The “vicious circle” of tourism development in heritage destinations

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Abstract

This paper explores the manifold relations that there exist between the spatial organisation of tourism, the quality of the tourism product in heritage cities, and the general dynamics of the regional economy.

The concept of “vicious circle” of tourism development is introduced to describe the self-feeding linkage between the emergence of a class of excursionists among the visitors in the later stages of the tourism destination life-cycle and the decline in the attractiveness of the city. Reference is made to the case of Venice.

According to this scheme, effective policies for sustainable tourism should attack the critical points where the vicious circle feeds. An adequate attention must be paid to the quality and accessibility of the primary and complementary tourism products.

Keywords: Life-cycle model, heritage cities, regional dynamics, tourism policy

1. Introduction

The very nature of tourism – its intensive use of the central space, its seasonal pattern, its "transversality" across industries – can greatly affect sensitive urban areas. By pushing on the value of urban facilities and premises, it represents an incentive for citizens and firms to abandon central locations. In the era of increasing inter-regional competition, the dispersion of human capital and economic resources is a major threat to the viability of local development (Bramezza, 1996). This trend is exacerbated when dependency of the local economy from tourism is high. It is the typical case of the middle-sized heritage city with a poorly diversified economic base, which finds itself locked in by the sensitive and valuable nature of its built heritage.

In short, tourism in heritage cities can prove *unsustainable* (Cazes, 1994; for a discussion of the concept of "sustainable tourism": Hunter, 1997). It is not easy, though, to track down the prime cause of such unsustainability. Is it tourism that damages the other urban functions, or is it a poor score of the local economy in general that produces an uneven tourism development? This is not a pointless issue for policy makers who need to define a strategy for sustainable development.

The reduction in the attractiveness of a destination in the later stage of its cycle of development, following a stage of take-off and one of maturity, is commonly stylised in the evolutionary model known as *life-cycle of tourism destinations*, a concept derived from the study of the markets. According to that scheme, an unguided expansion of the tourism industry is to be followed by decline, because it implies the emergence of high private and collective costs and the disruption of the economic and tourist performance of the city.

The scheme prescribes that policy should be pro-active, anticipating and smoothing the fluctuations of the cycle. Yet, it does not provide a sound economic explanation to the self-feeding nature of the cycle and the inevitable emergence of final decline. Therefore, indications on how to prevent such decline are generally poorly defined. Moreover, in the literature on tourist cycles little attention is given to historical cities, which have peculiar features for what regards the relation between the spatial organisation of tourism, the quality of tourist products, and the general dynamics of the regional economy.

The goal of this paper is to settle this weakness, examining more closely the determinants of the life-cycle in the context of heritage destinations, and deriving appropriate policy initiatives for each of the stages in which the mechanism operates. Section 2 introduces a scheme of causative relations and of the dynamic properties inherent to the scheme, the "vicious circle" of heritage destinations. An account of how the vicious circle works in the well-known heritage destination of Venice is given in Section 3. This case serves as a bench-mark to propose a series of policy indications, which are exposed in the last section together with some suggestions for further analysis on the topic.

2. The life-cycle of urban tourism destinations: a spatial economics approach

According to a well-developed stream of research (for exhaustive reviews of this literature, see Deprest, 1997; Da Conceiçao Goncalves and Roque, 1997), the development path of any tourist site assumes a cyclic pattern. The «life-cycle» scheme provides a framework to analyse tourism dynamics in an evolutionary context.

Its original formulation, introduced by Butler (1980), uses as an indicator the absolute number of visitors. In the earlier stages of tourism development, the city attracts visitors that are essentially "pioneers". The attention for the city may never reach the critical mass to become a destination for overnight stays, but if does, investments are started in infrastructures, services and advertisement. The city eventually enters a stage of take-off, in which the material and immaterial benefits accrued by tourism increase dramatically and the local economy gets boosting.

As tourism consolidates and the maturity stage is reached, sensible changes on the industrial organisation of tourism are observed, with non-local actors coming to dominate the production of tourist goods. Different interpretations exist for the emergence of the stagnation and declining stages. Some are based on the inner evolution of the tourist market and of the characteristics of visitors (Plog, 1987; Debbage, 1990; Ioannides, 1992), others are more concerned with the changes in the spatial organisation of production (Miossec, 1976; Gormsen, 1981). The latter argument is preferred here, both for its endogenous nature, and for the richness of implications in terms of strategic planning and policy action. The model can be accordingly extended introducing a qualitative element, that is the *kind* of visitor that is attracted into the town (Van der Borg, 1991). A close scrutiny of the characteristic of the visitors' flow in cities at different stages of their life-cycle suggests that not only the absolute number of visitors is changing, but their *mix* changes as well, with major consequences in terms of associated costs and benefits.

According to this view, the negative effects of tourism development are associated to the enlargement of the tourism region, pushed by the emergence of a class of "false excursionists": would-be tourists that, face to the high prices and the limited capacity of central facilities, choose a peripheral site for their visit to the main destination. A conflict arises at the regional scale between the centre – bearing the costs of tourism activity and retaining a decreasing share of the benefits – and the neighbouring communities. These enjoy as *free-riders* the advantages of the proximity with the main destination; the core, instead, is pushed to impose higher taxes and to shrink the budget for heritage maintenance, cleaning of the city, and marketing. In the end, the possibility to preserve and market the cultural supply depends of the availability of external sources of income by special laws or governmental transfers, increasing the rigidity of the context in which tourism policies operate. At the same time, tourism imposes a new valorisation dynamic, with devastating effects on the less competitive sectors of the urban economy (Sassen, 1994). The city is transformed in a tourist mono-culture and

lacks any other economic activity that may balance a possible decline of the local tourist industry (Holder, 1991; Van der Borg, 1991). The spatial-economic interpretation of the life-cycle dynamics is relevant because it makes it clear that the origins of the stagnation and decline of tourism have to be looked for in the pattern of expansion of tourism itself. In Figure 1, this "revisited" version of the tourist life-cycle scheme is exposed. Each stage of the life cycle is associated to a specific spatial distribution of the costs and benefits arising from the tourism activities (lower part of Fig. 1). In the first stage, the area benefited from tourism extends well over the new-discovered destination. As development proceeds (e.g. with the building of hotels) the two regions almost coincide. Later on, the tourist revenues spread again to the rest of the region, while costs remain concentrated. If the core enters the declining stage, such costs may diffuse to the rest of the region.

