route) and located to the North of the Douro river, and the road parallel to this, called Via Norte (northern route), would serve as a support for the big production, storage or repair companies set up here in the middle of the century. Several "industrial areas" were established around such companies, where the automobile sector (import, repair and sale) and the food sector (sugar and beer refinery) prevailed among big and middle factories, normally with little labour compared to the capital invested.

With the New State and the slow implementation of the principles set out in the Letter of Athens, cities also suffered the impacts of a rational and radical town planning. The depreciation of the old town and the will to stand out some referential elements -monuments- led, for instance, to the opening of the avenue which linked the S. Bento Station with the D. Luís I Bridge, to the construction of a small tunnel next to Barredo (in the lower town) and to the creation of a square in front of the See and the Bishop's Palace in the beginning of the 40's by sacrificing over a hundred houses.

Due to its rationality, functionalism promoted the separation of functions through the establishment of residential areas, industrial areas, commercial areas and green areas and the organization of the road system into a hierarchy by separating the different kinds of traffic.

These principles, also because they area related to the Salubrization Plan of the "islands" (1956) -which allocated enough capital for the construction of a few thousand "social housing" dwellings-, led to the creation of the "social quarters", consisting of multi-family housing blocks where some hundreds of families lived. They would be located around the consolidated urban network, in places where there already had been some quarters of rented terraced houses in the first decades of the 20th century, as a result of a first effort of social housing building motivated by the serious consequences of the bubonic plague of 1899 (when the city came to be surrounded by a cordon sanitaire).

The city of the 20th century underwent a growth in height as well. This process of "verticalization" in Porto achieved its greatest splendor in the "skycrapers" of about ten buildings built in D. João I square at the end of the 50's. This square, together with Ceuta Street and the closing of Sá da Bandeira represent the last reserve of renewal in the city centre. From that time on, only some buildings were replaced and few public spaces were improved. Since the closing of the Aliados Avenue and the opening of the Paços do Concelho (buildings of the town hall) in 1956 enhanced the prestige of the Baixa and reinforced its centrality, these works enabled the construction of notable buildings, some of them modernist, all equiped with the most modern lifts. They would house public services, lots of offices, banks and commercial establishments, among other "more central" uses.

At this time there was also a considerable number of buildings in the centre of Porto that were destined to house various shows, especially cinema, with the opening of the Rivoli, the Coliseu and the Batalha cinema to the public. These cinemas added up to the S. João cinema, reopened in 1918 and rebuilt after the fire that had occurred ten years before, according to the project of the Marquis of Silva, the most outstanding name of Porto's architecture in the beginning of the century.

## **The metropolis (1970-2001)**

### **- Agents and circumstances**

The period of 30 years initiated in the 70's is a short one in the history of towns, and above all of big towns, if one takes into account the size and intensity of their transformations. The case of Portugal is deeply marked by the emergence of the democratic regime -after the military coup on 24 April 1974- and by the subsequent process of international opening-up culminating with the integration into the European Economic Community (nowadays European Union) in 1986. The support frameworks of the Community and the programmes under them as

well as some governmental and local initiatives combined with the opportunities created and the specific context of Porto, enabling the understanding of the great changes that took place on how the city is viewed, felt and lived by those who reside in it or go to it either regularly or occasionally. The significant improvement of the economical situation of its inhabitants helps understand the expansion of the territory due to the increase in mobility (after the dramatic increase of the car-ownership rate and the development of transport infrastructures). This expansion, resulting from the notable adding of developed areas, can also be understood when looking at the high numbers of the construction per capita. The main reasons for this -with respect to housing- are the reduction of the average family size, the existence of double residence, the partial non-occupation of what is built (either the oldest depreciated housing or the newest, still "on sale" one) and, in the unoccupied housing, the increase in number and area of private establishments and public equipment far superior to the increase in the number of inhabitants.

During the last decades there has been an intense restructuring of the economic and cultural organization and, in general, of all the other forms of social (re)organization. This had an evident territorial reflection on a bigger and more complex urban space which can hardly be called city. This applies particularly to Porto, where -apart from this difficulty- there is a very small administrative size (42 km<sup>2</sup>), clearly inadequate to even be close to the evasive outskirts of a broken urban network, extremely enlarged by the new and fast routes of the national network.

In the economy, after a time when the "small" looked "beautiful", the creation of big business concentrations is portrayed as something unavoidable. This concentrations were made through expansions and mergings and fed by a growing internationalization which translated into names (of banks, trade marks, hotel and restaurant chains...) and into more or less standardized forms and images (the tower of the Sheraton, the double ring of MacDonaldis, the green of Benetton,...), all of them present in Porto like in many other cities around the world. In this process of economical development and internationalization an important qualitative alteration can also be identified: the predominance of the tertiary sector -both in employment and added value production- over industry and the other so-called production activities, which is particularly true in the urban space. Porto lost industrial units and inhabitants, concentrating -almost exclusively- establishments of the social and administrative sector (especially in education, culture and security) as well as an economic tertiary sector (including the financial and property sector, the retail trade, the hotel and catering business and the cultural offer).

