Reading and interpreting the gateways in contemporary cities: an educational perspective

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Abstract

This work aims at highlighting the teaching potentialities of urban geography, in particular the didactic value of gateways in contemporary cities. Therefore, after a reflection on the still fundamental pedagogical value of urban geography and its teaching tools, the paper provides a model of reading and interpreting the city through the study of connections between tourist flows and consumption models in specific urban places, that is to say, the traditional city gateways such as railway stations, ports and airports.

Keywords: Gateway, City, Waterfront, Airports, Railway Stations, Multifunctional Spaces

1. Teaching Urban Geography: the educational value of the city gateways

The main goal of the didactics of geography is to “translate” for the school, through an appropriate scientific processing of results and outputs achieved by research, so that the objects, methods and aims of the discipline can participate entirely in the educational-teaching project. The task of transmitting the results of research for educational aims is then divided into multiple sub-sectors, related to the different aspects of geography, that is to say the cognitive, educational, methodological, teaching and assessing ones (De Vecchis, 2004, 2011).

Geography aims at thinking the geographical space as a set of territorial systems that have their own autonomy and, at the same time, are the results of continuous interactions with different geographical scales and territorial systems. Thus the territory is seen as the output of processes and social relations, by revealing to what extent human life is involved in economic,
political and cultural processes.

It is also regarded as a spatial scale where the city gates play an important role within the relational processes. From the educational point of view, the territory highlights the ethical connotation of geography, since the discipline is not limited to a detached observation of the territory, but it helps to suggest solutions for its governance through ideas and guidelines, by indicating the resources and strengths to be leveraged and the challenges to be faced (Giorda, 2014, pp. 15-30).

The use of geographically expressed concepts and paradigms is still one of the most effective applications in teaching the discipline, since a well-conceived model can provide an accessible and holistic perspective about a multifaceted issue.

One of the main fields where geographical models and interpretation tools are usually exploited is the analysis of urban evolution, since the city structure, even though made even more complicated by current transformations at global level, can be easily read and interpreted through deeply-established geographical models. Ranging from well-known traditional models (Kearsley, 1983; Corna Pellegrini, 2007) to the most recent and innovative ones, the study of the city evolution today represents one of the most appealing geographical fields due to the fascination it exerts on students of different levels as well as its capacity to represent the complexity of current global changes.

Since the sixties (age of astonishing transformations of urban structures), urban geography has been regarded as “the most important and rapidly expanding focus” of the geographical research, since many geographical schools had already understood “the fundamental educational value of urban geography as a subject which introduces pupils to basic geographical principles in terms of the most familiar environments” (Keeble, 1969, p. 18).

Today, the vitality of urban geographical research, both at the theoretical and methodological level, reflects the unprecedented patterns and practices of contemporary cities deriving from dynamics such as the effects of urban sprawl, the consequences of regeneration and redevelopment projects, the increasing role of finance in changing urban structure and the spatial implications of neo-liberalism.

Apart from the fundamental role played by fieldwork (Fuller et al., 2006; Dunphy et al., 2009), new technologies provide a wide range of tools (GIS, Google Earth etc.), many of them easily accessible, making it possible to read, interpret and consequently teach the evolution of city structure in a more innovative and appealing way if compared with the traditional models of teaching.

Contemporary cities have recently imposed their role as fundamental nodes of wider global networks to the point that their future is increasingly dependent on their capacity to support the innovative development of urban gateways. The presence of a city in a network of global relationships is related to the effectiveness of urban policies inspired by creativity and innovation that enable cities – not necessarily of a higher order – to carve out a leading role in the scenery of international relations (Short et al., 2000).

As a result, the future of the contemporary city is increasingly dependent on the ability to establish itself as a gateway city, regarded not only as a space shaped by the processes of cultural, political and economic globalization, but also as a place where traditional access points (airports, ports, railway stations, roads) contribute to shape the hierarchy of functions in a context of growing global competition.

Not surprisingly, one of the areas where the extent of current changes is ever more evident is the structure of transports and, consequently, the patterns of spatial organization that affect the performance of the cities in which there are terminals (Ahmed and Miller, 2007), determining the rank in the urban hierarchy at the regional, national or international level (Rodrigue et al., 2006).