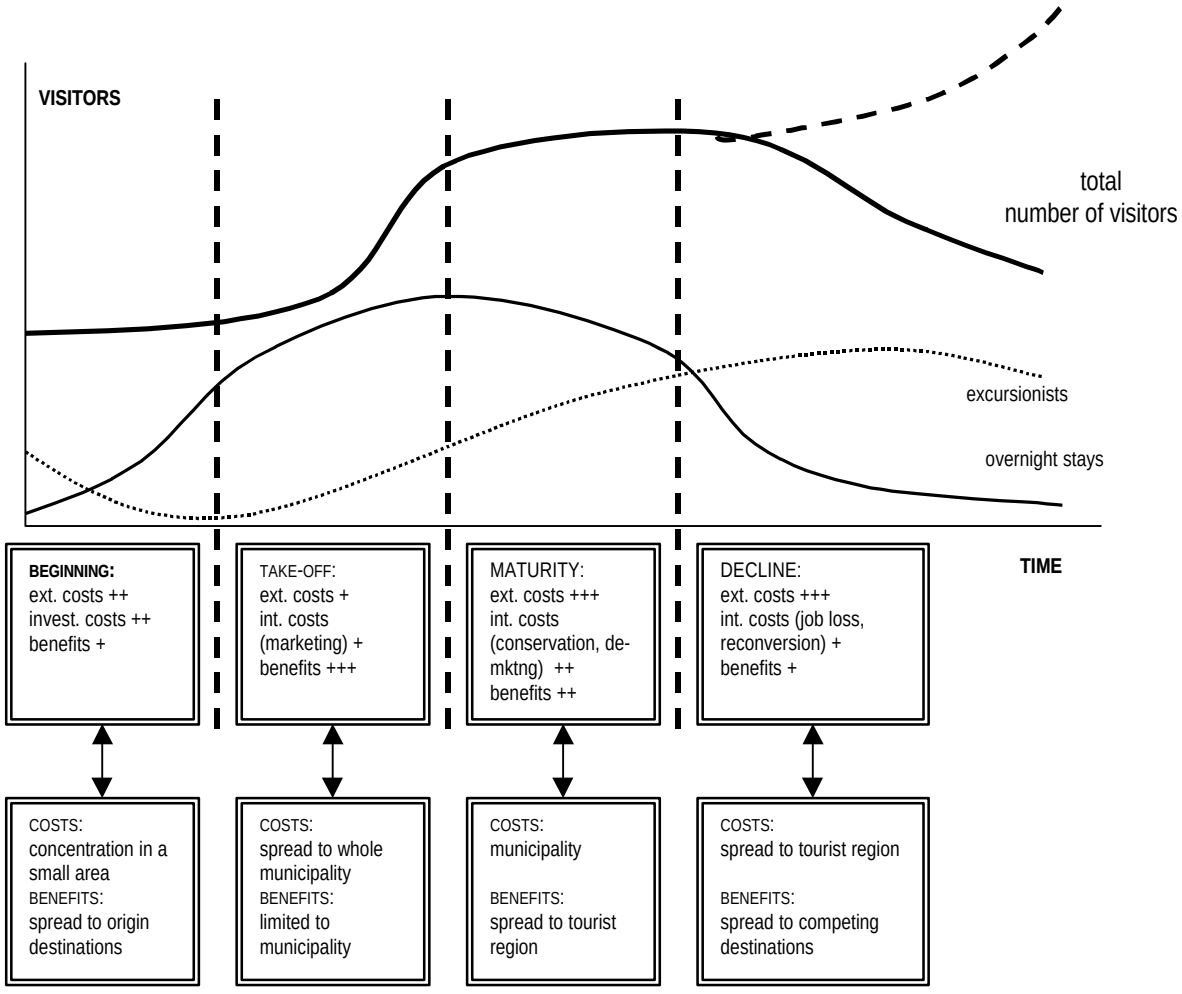

Fig. 1: The theory of urban life cycle of tourist destinations

A complementary concept to the life-cycle scheme is that of *socio-economic carrying capacity*. This is defined by Costa and Canestrelli (1991) as the number of visitors – tourists or excursionists – that can be let into city without affecting the

capacity of the city to deliver the services that are demanded by tourists and residents alike. When the carrying capacity is violated, the possibility to sustain tourism growth in the long term is compromised.

According to the life-cycle model, tourism management should be *pro-active*, smoothing the fluctuations foreseen by the cycle and favouring a balanced relation between the costs and the benefits originated by tourism (Van der Borg, 1991). However, this purely descriptive scheme does not capture the economic nature of the linkages that make the cycle self-propelling, and therefore is of poor help to set up an integral strategy for sustainable development. The normative and predictive value of the life-cycle scheme has been criticised from various points of view (e.g. Getz, 1992). Moreover, the greatest part of the literature focuses on applications regarding beach resorts and other "new" tourism products. Little attention is given to urban tourism, and in particular to heritage tourism (Cazes, 1994; Garrod and Fyall, 2000). The impression is that some of the main elements of the life-cycle literature are hardly extensible to urban historic environments, especially those related with the "psychographics" of tourism and those that foresee a proliferation of competing resorts throughout the tourist region. We argue that even if the scheme is accurate as a descriptive tool, a normative analysis requires that the economics at the base of the life-cycle mechanism reflect the specific context under investigation.

Tourist attractions in heritage cities are to a great extent hardly reproducible and concentrated. The quality of the visitors' experience is deteriorated not only by congestion and stress, but also by a decline in the quality of the environmental context in which the act of consumption takes place, and in the quality of the auxiliary tourist facilities. These features, as well as the institutional context which is typical of these cities – where the administrative boundaries seldom correspond to the economic or functional ones (Bauer, 1997) – make the life-cycle development of heritage cities a distinct one, where spatial-economic dynamics within the tourist region determine the extent of the catastrophic state foreseen by the general scheme.

Of course, this argument may well be extended to other destinations of cultural tourism, such as historical neighbourhoods in metropolitan regions or isolated monuments and sites. However, it is in heritage cities that the full developments of the cycle assume the most significant tracts; therefore we will limit our attention to such kind of contexts.

We proceed in the analysis by exploring in detail some reoccurring consequences of the expansion of tourism over the carrying capacity.

The first sign of an excessive growth of tourism is the saturation of the central supply of tourism facilities. Resources (land, buildings, roads, parking places, etc.) in the proximity of the central attractions are limited, but they continue to be visited. When the capacity of the central facilities gets saturated, the complementary industry will grow more dispersed. The first phase of the "vicious circle" (Fig. 2 - A) springs from the incapacity of the heritage city to limit the growth of tourism in accordance to its

physical resources. The complementary product is much more mobile than the primary assets, and the administrative boundaries of the city are to a large extent insensitive to these dynamics. The *tourism region* – the area in which the visitors to the central attractions are hosted – tends to become larger, overcoming the boundaries of the municipality (Miossec, 1976). However, if the city is a very attractive one – as in the case of main European cultural destinations like Venice, Bruges or Salzburg – it might as well overcome regional or even national boundaries. The consequences of the enlargement of the tourist region are two.