In the economy, like in social and cultural affairs, there was growing talk about a globalization process; territorially, old concepts such as those of city and even of center and periphery were questioned because it is becoming difficult to access the old center (and to park here). However, places still referred to as peripheric are becoming more accesible for a large number of people despite being established, like shopping centers, in junctions of easy and fast access roads, thus turning to be the privileged visit and meeting places for the metropolis inhabitants.

From the urbanistic point of view, given the (broken) expansion of the urban network, either for residential purposes or economic activities, Porto and Salvador became, almost exclusively, a (socalled central) part of a vast built-up area, a mixture of conurbation and buildup, considering the diverse degree of autonomy of the surrounding centres compared to the historical city.

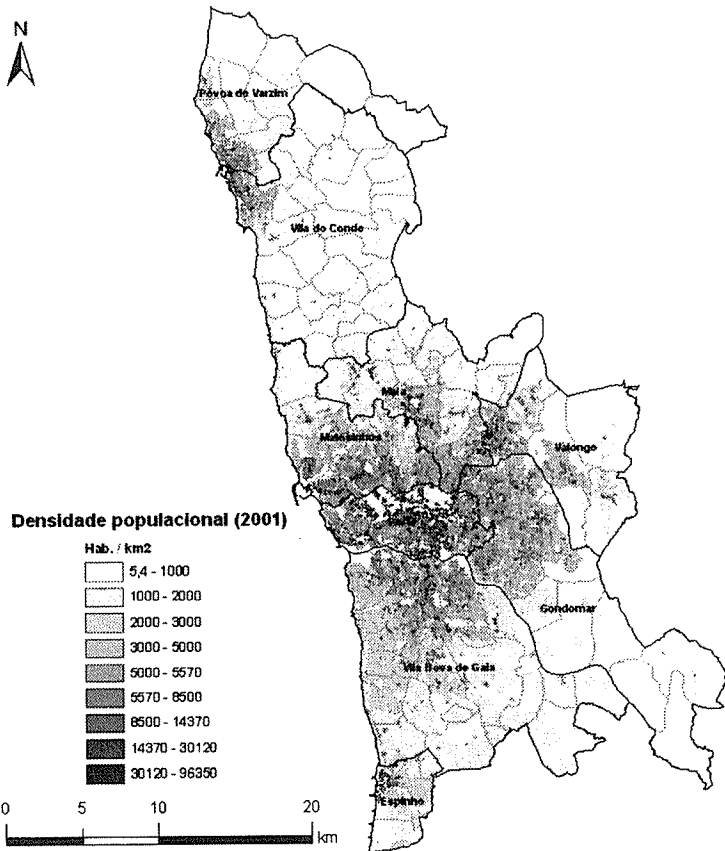


Figure 38. Population density in the metropolitan area of Porto



In this expansion process, considerable variations of the accessibility conditions of different urban places took place and several centers appeared (or became reinforced) –historical, trade, administration and leisure centers), as well as peripheries (industrial, rural, resort peripheries). On the other hand, territorial oppositions became less deep due to the center-periphery duality and they arised associated, in particular, to the differences between the western and the eastern side. Moreover, the signs of urban fragmentation started to be felt. A fragmentation characterized by the emergence of closed condominiums, exclusion places and big isolated buildings; as well as -for some people- by the increase of direct relationships –by car- between the residential place and the destination, where “relationship conducts” or fast routes made it possible to circulate through this “indifferent space” towards a destination which had to incorporate a car parking.

Once the Church experienced a loss of importance, maybe even as a moral reference, and the State saw its capacity to make city diminished, more and more companies –big property and civil construction companies above all- were now the main town-planning agents. The city council and the central government played an essentially regulative role, mostly getting involved in the urban space and some equipment and reserving a greater activity for periods of big projects and conjunctural resources that allowed them to make a considerable transformation, normally associated with a certain event and/or a certain area of town, sometimes also with public companies.

So it is in the case of Porto, especially regarding the historical centre renovation, the celebration of the European Capital of Culture, the installation of an underground network and the housing of the European Football Championship in 2004. As for the rest, except for some infrastructures (like the *Via de Cintura Interna*, inner ring road), the greatest transformations of the city have been made thanks to the intervention of big private -national or multinational- companies. These companies have built bank and insurance headquarters, big hotels, shopping centers, office buildings and lots of others with a mixed use, or for residential uses, and have even made most of the support structures for what has been built (streets and viaducts, parks and gardens).