Main international cities, such as the gateway cities, operate together as a single network system linked to flows of information, capital, new technologies, cultural and ideological influences. They not only play a role of modal interchange that allows an easy passage of travelers from one kind of transport to another,
but rather they principally represent the core of the modern network city and are, at the same time, symbols of urban and territorial identity (Dematteis, 1991; Dupuy, 1991).

As a consequence, current economic structures of contemporary cities are shaping new urban spaces, where the national and international infrastructures of transports have not only to assure connection efficiency, but also to reorganize the functional hierarchies in order to promote tourism development (Rodrigue et al., 2006).

Moreover, recent projects of urban regeneration have been revealing unexpected potentialities of enhancement of such city gateways, due to the increasing presence of leisure and retail facilities within these places, which contribute to building the first tourist image of a city.

2. Waterfront and tourism, new potentialities of urban revitalisation

Ports and waterfronts have been recently become among the most studied sub-fields of the geography, due to their strategic importance within global economic and urban networks. They thus represent a highly attractive field from the pedagogical point of view.

Ports are among the oldest urban structures dedicated to the exchange of people and goods, as well as the meeting places for different cultures, perhaps the oldest examples of urban laboratory of cultural mediation.

The first theories about the processes of functional redevelopment of coastal areas date back to the sixties of the last century when the English geographer J. Bird considered the proximity of the sea as a factor of urban and suburban polarization. He proposed a model, called Anyport, to explain the dynamics in the process of development of the main ports of northern Europe, with particular reference to those located within estuaries, as in the case of London (Soriani, 1998).

Only at the end of the seventies Vigarié (1979) underlined the horizontal relations between ports and coastal areas, to explain the growing separation between city and port activities in the nineteenth and twentieth centuries due to the process of industrialization (Vallega, 1992).

During the eighties, in fact, after the case study of Baltimore reported in an article by Wrenn (1983), the theoretical frame was focused on a series of contributions dedicated to the transformations of urban waterfront, such as that of the French geographer Chaline (1988) who analyzed the London case. The English geographer Hoyle (1988) proposed a space-time model of the dynamics of the port-city relations organized in five stages (Hoyle et al., 1988) that explained the evolution of port cities from the Middle Ages (primitive Cityport) to the present day (the stage of expanding port between eighteenth and nineteenth century, the modern industrial Cityport and Maritime Industrial Development Areas “MIDs”). During this evolution the port is increasingly far from the city centre, due to the need for new spaces which are less dependent on the competition with other land uses (Soriani, 1998).

The beginning of the process of de-industrialization determined the final separation of roles between city and port, despite the progressive expansion of Brownfield sites in the surroundings of the old port areas. However, this will be the driving force for the functional redevelopment of many waterfront areas which rediscover a new level of relations at the expense of traditional port activities.

Thus, the contemporary port-city should be able to interpret the waterfront as a complex system, apart from considering it as a network of “geo-communities”, that is to say a specific complex of innovative milieus.

The re-appropriation of the highly original waterfronts of Amsterdam, Rotterdam and Hamburg is not only a good example of port reorganization that allows the enhancement and reorganization of public spaces, but it also underlines the ability of these urban communities to question the old functional system, in order to imagine new driving forces of the urban economy. The balance between old and new functions can promote the revitalization of the city centre, as happened in the London Docklands where the project has been characterized by the association of two images of the city, the one linked to the water activities and the other linked to the new urban
tertiary and quaternary economies at the core of the global city.

During the Olympic Games in 1992 Port Vell in Barcelona was transformed into a huge new “public space” where pedestrians, leisure and extravagant architectural forms are the tangible signs of the renewal undertaken, by involving the whole metropolitan area (Nicosia, 2009; Rocca, 2010). Interventions would then be carried out on the waterfronts of Lisbon and Genoa to host international major events as – in some cases the only ones – potential tools of urban regeneration which may exert a positive impact on the capacity of local governance.

While the experiences of Bilbao and Liverpool show how the city can still have the ability to challenge the economic decline of the post-industrial city, the Harbour Place in Baltimore and the whole South Street Sea-port of New York clearly show the “spectacle” of the interventions as symbols of post-modernity (Harvey, 1993).