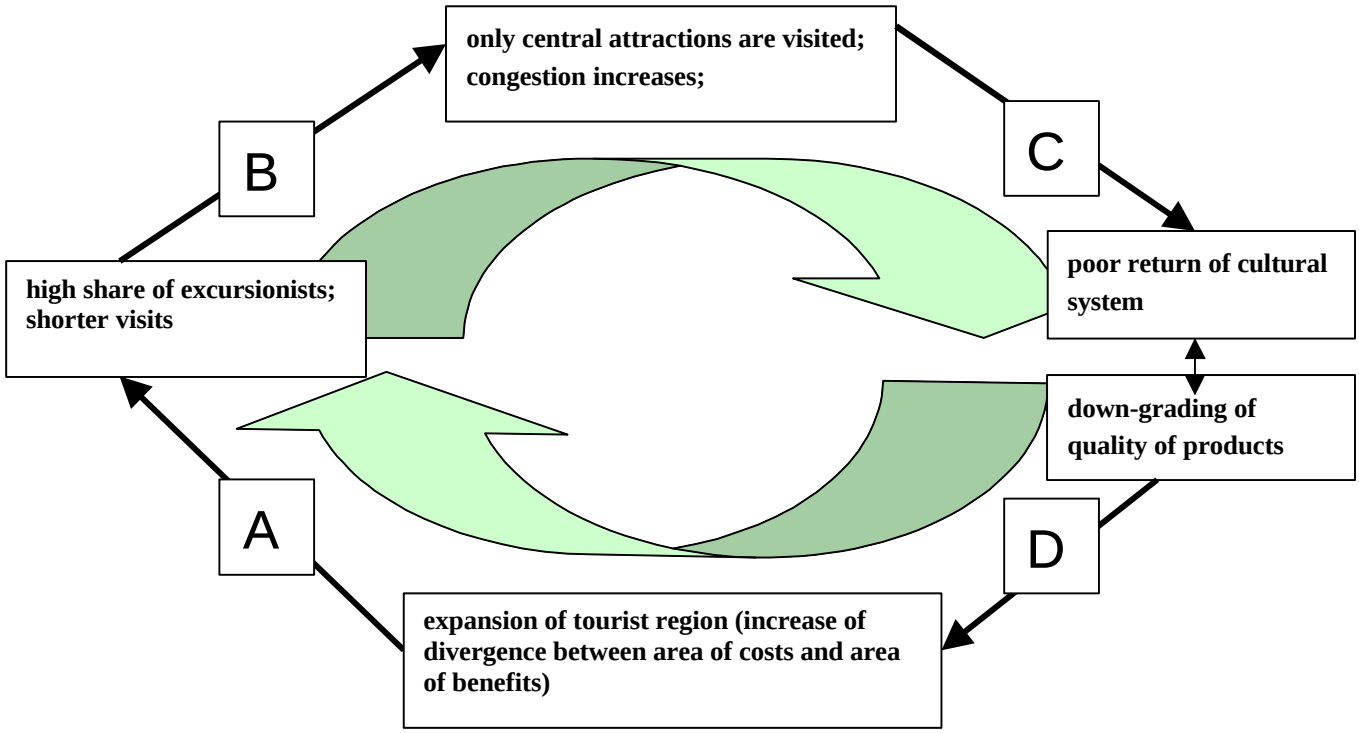

Fig. 2: The vicious circle of tourism development in heritage destinations. First stage (A): The expansion of the tourism region over the city's boundaries turns some of the visitors into "day-trippers". Second stage (B): The increasing number of excursionists only have time to visit the most central attractions, and the concentration of the visit in the day also increases, creating further congestion. Third stage (C): Less control over the benefits from the tourism business implies a decline in the quality content of tourism products. Fourth stage (D): The convenience to become day-trippers increases as a result of the increased congestion and of the de-specialisation of the tourism product.

First of all, the share of day-trippers among the overall number of visitors increases. An increasing number of visitors spend a high share of their budget *outside* the central area, but they continue to impose costs where the main tourist attractions are. Secondly, the flexibility of the visits decreases. On one hand, day trips are typically more sensible to weather conditions and "special occasions", so that their seasonal pattern is more pronounced. Moreover, visitors who commute have less time for

retrieving “tacit” information about the cultural and the complementary products. Consequently they tend to be (*i*) less aware of the qualitative content of the tourist goods and (*ii*) less reachable by traditional information tools (guides, signals, press). Therefore, they also concentrate in space, as the centrally located attractions are reached (and experienced) with a minimal level of information. We enter now a further phase of the vicious circle (Fig. 2 - B): day trips produce more congestion than overnight stays, and in this stage their share on the total number of visits increases.

The incapacity of the heritage city to benefit from tourism in proportion with the growth of tourism is at the bases of the next phase of the vicious circle (Fig. 2 - C). The excessive concentration of the visits and the dispersion of the “selling points” associated with the emergence of day-trips negatively affect the performance of the tourism attractions. In fact, the resources needed for the maintenance of the heritage, for innovations in the tourism product, and for the implementation of information and marketing strategies are to a large extent no longer under the control of the local institutions.

But there is another, subtler mechanism at work: as the share of day-trippers increases, the elasticity of tourist demand respect to quality decreases. Because visitors on the whole are less sensible to quality, the suppliers of tourist goods in the city centre will be able to curtail the quality content of their products maintaining their market share. They may lose some “sophisticated” customers, but they appeal to visitors less concerned with quality and much more sensible to prices. In the end, in a typical process of adverse selection, only low-price/low-quality suppliers are left in the market. Whereas in the initial stages of tourism growth the economic strength of tourism caused the displacement of other economic activities, in this later stage tourism tends to crowd out itself, substituting high quality products with cheap and standardised ones. We are now at the “Mc Donaldisation” of the tourist space. Not only the tourist supply declines in quality to match the demand of the predominant segment, but the whole aesthetic quality of the landscape and the system of cultural values embodied in the city is at stake.

The consequence of this decline in quality is a strong feedback to the very origin of such mechanism. In the fourth and last phase of the vicious cycle (Fig. 2 - D), we can see the full implications of the dispersion of tourism activities that occurred in the first place. With the tourism product getting increasingly banal, and congestion making it more costly for visitors to choose the central facilities for accommodation, the convenience for them to consume non-central facilities increases as well. The visitors evaluate the cost of distance against the prices and the quality of the complementary facilities. An increasing number of them will then choose a peripheral location, thus feeding further the operation of vicious circle.

The circle is now complete. The expansion of the tourist region over the “natural” boundaries of the city centre that occurred in the first place as a result of the growth of tourism demand, is in the end causing this very expansion to continue.

This is a brief account of how the vicious circle is triggered and it develops; the next question that poses is whether this process of relocation of tourism activity from the city centre to the region has an end, or, in other words, if a *steady state* exists. The answer requires an analysis that can only be expressed in formal terms, i.e. a general equilibrium model of the tourism region. A broad description of the equilibrium characteristics is given here, leaving the full analysis to further research.

The vicious circle model suggests that the determinants of the location of visitors in the tourism region are in the end prices and quality. The price gradient depends on the distance of the facilities from the central primary attractions (Rispoli, Van der Borg 1988). Quality can be proxied with congestion – the more the latter, the easier the process of quality curtail – and it is determined by the extension of the tourism region. If we assume that the growth of tourism demand approaches zero, then there might exist an equilibrium in prices and quality/congestion that corresponds to a certain extension of the tourism region, in which the spreading forces (congestion, prices) and the agglomerating forces (proximity to central attractions) are exactly matching each other. A further expansion would not be justified, and the visitors' flow is "optimally" divided between tourists and excursionists.

However, there are two reasons for which such a steady state is unlikely to emerge:

(a) It is questionable whether the growth rate of tourism for a heritage destination of prime importance would "exogenously" decline to zero. New origin markets continuously develop, new target groups are addressed, technological and economic progress makes it easier for people to travel. Therefore, we can assume that the increase in the tourist demand is to some extent persistent.

(b) The pattern of dispersion of the tourism activities in the medium-term equilibrium is generally not matched by an adequate revision of the administrative boundaries of the central municipality (Bauer, 1997). In other words, if in the central areas the tourism balance is on the side of costs, the leakage will be permanent. Even if there is a temporary equilibrium in the sense that the tourism industry has no incentive to relocate further (e.g. with a growth rate approaching zero), in the absence of re-distributive policies the social costs from tourists will still be borne by the residents.

From (*a*) and (*b*), we can figure out that – if uncontrolled – the vicious circle will determine a continuous decline of the tourism attractiveness of the central area, that may turn into an absolute decline in the performance of the tourism industry if/when the quality content and the accessibility fall below some critical threshold. If the spatial dispersion on the tourist activities in the "steady state" is such that not enough resources are channelled in the maintenance and upgrading of the primary product, i.e. the cultural heritage, then the demand for tourism in the region as a whole is expected to decline. The emergence of this catastrophic outcome would depend on the structure of the tourist

system: namely, the structure of mobility, the quality of information, the location of the primary tourist product, the structure of local finance, etc.

This argument represents a spatial-economic rationale to the assertion that «…the damage caused in this way to the image and the reputation of the city may well be irrecoverable. And since these resources do play a key role in the initial stage of the cycle, it could reasonably be doubted that the city might be able to recover its position as a tourist attraction in a later stage» (Van der Borg, Gotti, 1995, p. 28).