The changes in the territorial distribution of land uses in the city and its evolution are, firstly, both cause and effect of the population mobility increase. In the first place, Porto started to lose from the demographic point of view, a situation that continued during the 90's. In 2001, the total population of 262,928 people represented a decrease of 13,1% compared to 1991 and only 20,9% of the total population of the metropolitan area (1,256,633 people). Industry followed suit, as middle and big factories preferred to spread around the city,

along well-connected axis, or to concentrate in industrial areas especially created for this purpose. Later, in 1985, the first hypermarket of the country was also placed outside the administrative limits of Porto but very near the city. This first hypermarket was followed by others on the southern limit as well as shopping centers interrelated with them.

### **- Urban space**

In Porto, the *Via de Cintura Interna* (VCI, inner ring road) is, perhaps, the work made in the 30's with a higher impact on the territorial organization and the daily life of citizens. It was already proposed in its strategical sense in the Regulatory Plan made by Antão Almeida Garrett (approved in 1954) but was only finished in the mid-90's with the inauguration of the Freixo Bridge, which allows –on the eastern side- to close the ring started on the west, in the Arrábida Bridge (1963). The late closing of this ring road on the east would contribute to create better conditions on the west to consolidate the tertiary activities throughout the economic expansion period lived in the country during the 80's and the 90's, thus reinforcing the interurban and regional accesibility in the area of Boavista and leading to the establishment of shopping arcades and shopping centers, banks, company head offices, many hotels and restaurants (international chains), sometimes in the spaces previously occupied by factories. This development on the west would be favoured by the proximity of residential areas as well -where many inhabitants have a middle and high buying power and an open mind to novelties- and by the chance to build massively due to the land structure and the lack of restrictions on development such as those in force in the oldest part of town.

This urban assertion process in a new area –which turned more accesible- became progressively consolidated, especially among the middle and high classes and young people. Finally, this area became a "new center" that deepens the "peripheral character" and relative subalternity of that center –in the historical town- that used to be unique and that, now, offers its services mainly to the more popular classes.

In the 90's and during the beginning of the new century, with Fernando Gomes e Nuno Cardoso as President of the Town Council and in a context of increase of the money coming from the national budget and the European programmes, not only a new dynamics is introduced in several processes (like the renovation of the historical centre or the cultural animation in the city) but also different measures are promoted which enhance the prestige of the city and create especial investment opportunities, as is the case of the candidatures of Porto - approved- to join the worldwide Heritage of the Humanity or to be declared

European Capital of Culture, or several especial support programmes (such as Urban, Procom and PER, among many others).

Once the accesibilities had been controlled, after years characterized by the exclusive dedication of some streets to pedestrian transit, big interventions proliferate. Besides several tunnels and viaducts and important traffic management measures, we should stand out the opening of two new bridges over the Douro river: S. João bridge in 1991 –which solved the problem of the slow crossing of the Douro river by train on the only railway of the several-century old D. Maria I bridge- and Freixo bridge, a few years later, allowing a better road connection between Porto and Gaia, also on the side of the river source. In the present day, another bridge added to the ones already mentioned (Infante D. Henrique bridge), thus freeing the upper floor of the D. Luís I bridge for the exclusive use of the light underground.

The present Porto is a city more aware of environmental quality, where –in the last decades- an urban park of around 40 ha (Parque da Cidade) was built near the sea and later, also on the west, the Parque da Pasteleira and another garden close to the Galiza square. Pollution has become a controversial subject, leading to the closure of factories and to investment on restructuring the sewage system and building two new residual water treatment plants (Freixo and Sobreiras) with a view to depollute the Douro river, nowadays the central axis of a growing tourist demand.

But the first years of the 21st century, particularly 2001, were also (or above all) characterized by a firm commitment to culture, mainly translated into the creation of new public facilities. On this matter, apart from the Almeida Garrett municipal library and the renovation works in the Tribunal e Cadeia da Relação, the Soares dos Reis Museum and the Carlos Alberto National Auditory, the most remarkable and unusual work carried out is that of the Casa da Música (house of music) by Rem Koolhaas.

In general, and from the economic point of view in particular, we can talk about an expansion towards the west, more intense during the last two decades, which made it possible that, from Boavista, “high standing” commerce and services units spread, among which abound jeweller’s, luxury car dealers, high-fashion houses, around the Casa da Música, the best hotels, luxury apartments, the consulates and the headquarters of prestigious institutions. To the north and up to the airport, as well as south from Boavista (then also on the western side), the fast connection routes and the more open stance of the local power regarding this kind of structures, among other factors, favoured the establishment of big commerce units in a crucial metropolitan axis located between the NorteShopping and the GaiaShopping, where there are three big shopping

centers and four hypermarkets, apart from the several smaller shopping centers located in the center of town.