We should also remember the case of Dubai, where the coastal projects seem to indicate the culmination of difficult and complex research on the new dimensions of the 21st century city.

Beyond the already described experiences, European and Mediterranean cities should aim at achieving a clever interpretation of existing urban spaces in the process of the recreation of new urban waterfronts, by trying to enhance the sense of place.

Therefore, the processes of redevelopment of the waterfront, despite being the result of different models of development, share the same theoretical principle, based on an evolution of the contemporary city far from conventional patterns. The model of development should be smart, competitive, cohesive and sustainable, as warmly recommended also in the Territorial Agenda of the EU (2011).

Fieldwork in port areas, in cities of different dimensions and functions, can represent a useful tool for students to understand not only the current changes in waterfront areas but also wider transformations that have been affecting the whole economic system at global level.

3. Railway stations as contemporary leisure places

Within the wide sub-field of urban geography and geography of transports, railway stations have always represented a good example of the ability to attract geography students of different levels, due to their capacity to fascinate.

Railway stations have been changing their aims, functions and relationship with the surrounding urban fabric. Regarded as places to intercept flows of people and goods, as well as public places of connection between the rail system and the city, railway stations have a dual nature: the infrastructure that belongs to the local system and the functional specialized space.

Since the second half of the nineteen century, the architecture of railway stations has tended to combine the meaning of a new gate of the city and technological progress. More frequently abroad than in Italy, the façades of the stations are dominated by a tower, sometimes as a functional element for monitoring the line, more often as a symbol of the building. This is the case of the Prague Main Train Station, with its facade in Art Nouveau style (Ventura, 2004) and the Grand Central Station (more precisely Terminal) in New York, which opened in 1871, and today a multi-functional and global space both of transit and leisure, with its several restaurants (the most famous of which is the Oyster Bar) and fast food, as well as delis, bakeries, newsstands, a food market, a location of the New York Transit Museum, and more than forty retail spaces.

In the nineteenth century, moreover, the railway stations were built for major events such as the World Expositions. This is the case of Victoria Station, built for the Great Exhibition of 1851, which was when the railway line to the West End of London and Crystal Palace Railway were created, and the Gare de Lyon in Paris, built for the Universal Exhibition of 1900. At the end of the century a prevailing language of classical architecture, adopted mainly in French stations, such as the Paris St Lazare, North, East, Lyon, Montparnasse, Orsay, and later even in Budapest, Zurich and Dresden. The railway line style is even typical of the great American
stations, such as the Union Station in Washington and revised in some cases in Italy, such as in the Milan Centrale which is inspired by Assyrian-Babylonian styles. In other circumstances, the railway line, which has become non-competitive, was gradually abandoned.

Today, many of the main railway stations of the past have been dismantled and redeveloped to assure the rationalization of the network. This is the case of the Penn Station in New York City, demolished to support a redevelopment project that has implied the covering of the tracks and the realization of Madison Square Garden. Another example is the Gare d’Orsay in Paris, abandoned for demolition in the seventies, later declared a national monument and then converted into a museum.

Moreover, we should remember the Promenade Plantée of Paris, a linear urban park located on the track of an old abandoned elevated rail line (ligne de Vincennes) which extends for more than 4 km from the Place de la Bastille.

These great architectural works, that have become fundamental axes of urban development, have often been used by many directors as locations for their films (de Spuches, 2002), so that they can be used as a useful teaching aid to show real examples in the classroom. Films and television are useful tools for teaching geography since they provide a great deal of information useful for the understanding of the world. The analysis of a film, through an interpretive key of geographical matrix, can play a significant role in the teaching plan (De Vecchis, 2011).


In contemporary cities, travelers are at the centre of the new concept of the railway station. Commuters, tourists, users of the services in general ask for mobility needs to be satisfied with high quality services, but they also want to find social spaces where to meet and spend their free time in places that allow different sociability, which enhance and strengthen the local identity (Camasso, 2010; Ingallina, 2010; Nicosia, 2013).