The scheme of the "vicious circle" provides an explanation for the decline stage foreseen by the life-cycle model. Is this a common story for destinations of cultural tourism? The empirical evidence does not yield unequivocal indications. Many destinations did experience stagnation or decline after a stage of take-off and one of maturity, but the peculiarity of the contexts might have heavily influenced the events.

In most cases, it is probable that the socio-economic threshold of carrying capacity has been overcome and the perverse dynamics of tourism have started to be experienced. In cities as Salzburg, Toledo, Venice, Bruges, the tourist pressure is perceived as a source of conflict between the stakeholders of tourism and the rest of the population. Yet it is also true that the explosion of mass cultural tourism is occurring now for the first time in history, so that little can be said about the possible consequences of the present patterns of tourism growth. The case of Venice can help to derive some interesting indications about the development and critical points of this process.

3. A case of "vicious circle of tourist development" at work: Venice

3.1 *Introduction: place characteristics and main tourist trends*

Venice is a well-known international attraction, possibly the most famous tourist city in the world; yet few people could imagine that its historical centre (henceforth: Venice HC) in the heart of the lagoon is a "problem area", whereas the mainland city is well integrated in a booming regional economy. With young households pushed out of the centre by inaccessible housing prices and lack of high rank specialised jobs, the population in Venice HC passed from 170,000 to 70,000 in the verge of half a century, and is still decreasing at an yearly rate of ca. 0.5%. The physical characteristics of the isolated central town provide further reasons for moving outside of the town following the jobs. The reoccurring floods are a source of economic uncertainty. At the same time, the tourist pressure on the city increases, determining an exponential trend of the visitors to residents ratio (Fig. 3), now reaching 50 to 1 in Venice HC (175 to 1 if the excursionists are considered as well, on the assumption that each tourist wants to visit the HC at least one time during their vacation).

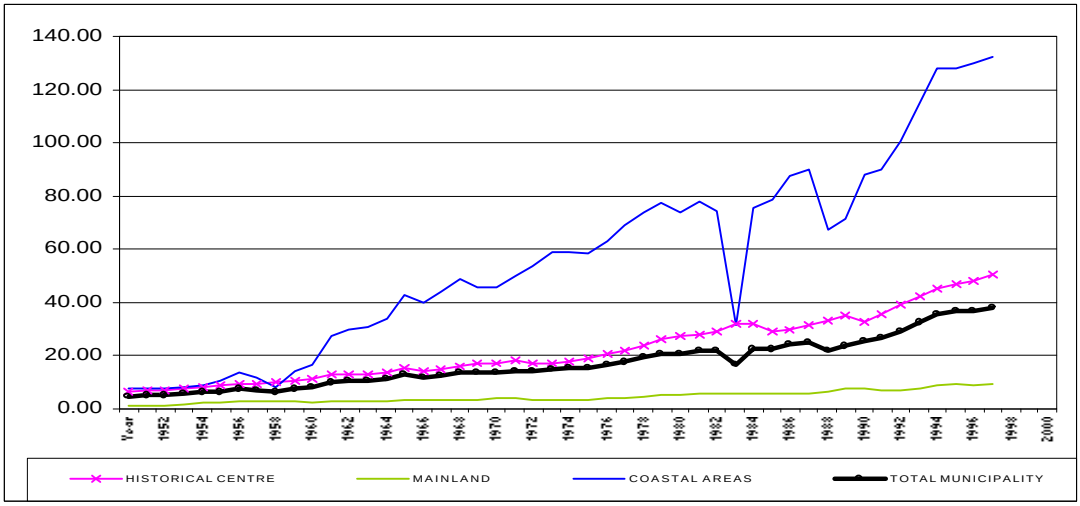

Fig. 3: Visitors to residents ratio in different parts of Venice municipality, years 1960-1995

A signal of the "fragmented" destiny of the different areas of which Venice is composed is given by the reoccurring proposals to split it into different municipalities, until now always rejected at polls[1]. Political instability and interest groups have dominated the local scene for years, though recently a directly elected mayor started a wide-range programme for urban recovery.

3.2 *The Venetian tourist region*

At the end of the seventies, the changes in the structure of the Italian economy and a renovated interest in urban planning brought about a wide-range reflection about the options at hand for the development of Venice. One result of this debate was the necessity to quantify the tolerance of the city with regard to tourism, as it seemed clear that the costs of tourism could become unsustainable and compromise the endurance of the city's functionality and economic soundness. Costa and Canestrelli (1991) adopted a linear programming method to estimate the optimal level and composition of the tourist flow which is compatible with the full functionality of the different sub-systems used by citizens and tourists alike (transports, waste collection, access to cultural institutions, etc.): the *socio-economic carrying capacity*. These experiments indicate that Venice could absorb a total number of about 22,500 visitors, but only a maximum of 10,700 of these should be excursionists. These limits were surpassed in 1987 for 156 days in the year (Costa, 1990); the number of yearly violations has been increasing since then, despite any attempt to smooth the tourist peaks through regulation and planning. The tourist region has surpassed by far the provincial scale, extending in some cases to foreign countries like Austria and Slovenia (Fig. 4).

An exam of the composition of the visitors' flow evidences the extent of the economic leakage provoked by the expansion of the tourist region, with high-budget tourists counting only for the 35% of stays and day-trippers progressively increasing their share in the last ten years. Estimates (Manente and Rizzi, 1993) suggest that the

[1] Since 1998, the part of the beach area (Il Cavallino), hosting half of the yearly tourist flow, is an autonomous municipality.

expenditure of a staying tourist in Venice is on average 30% higher than that of an "indirect" excursionists and almost three times as much as that of a "real" day tripper.

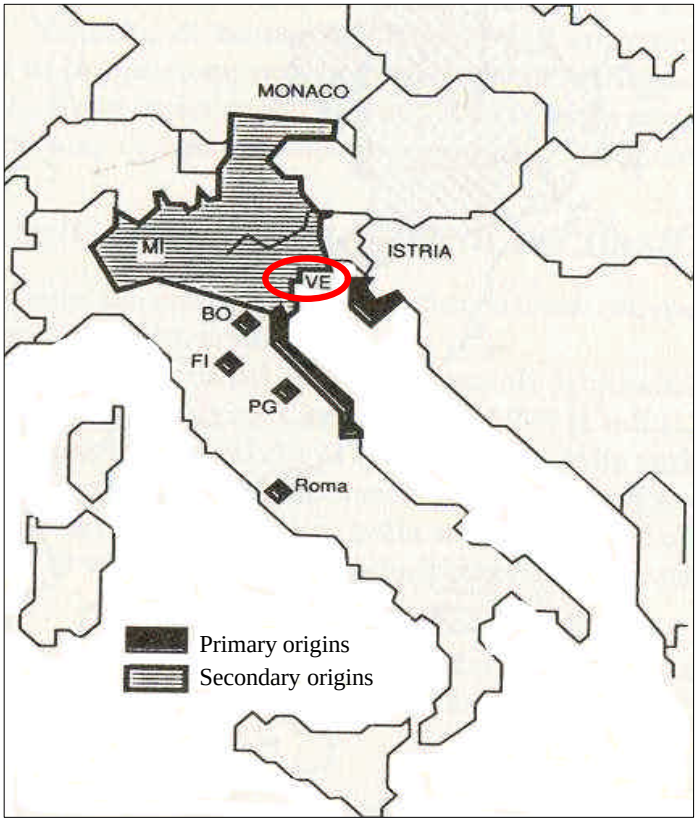

Fig. 4 - The Venetian tourist region and the excursionist flow. *Primary origins* are the residence location of day-trippers. *Secondary origins* are chosen either as alternatives to Venice for a cheaper stay ("false" excursionists) or are the main destinations of holidays but originate indirect visits to Venice ("indirect" excursionists).