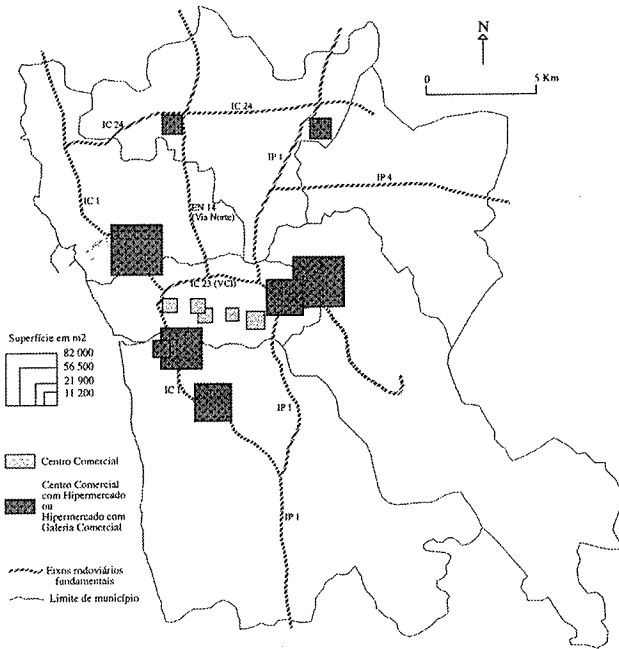


Figure 39. Commercial areas (malls) in the periphery of Porto

On the other hand, the center turns "traditional" and more "remote", with a progressive increase of the already numerous depreciated spaces, the change towards the trade in low-cost products, mainly by Chinese and Hindus, and the spread of its identification with insecurity, prostitution and drug abuse. Some distinguished examples that are contrary to this dynamics of stagnation and "loss" are the Via Catarina shopping center and the FNAC shop in Santa Catarina Street, as well as the renovation of the S. João, Coliseu and Rivoli cinema-theaters. In 2001, public efforts were directed to the "Baixa", when the Town Council, the Government, the Porto 2001 Society and the Porto Collective Transport Society restructured layouts and reasphalted streets and boulevards, created the conditions for the installation of a tram network and more parking spaces and promoted, prestiged, spread and/or opened different cultural facilities such as museums, libraries and galleries. This work has not been finished not finished despite the fact that the Porto Underground made it possible to find financing for other such measures, like the ones currently

implemented in Aliados Avenue and Vimara Peres Avenue, in the connection with Ponte D. Luís I bridge.

In the oldest part of town, the setting up of an urbanistic renovation institution, the *Comissariado para a Renovação Urbana da Área da Ribeira-Barredo* (CRUARB,—Commission for the Urban Renovation of the Ribeira-Barredo Area), incorporated to the Town Council of Porto in 1980, favoured a considerable improvement of the conditions of most of the housing and the quality and comfort of the urban space, also contributing —together with the *Fundação para o Desenvolvimento do Centro Histórico* (Foundation for the Development of the Historical Centre)- to the “hammering out” of a ghetto which, nowadays and to a great deal, constitutes one of the most visited places. Apart from that, tourism, as one of the main leisure activities of the young population, is presently a vital factor for the promotion of this space, particularly in the surroundings of the Douro river, where an space depreciated until the end of the 20th century is rediscovered and associated with the Douro wineries located on the left bank, in Vila Nova de Gaia; an space which extends to the west, along Massarelos and Lordelo, up to Foz.

The recent closing of the CRUARB to implement a new old town management model (by creating the *Sociedade de Reabilitação Urbana*) would result from the impossibility to put an end to the degradation and devitalization of this urban area only with public funds. The new model, which rises fears of causing an excessive gentrification, and because it cannot be assessed yet, is far from helping to face with optimism the solution for the recovery of buildings.

Meanwhile, on the east, the realization of the “Cidade das Antas” project led to a deep urbanistic restructuring of the area around the new Dragão Stadium (owned by the Porto Football Club). This city includes residential and commercial areas (a shopping center with hypermarket and multiplex) next to a junction of the VCI (inner ring road). This area would also benefit from the renovation of the Campanhã railway station and underground line, which, however, does not seem enough to lessen an evident unbalance between the western and eastern side: this line extends, by the sea, towards the south, up to Granja (Vila Nova de Gaia) and Espinho and, to the north, through Leça da Palmeira (Matosinhos) and Vila do Conde, up to Esposende; while, on the eastern side, it extends through Valongo and Gondomar, with considerably excluded communities in S. João de Deus (NE of Porto), Triana (Rio Tinto) and S. Pedro da Cova (Gondomar).

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