**Hezi Israeli**

**Transport/Tourism Strategies for Accessibility Management in Tourist Cities**

1. **Introduction**
2. **The Relationship between Tourism and Transportation - Theoretical Overview**

There are very few studies of an interdisciplinary nature drawing together the fields of tourism and transportation. For this reason, the relationships between transportation and tourism have still not been investigated deeply (La Rocca, 2015; Gross and Grimm, 2018). Although transport has been acknowledged as one of the most significant factors shaping the development of international and domestic tourism (Page, 1999), the importance of tourism-related mobility has never been thoroughly investigated in mobility studies (Chew,1987; Gunn,1994; Hall,1991; Inskeep,1991; Page,1994,1999). This lack of theoretical grounding is striking given that, in decent decades, tourism has developed into one of the most significant types of mobility. Only lately has there been any impetus in terms of studies to address this dearth of theoretical resources (Gronau, 2017).

The main problem stems from the fact that conventional transport research has, by and large, tended to focus on systematic demand trips (such as commuting), which are characterized by having one origin and one destination. It is clear that insights gained from studies on regular mobility cannot easily be transferred to non-regular tourism and/or leisure trips given the substantial difference in their natures. It is far more difficult to describe and explain multi-destination, infrequent travel where, as opposed to utilitarian commuting, the trip is considered an end in itself.

As mentioned above, previous studies have tended to ignore the problematic nature of tourism-oriented transport. As a consequence, there is a glaring lack of research on mobility, accessibility and transport management strategies for constrained urban settings in the context of leisure travel.

Most studies of transport in relation to tourism have been descriptive in nature and have focused on modes of transport used by tourists to transit from their place of origin to their destinations and back (Page, 1994; Hodgson, 1988; Prideaux, 1993). Other studies, also of a descriptive nature, have recognized the role of transport systems as an essential component of successful tourism development (Hall et al., 2017; Gronau, 2017; Papaix and Coca-Stefaniak, 2020; Kaul, 1985; Wheatcroft, 1994; Masson and Petiot, 2009; Khadaroo and Seetanah, 2008).

The confluence between the non-systematic demand created by tourists, and the systematic demand of commuters, in the same space and using the same infrastructure, has the effects mentioned above. Some studies analyze these effects, but very seldomly do they offer complete solutions (Page, 1995; Halsall, 1998; Hall, 1993, 1999; Prideaux, 2000; Gronan and Kagemeier, 2007; Schiefelbusch et al., 2007).

Many studies have focused on travel behavior and travel patterns to urban tourist destinations. Some of these have concentrated on general modes (Halsall, 1998; Scuttari et al., 2011) while others on specific modes such as “dockless” bike sharing (Yang et al., 2019), public transportation (Miravet et al., 2021) and pedestrian behavior (Asriana,, 2021). Forecasting the demand for tourism in relation to transportation infrastructure and modes has been performed in several studies. These studies indicate data and parameters that can influence the demand but, here too, tools for improving accessibility are not suggested (i.e Okuyama, 2011; Tsukai et al., 2010; Perez-Olhoyoi et al., 2017; Yang et al., 2021). Transportation planning models are most frequently used for the analysis of travel patterns (Mortazavi and Nerhagen,1998; Cohen and Harris,1998; Tot and David, 2010; Mason and Petiot, 2009; Tsukai et al., 2010) and investigating the spatial distribution of tourism flows and their implications for planning, has been at the core of a number of studies on different transportation modes such as taxis (Bing et al., 2021), public transportation (Domenech and Gutierez, 2017), sightseeing buses (Farias, 2010), and general modes (McKercher and Lew, 2004; Gao et al., 2021).

Other studies have focused on measuring the appeal of destinations to tourists. Tol and David (2010) explored the link between accommodation turnover and accessible public roads, while Kahtani et al. (2009) identify suitable methods for measuring accessibility to tourist attractions using a gravity model. Evaluations of the appeal of destinations in relation to different accessibility parameters have also been conducted, mainly, in terms of tourist behavior (Masson and Petiot, 2009; Khadaroo and Seetanah, 2007, 2008).