The newly-built railway stations, technologically advanced, are also cleverly conceived in terms of appearance and design. The new spaces are designed for multiple uses and functions and their spaces are designed to be comfortable both for those who have to take a train and for those who simply want to buy a newspaper or have a cup of coffee. An example of redevelopment of European railway stations is that one of Almere, a Dutch town, where the train station has become a town square from which you can observe the passage of trains from a window; another example is Basel, where a shopping mall has been built in the railway station and finally Dortmund and Lucerne where cultural centers have been built near the railway stations (Pini and Boschi, 2004).

Today, even in Italy, the new organizational structure of the railway stations aims to expand, reshape and replace the spaces for passengers’ facilities. The Italian Railway Infrastructure Company of the State Railways Group has elaborated several redevelopment projects, in order to reinvent the public space of the railway stations by transforming them into “urban plazas” (Ministero delle Infrastrutture, 2007).

While the nineteenth century railway station traditionally fostered urban development, generating new ways of connection or redevelopment, nowadays the railway station is strictly linked to the development of areas devoted to the tertiary, so that they embody one of the first retail and leisure spaces of the gateway city.
4. Airports as multifunctional spaces

Due to the current changes at global and local level, teaching geography in the postmodern age implies a holistic approach that takes into account the complexity of transformations (Morgan, 2002). A highly interesting subject from the pedagogical standpoint is the role of modern airports in reconfiguring interconnections within city systems as well as providing unprecedented patterns of the use of urban and suburban spaces.

Although located near the urban belt, at a certain distance from metropolitan centres, the airport has a significant influence on the surrounding socio-economic area as well as on the nearby city, linked together through a network of more or less integrated infrastructures and connections.

Today the airport plays the same role of reconfiguration of the socio-economic structures in the urban landscapes that was already played by the railway stations at the time of the first Industrial Revolution (Güller and Güller, 2001). What is more, it acts as a magnet for local economy by linking the global network of interconnections and urban hierarchies. In addition to influencing existing settlements, changing ranks and functions in the hierarchy of urban nodes, an air terminal can establish itself as a player of urban development (Dematteis, 1996). It also nourishes hybrid forms of urbanization close to main agglomerations, by creating urban sprawl which connects semi-rural urbanized areas located between the existing settlements.

There are five categories of impacts linked to the economic activities of the airport, which interact with each other: the direct impact, which includes activities related to the air transport of goods and people inside the airport; the indirect impact, or activities outside the airport, but destined to users; the induced impact, determined by the multiplicative effects of the previous categories; the catalytic impact, which identifies the airport as a catalyst for investment, resulting in employment, income and tax revenues; the overall impact, or the sum of all previous categories.

Due to the growing importance of global airports, even in the geography of transport the analysis of the impact of air traffic and airport infrastructures is one of the most dynamic areas of research, which focuses primarily on concepts such as connectivity, accessibility, model development at different scales and the implications of the global economy (Graham, 1995; Vowles, 2006; Shaw and Hesse, 2010).

The ability of an airport node to act as a cohesive territorial element is particularly evident in the case of the Airport System, a system of airports of different sizes and functions making up an integrated infrastructure in a large metropolitan area. The London airports, which include London Heathrow, London Stansted, London Gatwick, London Southend and London City, is an example.

While these great Airport Systems are usually located in already very dense areas in terms of economic, political and social structures, on the other hand even a single airport located close to a medium-sized city is able to exert significant impact in terms of urbanization, patterns of spatial organization, employment implications and functional hierarchies (O’Connor and Fuelhart, 2012).

The performance of efficiency and accessibility guaranteed by air transport, in fact, represents a competitive advantage not only for the global cities (Sassen, 2010), but also for settlements of smaller size and rank that thanks to the presence of an airport can establish themselves as gateway cities at a national or international level (Short et al., 2000; Geurs and van Wee, 2004; Ahmed and Miller, 2007). Thanks to an airport, these cities can also enable innovative processes for development, linked to knowledge economy, typical of the smart city or the creative city (Florida, 2005).