Source: Costa and Manente, 1995.

Overnight stays still increase at a yearly rate of 3%, saturating the hotels supply in the city centre for prolonged periods of the year. Yet, the growth of day trips is even higher. Rispoli and Van der Borg (1988) provide an explanation for the sustained growth of the day-trippers segment: a fair share of them finds it more convenient to stay in the periphery of the tourist region. In fact, hotel prices for a given category decrease constantly with the distance from Venice's historical centre (van der Borg, Russo, 1997). A room in a four-star hotel in Padua costs about one third than in Venice. The 40 km distance can easily be covered by train or auto in less than half an hour – the time that it would take to a visitors of Paris or Rome to get to the centre from a hotel in the outskirts. Such enormous difference in tourist prices explains the emergence of this curious character, the "false" day-tripper, whose aim is to visit Venice but prefers to spend the night in its environs. The information about the seasonal distribution of visits shows that while residential tourism accounts for a stable amount of visits throughout the year, excursionists concentrate in the summer period, with highest shares in August and September (see Fig. 6). This pattern is driven by the "indirect excursionism" of seaside vacationers, and by the day-trips of those who come to Venice from their hometown. However, the presence of a fair share of excursionists also in off-peak periods (touching a minimum of 47% in December, 1989 data) is explained by the

existence of “false excursionists”. Their flow is stable and approaches the characteristics and motivations of residential tourists.

3.3 *Mobility, congestion and the character of the visits*

Fig. 5 describes the pattern of inflows and outflows during a typical peak day in Venice. 60-70% of this enormous flow of people and vehicles is concentrated in a couple of hours in the morning and another couple of hours in the afternoon. The average duration of a daily trip is ca. 8 hours (60% of the visits being shorter). Moreover, the greatest share of this flow approaches Venice through its only road/rail connection to the mainland, provoking congestion in the main routes that connect that terminal to the central areas. In the limited time they dispose of, visitors crowd the central tourist attractions around St. Mark's Square, where long queues are often found.

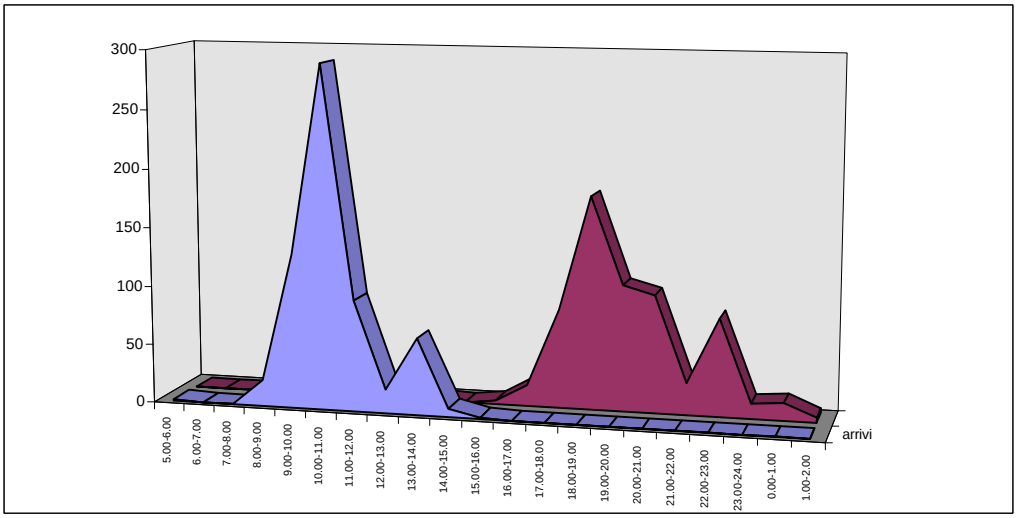

Fig. 5 - Daily pattern of visits to Venice in a non-working day (arrivals blue, departures red), year 1998 (*source*: ICARE, 1997)**.**

Visitors make use of urban facilities, subtracting a significant portion of them to the use of the Venetians, especially during peak days and in the occasion of mega-events[2]. The imposition of external costs to the residents is not central to the present analysis. However, since the excessive cost of urban facilities is a significant factor to explain the massive loss of population occurred in the last 50 years, it is not difficult to

[2] Indovina (1988) estimated that the public space in Venice HC is used by tourists for the 34% (against 49.3% of residents’ use, 12.6% of commuters’, 4.1% of students’). This figure increases to 56.9% if only the most central areas are considered, and to 66.9% in the period July-October.

see how the problems of tourism development are exacerbated as the socio-economic mass of the city gets thinner[3].

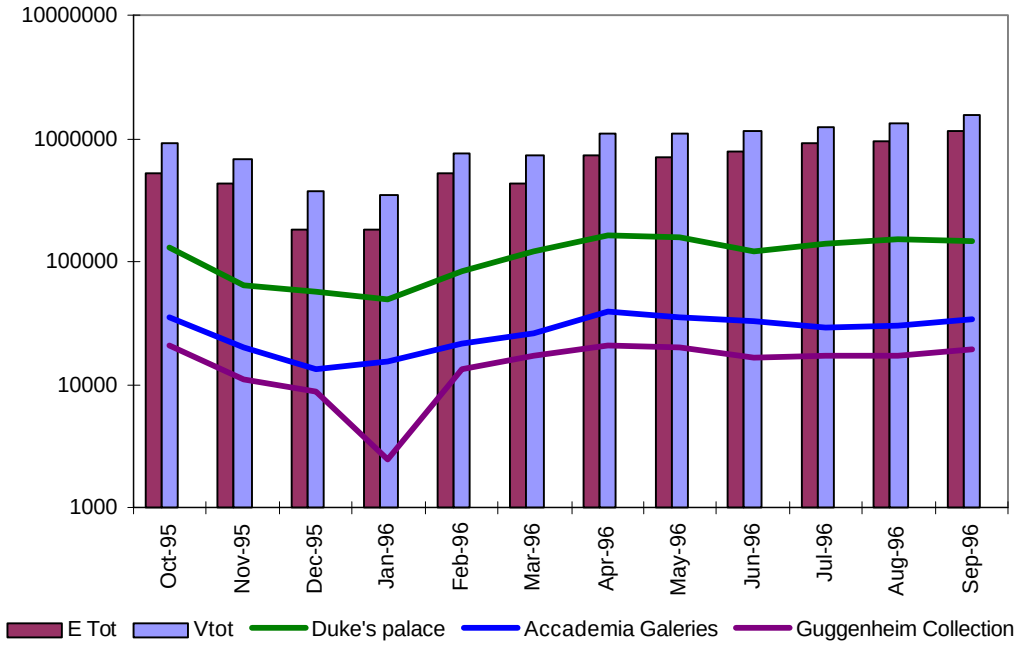

Fig. 6: Visits to the city and visits to the main cultural institutions. (Vtot = total n. of visitors; Etot = n. of excursionists). The Duke's palace is one of the main attractions in the central S. Mark's Square; the other two institutions considered are located in less central areas. Logarithmic scale, survey data. Period 10/95-9/96.