Only a few studies have looked into mobility management issues. Unfortunately, they have tended to be rather narrow in scope given the complex array of transport/tourism-related problems, in general, and in urban areas in particular. Their conclusions call, for example, for promoting the use of public transport (mainly buses) and limiting car access in urban areas (La Rocca, 2015; Miravet et al., 2021; Hospers, 2019; Holding and Kreutner, 1998; Halsall, 1998; Eaton and Holding, 1996; Albalate and Bel, 2010; Gronan and Kagemeier, 2007). Other studies have focused on identifying the most important factors influencing the use of public transport and the associated level of satisfaction with services based on user profiles (Virkar and Mallya, 2018; Flows at al., 2019; Tan and Ismail, 2020; Guti´errez and Miravet, 2016). In the main, their recommendations concerned increasing the awareness among transport-planners about visitor requirements while moderating the conflict between locals and tourists using the same transport infrastructure. Some studies suggested various strategies, like the use of Park and Ride (Halsall, 1998), transportation integrated systems (Lehrer and Freeman, 1998), and integrated tickets (Halsall, 1998, Kraan et al., 1998), public transportation lines oriented to tourist attractions with flexible stops (Ismail et al., 2017), and the use of city tours (Farias, 2010; Rudjanakanoknad and Rattanasuwan, 2011). Many other studies have looked at small-scale transport means capable of easily diffusing demand. The most popular solutions include bikes of various kinds: personal, rented, with or without docks, etc. (Yang et al., 2019; Yang et al., 2021; La Rocca, 2015; Nilsson, 2019; Davies et al., 2010). Other suggestions include small electrical vehicles for short distances (Davies et al., 2010) and cable cars for destinations which present challenging topography (Sahril et al., 2020). Another strategy for diffusing demand is developing walkable pedestrian routes with easy access to public transport within cities (Asriana, 2021; Ram and Hall, 2018; Hall et al., 2017). Another approach, although not transportation-oriented, was found in a study of overtourism in 13 European cities which indicated the existence of a clear preference for enhancing the tourism industry, mainly the attractions, in order to respond to increasing demand (Koens et al., 2018). There is no doubt that such an approach is unsustainable without first solving the problems of accessibility.

Only a few studies considered the simultaneous use of several strategies. Schiefelbusch et al. (2007) suggest a combined strategies method for event destinations and introduce the concept of “travel chains” combining travel and tourism activities. This facilitates the evaluation of the sustainability of transport services and packages by allowing for the selection of an appropriate strategy. A comprehensive set of actions, based on best practices, was identified and appears as a checklist for planners for facilitating the adoption of suitable strategies (La Rocca, 2015). Such strategies could be balanced between pull measures (incentives) and push measures (constraints) in order to promote the most sustainable way for visitors to enjoy a city. Pull measures refer to mobility policies for promoting “car-free tourism”, while push measures refer to mobility policies aimed at dissuading car-use by imposing restrictions. Each of the two categories of actions is divided into two groups of actions: functional actions - mainly concerning the administrative level, and physical actions - mainly concerning the quality of urban spaces. The outcome is a long and detailed list of actions, with transportation, administrative, economic, social and urban aspects considered, from which planners or decision-makers can customize appropriate strategies. A discussion of the selection process of actions and the way strategies might be formulated and implemented is beyond the scope of this study. The use of comprehensive sets of strategies, specifically in historical cities, including implementation procedure, is suggested by Israeli and Mansfeld (2003) based on ARTIST (2000). In order to remain relevant and useful, this research needs generalization and updating.

With respect to the above, this paper investigates various aspects of the relationship between urban transportation systems and urban tourism. Based on a large sample of good practices and on empirical case studies from various European cities and other cities worldwide, this paper classifies solutions for managing tourism and visitor mobility into a set of main strategies. These solutions, arrived at using multi-objective analysis, can maintain the balance between the physical/social environment and the visitor experience, and can contribute to making destinations more sustainable.