It is by no accident that the geography of the contemporary air system reflects the current geo-economic scenery. In addition to the development of regional hubs in Southeast Asia – Hong Kong, Singapore, Bangkok (O’Connor, 1995) – countries with “emerging” economies such as India, China or Brazil have understood the need for integration in the airline system as a prerequisite to intercept global flows of capital, goods, people and information (Hooper, 1998; Bowen, 2000; Jin, Wang and Liu, 2004).
The airports based on a new concept include a wide range of urban values because of the proliferation of features and facilities linked to leisure and retail industries. In the international rankings of the most popular airports chosen by passengers – but also rewarded by experts – there are terminals such as those located in Hong Kong, Singapore and Seoul that, in addition to the highest levels of accessibility and intermodal connections with other transport infrastructures, ensure passengers patterns of consumption and high-level services. In particular, despite being one of the largest freight hubs, the airport of Hong Kong, the first in the 2011 ranking, boasts several lounge rooms, high-level restaurants, golf, 3D cinema, wi-fi, as well as a link to trains and from the city centre that allows remote check-in from the railway station. The Singapore Changi Airport, the second in 2011, offers passengers the opportunity to benefit from swimming pools, spas, prayer rooms, roof gardens and retail arcades. The Seoul Incheon, ranked third, has private rooms for resting, free showers, spa, golf, ice-skating, roof garden, as well as a museum of Korean culture and open spaces for shows and live performances.

Thus, such hubs represent the first tourist sites of a gateway city, because passengers do not only pass through them, but they really visit and use them as leisure or retail spaces.

As a result, modern airports can no longer be considered as simple interchange nodes, because they are increasingly becoming multifunctional citadels of leisure, shopping and services. They are not only simple transit spaces, but they appear as a patchwork of specific micro-spaces where passengers are entertained through a wide range of services that join the patterns of shopping centers with those related to the leisure industry (Adey, 2007), which helps to create the first image – even the tourist one – of the city.

From a pedagogical point of view, the in-depth study of the impact of an airport can provide useful information about the functional role of the transport system and the nearby urbanized area. The study can be based both on the examination of flows based on official sources (data and statistics) and more innovative educational tools, such as pictures, videos, websites analysis. Through these tools it is possible to grasp some factors that data do not underline, that is to say, aesthetic/architectural elements and the organization of leisure and service spaces within the airport system.

5. Conclusions

Geography is a discipline that can make a significant contribution to addressing current urban changes on the local and global scale. Its teaching can promote a greater awareness of the socio-economic and cultural transformation of contemporary cities through the development of knowledge, skills and values in students that encourage an effective model of interpretation of city structure (see also Pasquinelli d’Allegra, 1998; Laneve, 2003; Wellen et al., 2006; De Vecchis, 2004, 2011). In particular, the analysis of gateway functions can provide a different model of understanding current urban systems.

The gateway functions do not necessarily depend on the status of a global city, but rather on the ability to develop innovative urban policies focused on intermodal ways of transport. It is especially in urban settlements of higher order that the integrated and systemic approach in urban planning and transport has allowed the “gates” of the city to serve not only as places of access, but as real multifunctional spaces, which have often turned out to be development potentials, even for tourism (Graham, 2000). In fact, the gateways of the contemporary cities contribute to building the first image of the city, apart from acting as one of the main players of the whole urban economy.

From the strictly didactical perspective, it could be interesting to organize a workshop about gateway cities, made up of a first theoretical stage followed by a tutorial one, based on the use of new technologies, and finally by fieldwork.

First of all, students can compare different city systems according to their transport networks and gateways, both at the global level and the local one, by calculating the centrality indexes as well as measuring specialization and polarization among cities.

The teacher can lead students in making this comparison of different gateway cities by
helping them to find shared definitions of urban systems at the different levels as well as harmonizing the spatially differentiated data.

Secondly, students can also use new technologies such as GIS to represent the territorial data through an interactive cartography (Azzari, Michelacci and Zamperlin, 2010).

Finally, the workshop can be characterized by final fieldwork in the gateways of some selected cities on the local scale, in order to study their main features and to compare them with the already gathered data and theoretical frameworks, as well as highlighting their functions within a wider network nodal system.

As a result, the students’ subjective look at the gateway functions can be a useful tool of analysis to filter the collected data according to the direct experience, in order to promote a more attractive way to approach Urban Geography, regarded as a field that every one can experience.

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