More relevant to the argument of this study is the impact of such an inefficient organisation of the visits on the performance of the cultural tourism industry. As a result of the combined effect of congestion and lack of information, some cultural resources are under-utilised while some other are over-utilised. Only 1 out of 4 visitors comes to Venice to visit something in particular; the same percentage ever pays to get in a cultural institution during their visit (ICARE, 1997). On the whole, far less visitors are able to enjoy the cultural heritage than the city could afford, and the quality of the tourists' experience is eroded by various impediments and time lost in queues. Apparently, the set of cultural resources in Venice is not working as a true "system", fragmented as it is between a host of management and ownership bodies, without a common strategy or a unique selling point. Zago (1996) counts at least 10 directly responsible institutions, public or private, for the museums of Venice. Fig. 6 describes

[3] An example of such "hidden costs" is given by the widening gap between per-capita technical costs and actual costs of waste collection, estimated by Van der Borg and Russo (1997). While the costs of collecting the waste produced by residents and tourists have decreased of 5% in 7 years, the overall cost of collecting waste has actually increased of almost 10%; the difference is mainly imputed to the excursionists' production.

the extent of the mismatch between visits to the city and visits to its cultural institutions: the figures of the Accademia Art Gallery, possibly one of the main collection of Italian renaissance arts, are highly significant. It can be concluded that even if Venice markets itself as an art city of major importance, the return of its cultural system is disappointing.

3.4 *The decline in the quality of the Venetian tourist product*

The various analyses about the use of the cultural institutions make it quite clear that a link exists between visits to such institutions and the length of the trip (e.g., Richards, 1996). The question is quite simple: the Venetian cultural supply is so vast that it could satisfy the demands of a public with quite different preferences, if this public were adequately informed, had the possibility to book their visits, could improve the information content of the visit, and could combine their own visit with opportunities for leisure and entertainment. When the access to city becomes problematic, the very interest for its cultural supply comes less, as well as the willingness to pay for it. Therefore, the capacity of the most central cultural institutions becomes a bottleneck to the whole network. A yearly-congested Dukes' Palace may well cause a leakage of visits to some adjacent attractions (as it is shown by survey data), but it is likely to decrease the share of tourists coming – or returning – to Venice for a cultural visit.

However, it was not just the quality (effective of perceived) of the primary tourist product of Venice to slump in the last years: the decline in the quality of commercial outlets to meet a less sophisticated demand is even more unabridged. The result of such process of reorientation is a dramatic simplification of the economic base of the city. This is particularly evident in the retail and catering sector, but also hotels and boutiques are starting to feel the breath of cheap competitors. The process of crowding-out has already being described by Prud'homme (1986), but has recently gained a new complexity.

Some figures may help to focus on the most important traits of this mechanism. Tabs. A1 and A2 in the Appendix show the composition of the economic structure of Venice (the HC as well as the rest of the Municipality). In Tab. A1, the territory of Venice is divided into *areas* (in bold, I-V) and *quarters* (1-17); in Tab. A2 the HC is further divided in *census zones* (italic, Z1-Z21). Columns 2 and 3 give the share of employees in tourism respect to the total population of the area and respect to the total amount of workers. The "tourist" sector includes all the economic activities that mainly sell to a non-residential demand: the traditional tourist supply and the commercial activities mainly directed to tourists and day trippers (souvenirs, street vendors, artists and artisans, etc.)[4]. Column 4 subdivides the tourist sector in "real tourism" and "para-tourism". The former category lists all the suppliers of primary and complementary

[4] This method follows the main lines of the «tourist satellite account» system (Smith, 1998).

products (cultural assets, hotels, transport, etc.); the latter includes all the *ancillary* activities, like the souvenir business, street vendors, vending machines, cheap handicraft, etc. Finally, columns 5-6 indicate the dynamics in the period 1991-1996 of all tourism and of para-tourism units respectively.

The data provide evidence of a concentration of tourist activities in the most central areas of Venice HC, further reinforced in the last years. More tellingly, we observe a noteworthy substitution of activities related to the cultural, high-quality visits with others that are oriented to the low-elasticity segment of the visitors' flow. Such visitor-driven reorientation of the supply ends up in curtailing the welfare of the residents, who bear the decrease in quality of the products sold: another factor that may explain the persistent outflow of residents from the centre of Venice. A second consequence is that, face to the decline in quality of the venetian tourist supply, an increasing number of potential tourists will be pushed to become commuters or, in general, to neglect the "cultural" motivation.

The data to validate the latter argument are scarce and fragmented. Yet, various sources (such as Scaramuzzi, 1988; Costa and Manente, 1995; Manente and Rizzi, 1993; ICARE, 1998; Van der Borg and Russo, 1998) provide evidence that:

- even at peak days, the hotel rooms are not fully occupied, and this occurs with increasing frequency;
- the number of "repeat visitors" is decreasing;
- the share of "group visits" is increasing respect to individual tourists;
- tour operators are selling packages including a daily visit to Venice which foresee overnight stays at increasingly distant locations (Verona, Bologna, Ravenna beaches).

These "clues" indicate that the prevalence of day trips as a means to visit Venice is less and less linked to the saturation of central accommodation, but rather the result of a decision which takes into consideration some of the costs of sleeping in Venice, of which poor quality and congestion are increasingly important components. As the concept of vicious circle suggests, the elements of distortion in the tourist use of the city become self-feeding, creating further distortions.

In conclusion, evidence suggests that the present growth – mainly pushed by day-trips – may eventually turn to stagnation and decline, to the extent to which the decline in the quality of the tourism products reduces the attractiveness of the city for tourism purposes. The life-cycle of Venice as a tourist destination can then be interpreted as a historical evolution from a state in which visitors were mainly attracted in the central areas, to a stage in which there is a relative spread in the region, and eventually to a stage of absolute dispersion. In the scheme of Tab. 1, after the first two stages of growth, the dynamics of the vicious circle exert their effects, leading to stagnation and to possible decline in the visits.

Tab. 1 - Life-cycle of tourism growth in Venice tourist region, years 1951-2000

core	++	+	=	–
periphery	=	+	++	+
period	pre-1950	1950-1975	1975-2000	2000-?

4. How to break the circle: policy suggestions and final remarks

The "vicious circle" scheme suggests a succession of causative relations between events, of which an initial point can be identified in the violation of the carrying capacity. Clearly, the importance of each link is peculiar to the characteristics of a destination; therefore, calibrating interventions on the most significant of those links yields an effective strategy to attenuate the effects of the cycle in that particular context.

Tab. 2 associates to each of the four stages of operation of the "vicious circle" a typical context where they are likely to occur, and some policies that may hamper or prevent decline. In all the situations in which the capacity of the city's facilities is easily saturated and the tourist region expands rapidly, policies to increase such capacity or to increase the city's attraction potential are necessary, while placing access restrictions may yield contra-productive results. On the other hand, the latter measures are appropriate when – due to the structural characteristics of the site – congestion emerges relatively easily. In general, *soft* controls based on incentives and pricing are preferred because they are cheaper, more flexible, and easier to enforce. However, in situations in which the heritage might be physically endangered by the tourist pressure, *hard* measures are required. Cities in which each of the four links reveals significant – as it seems to be the case with Venice – require an accurate and timely mix of such policies.

In the case of the Italian city, policies based on *soft* interventions are the most appropriate. In fact, these would be politically acceptable in a stage in which there is scarcely any other option at hand for city development rather than tourism, and stakeholders form the tourism industry make themselves strong of this.

Firstly, adequate forms of taxation on tourism have to be found, to attack the first node of the circle, the expansion of the tourist region. For example, the imposition of tariffs on those who do not book a hotel room, or other forms of "disincentive" to excursions. An advance booking system based on telecommunications could easily be integrated with the free issue of a «City Smart Card» to those who reserve, granting a series of benefits to their owners (Van der Borg and Russo, 1998): a win-win solution that is recently gaining support in political circles. On the contrary, taxation on overnight stays – such as hotel-room taxes – reveals contra-productive as it discriminates against staying visits.

Tab. 2 - The four links of the vicious circle, contexts and required policy interventions

	Causation	Context	*Hard* interventions	*Soft* interventions
1.	Increase of tourist demand ⇒ enlargement of tourist region, shorter visits	Difficult expansion of tourist supply, irreproducible heritage **(small centres, islands)**	Zoning, regional planning, enlargement of accommodation capacity in the city centre	Entrance ticket, incentives based on adv. booking, discrimination policies, tariffs, creation of a supra-local 'tourism authority'
2.	Shorter visits ⇒ increasing congestion costs, asymmetric information	Many cultural resources, difficult mobility **(medium-sized art cities)**	Zoning, access regulation, closing of portions of city centre, infrastructure policy, decentralisation of cultural supply	Information & discrimination policies, promotion, creation of "alternative routes"
3.	asymmetric information ⇒ decline in the quality of tourist supply (primary and complementary)	Limited competition, low controls, scarce homogeneity of cultural institutions **(mature destinations, transition countries)**	Licensing regulations, law enforcement, police controls in central areas, interpretation and welcome centres	Integral management of the cultural system, incentive to start ups, quality labels, virtual access to cultural products, tourist e-commerce
4.	decline in quality ⇒ incentive to commuting and disincentive to cultural visits	Sensitiveness to reputation, international attention, prevalence of tour-operated holidays, presence of alternatives in the hinterland **(mature metropolitan destinations, high accessibility)**	Regional-national planning	Reputation policies, promotion, diversification of tourism supply, fidelisation, marketing, rejuvenation of products

To decrease the extent to which tourist flows generate congestion, adequate information on the "peripheral" assets of the city must be provided, with the possibility to book in advance and arrange tailor-made itineraries. This requires diversifying the points of access to the HC. Closely linked to this issue is the complex problem of quality. The cultural sector must be re-organised on the assumption that the *value* of cultural visits should be improved, and that – though guaranteeing full access to any potential visitor – the cultural system must become a self-sustaining industry with a coherent strategy and solid connections with other growth sectors, like producer services. It is expected that a high-quality primary supply will trigger off a process of selection towards high-budget visitors that also enriches the commercial and economic viability of the city (Vera Rebollo and Dávila Linares, 1995; Keane, 1996).

Finally, forms of diversification of the supply and a fidelisation policy with respect to the cultural assets are needed to attract to the HC new market segments while keeping in touch with the "old" customers. Obviously, this approach cannot but be grounded in a sound and wide-ranging planning strategy, which takes into account the impact of tourism development on the other sectors of the economy. A sustainable tourism cannot develop in a rotten house. Tourism management, though, can prove a phenomenal starting point. To establish the right synergies, to create value and to sell it, to act in accordance to the market and not against it, and to make sustainable tourism a good business for everybody, is the challenge.

This paper has introduced an instrument of analysis, the "vicious circle" of tourism development in heritage cities, which is an elaboration and a specification of a class of evolutionary models – the life-cycle of tourism destinations. This scheme turns out to be particularly useful to describe the spatial dynamics that may lead to a decline of the attraction capacity of some tourist cities, and to calibrate the most appropriate policies to prevent the full development of such dynamics. The case of Venice has been presented to illustrate how the vicious circle works in practice and which suggestions for policy could be derived from its application.

Despite its convenience as a support for policy, the vicious circle model has limited accuracy; the complexity of the dynamics in the tourist region is such that this simple scheme cannot capture but the approximate trends. To analyse in further depth the dynamics of the tourist region, it is necessary to expand the analysis in two directions, that is the study of the long-term properties of a regional equilibrium, and the process of quality substitution in the city centre. These developments require the formulation of a formal model, which can use the scheme of the vicious circle as a conceptual base. The gain in insight from the use of these models (and of the simulations based on them) might greatly improve the information available to policy makers and city planners of heritage cities.

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References

Bauer, Michel (1997), "Les delimitations d'un territoire touristique", *Revue de tourisme*, 2: 3-12.

Bramezza, Ilaria (1996), *The competitiveness of the European city and the role of urban management in improving the city's performance: the cases of the Central Veneto and Rotterdam regions*, Thesis Publishers, Amsterdam.

Butler, Richard W. (1980), "The concept of a tourist area cycle of evolution: implications for management of resources", *Canadian Geographer* 24 (1): 5-12.

Cazes, Georges (1994), "À propos du tourisme urbain: quelques questions préalables et dérangeantes", in *Tourisme urbain*, AFIT - Agence Française de l'Ingegnerie Touristique, Cahiers Espace 39, Paris: 26-30.

Costa, Paolo (1990) "Il turismo a Venezia e l'ipotesi VenetiaExpo 2000", *Politica del Turismo*, 1: 1-17.

Costa, Paolo, and Elio Canestrelli (1991), "Tourist carrying capacity: a fuzzy approach", *Annals of tourism research*, 18: 295-311.

Costa, Paolo, and Mara Manente (1995), "Venice and its visitors: a survey and a model of qualitative choice", *Journal of Travel and Tourism Marketing*, 4(3): 45-69.

Da Conceiçao Gonçalves, Vitor F., and Paulo M. Roque Aguas (1997), "The concept of life-cycle: an application to the tourist product", *Journal of Travel Research*, 36 (2): 12-22.

Debbage, Keith G. (1990), "Oligopoly and the Resort Cycle in the Bahamas", *Annals of Tourism Research*, 17: 513-27.

Deprest, Florence (1997), *Enquête sur le tourisme de masse: l'écologie face au territoire*, Belin, Paris.

Garrod, Brian, and Alan Fyall (2000), "Managing heritage tourism", *Annals of Tourism Research*, 27 (3): 682-706.

Getz, D. (1992), "Tourism planning and destination life cycle", *Annals of Tourism Research*, 19: 752-770.

Gormsen, Erdman (1981), "The spatio-temporal development of international tourism, attempt at the centre-periphery model" in *La consommation d'espace par le tourisme et sa préservation*, Union géographique internationale, Commission de géographie du tourisme et des loisirs, 150-170.

Holder, Jean S. (1991), Pattern and impact of tourism on the environment of the Caribbeans, in *Managing Tourism*, ed. by S. Medlik, Butterworth-Heinemann, Oxford: 278-284.

Hunter, Colin (1997), "Sustainable tourism as an adaptive paradigm", *Annals of Tourism Research*, 24 (4): 850-867.

ICARE - International Center for Art Economics (1997), *Applicazione della Telematica alla Gestione dei Flussi di Visitatori*, Study commissioned by the Research Centre Telecom Italia S. Salvador, Final report.

Indovina, Francesco (1988), "Turisti, pendolari, residenti" in *COSES informazioni*¸ 32/33: 27-36.

Ioannides, Dimitri (1992), "Tourism Development Agents - The Cypriot Resort Cycle", *Annals of Tourism Research*, 19 (4): 711-31.

Keane, Michael J. (1996), "Sustaining quality in tourism destinations: an economic model with an application", *Applied Economics*, 28: 1545-1553.

Manente, Mara and Dino Rizzi (1993), *I visitatori di Venezia: 1989-1992*, Working Paper n. 93/13, Department of Economics, University of Venice.

Miossec, Jean-Marie (1976), *Eléments pour une théorie de l'espace touristique*, Centre des Hautes Études Touristiques, Les cahiers du tourisme, Série C, n. 36, Aix-en-Provence.

Plog, Stanley C. (1987), "Understanding psychographics in tourism research", in *Travel, tourism and hospitality research*: *a handbook for managers and researchers*, J.R. Brent Ritchie, Charles R. Goeldner, Wiley, New York: 202-213.

Prud'homme, Rémy (1986), *Le tourisme et le développement de Venise. Moteur ou frein*?, OCDE, IUP, Université de Paris XII, Créteil, mimeo.

Richards, Greg (1996), *Cultural tourism in Europe*, CAB International, Wallingford.

Rispoli, Maurizio and Jan Van der Borg (1988), “Più vicini, più cari”, in *COSES informazioni*, 32/33: 57-64.

Sassen, Saskia (1994), *Cities in a world economy*, Pine Forge Press, Thousand Oaks Ca.

Scaramuzzi, Isabella (1988), “Tanto rumore per nulla”, in *COSES informazioni* 32/33: 15-20.

Smith, Stephen L.J. (1998), “Tourism as an industry”, in *The economic geography of the tourism industry: a supply side-analysis*, ed. by D. Ioannides and K.G. Debbage, Routledge, London.

Van der Borg, Jan (1991), *Tourism and urban development*, Thesis Publishers, Amsterdam.

Van der Borg, Jan, and Giuseppe Gotti (1995), *Tourism and cities of art*, UNESCO/ROSTE Technical Report n. 20, Venice.

Van der Borg, Jan, and Antonio Paolo Russo (1997), *Lo sviluppo turistico di Venezia: analisi territoriale e scenari di sostenibilità*, Working Paper FEEM n. 07/97.

Van der Borg, Jan, and Antonio Paolo Russo (1998), “Il turismo sostenibile”, in *Venezia sostenibile: suggestioni dal futuro*, ed. by Ignazio Musu, Il Mulino, Bologna: 243-297.

Vera Rebollo, J. Fernando, and J. Manuel Dávila Linares (1995), “La cultura y el patrimonio histórico como fundamiento de prácticas de ocio turistico en la ciudad”, in *Estudios Turisticos*, 126: 161-177.

Zago, Marina (1997), “L'offerta museale veneziana”, in *La provincia ospitale*, ed. by G. Di Monte, I. Scaramuzzi, Il Mulino, Bologna.

Appendix:

Tab. A1: Structure and dynamics of tourism industry, municipality of Venice, years 1991-1996.

Cod.		1 Population	2 Tour. Employees on pop.	3 Tour. Employees on total empl.	4 *PARATUR* index*	5 Increase tour.units 91-96	6 Increase *PARATUR* units 91-96
1	S.Marco, Castello, S.Elena	24,643	34.01%	34.16%	0.36	33.79%	50.82%
2	Cannaregio	20,639	15.52%	29.83%	0.34	33.97%	38.74%
3	Dorsoduro, S.Polo, S.Croce	22,489	10.92%	15.84%	0.37	35.76%	30.95%
4	Giudecca, Saccafisola	6,903	2.81%	15.23%	0.05	171.43%	500.00%
(7)	Murano	*5,473*	27.11%	49.27%	0.84	27.27%	57.96%
I	**HISTORICAL CENTRE**	**80,147**	**19.61%**	**28.54%**	**0.41**	**37.10%**	**46.26%**
5	Lido, Alberoni, Malamocco	19,060	4.65%	23.39%	0.11	35.04%	87.50%
6	Pellestrina, S.Pietro in Volta	4,882	2.60%	15.10%	0.19	5.88%	0.00%
9	Cavallino, Treporti	10,890	4.22%	21.89%	0.13	43.45%	157.14%
II	**SEASIDE**	**34,832**	**4.23%**	**21.89%**	**0.12**	**37.46%**	**114.63%**
8, (7)	Burano, Mazzorbo, Torcello, S.Erasmo	*5,175*	2.92%	29.61%	0.31	66.67%	191.67%
III	**LAGOON - INNER ISLES**	**5,175**	**2.92%**	**29.61%**	**0.31**	**66.67%**	**191.67%**
10	Favaro Veneto, Campalto	25,044	1.59%	8.66%	0.28	37.21%	63.64%
11	Carpenedo, Bissuola	41,422	0.96%	7.45%	0.13	36.26%	100.00%
12	Terraglio	4,010	2.54%	4.82%	0.10	36.84%	200.00%
13	S.Lorenzo, XXV Aprile	25,739	5.10%	9.28%	0.37	15.14%	5.34%
14	Cipressina, Zelarino, Trivignano	14,815	1.00%	6.76%	0.43	30.56%	25.93%
15	Piave 1866	25,447	9.46%	15.26%	0.10	107.45%	450.00%
16	Chirignago, Gazzera	21,584	0.61%	4.43%	0.00	54.76%	+
18	Malcontenta	2,407	2.33%	7.67%	0.00	6.67%	+
(17)	Marghera città, Catene	*28,475*	1.89%	6.28%	0.29	67.89%	51.11%
IV	**MAINLAND**	**188,943**	**2.91%**	**9.73%**	**0.26**	**49.68%**	**62.96%**
17	Ind, area Marghera	204	38.73%	0.39%	0.00	27.78%	+
V	**PORT AND INDUSTRIAL AREA**	**204**	**38.73%**	**0.39%**	**0.00**	**27.78%**	**+**
	TOTALE COMUNE	**309,301**	**7.41%**	**16.48%**	**0.27**	**42.08%**	**55.38%**

*: units supplying goods included in 'paratourism' on total tourism supply

+: zero units in base year 1991

Tab. A2: Structure and dynamics of tourism industry, Historical Centre of Venice, years 1991-1996.

Cod.		1 Population	2 Tour. Employees on pop.	3 Tour. Employees on total empl.	4 *PARATUR* index*	5 Increase tour.units 91-96	6 Increase *PARATUR* units 91-96
Z1	**Rialto**	5,950	16.35%	19.05%	0.53	23.77%	24.32%
Z2	**S. Giacomo**	3,142	2.42%	7.87%	0.14	84.21%	100.00%
Z3	**Frari**	4,044	10.71%	21.30%	0.18	37.29%	40.28%
Z4	**S. Margherita**	4,141	24.08%	20.36%	0.16	43.37%	50.51%
Z5	**S.Stefano**	3,535	127.86%	48.70%	0.25	16.82%	21.13%
Z6	**S. Luca**	1,116	148.30%	27.60%	0.53	37.11%	39.13%
Z7	**S. Canciano**	3,417	5.50%	13.13%	0.33	34.29%	38.46%
Z8	**SS. Apostoli**	3,304	8.54%	20.27%	0.16	66.67%	106.25%
Z9	**S. Alvise**	4,609	0.95%	4.03%	0.10	38.89%	35.00%
Z10	**S. Leonardo**	9,309	28.89%	39.42%	0.40	27.48%	25.23%
Z11	**S. Marta**	4,768	6.67%	7.37%	0.30	28.57%	26.67%
Z12	**Salute**	1,154	6.07%	22.65%	0.14	16.67%	14.29%
Z13	**S.M. Formosa**	3,860	16.63%	30.34%	0.38	46.15%	48.63%
Z14	**S. Francesco**	2,370	18.86%	18.43%	0.07	46.15%	85.71%
Z15	**Bragora**	4,107	13.66%	49.60%	0.20	43.18%	52.73%
Z16	**Via Garibaldi**	6,365	1.98%	15.14%	0.27	33.33%	42.22%
Z17	**S. Elena**	2,427	0.74%	4.95%	0.00	14.29%	28.57%
Z18	**Sacca Fisola**	1,965	0.66%	5.56%	0.00	175.00%	175.00%
Z19	**S. Eufemia**	1,875	1.33%	6.56%	0.20	325.00%	320.00%
Z20	**Redentore**	3,216	4.85%	16.88%	0.00	123.08%	138.46%
Z21	**Murano**	5,473	27.11%	49.27%	0.83	27.27%	52.63%
TOTAL HIST. CENTRE		**80,147**	**19.61%**	**28.55%**	**0.41**	**37.02%**	**40.75%**

Source: own elaboration on Census 1991and 1996 data; taken from Van der Borg, Russo 1997. Darker cells indicate figures above column average.