Viewpoint

You are the way you fly: on the association between business travel and business class travel

Introduction

The objective of this Viewpoint is to scrutinize the commonsensical association between 'business travel' and 'business class travel'. Indeed, in research on theory and practice in air transport, both concepts are often assumed to be almost one and the same. For instance, the number of 'business visitors' at an airport is often guesstimated based on the number of 'business class' bookings. Thus the Belgian branch of BCD Travel, a leading provider of global corporate travel management, declared in a 2007 press statement that in 2006 Belgian business travelers were primarily flying to New York, Frankfurt, Munich, London and Zurich because these cities were the most important destinations of customers booking business class tickets¹.

It is, however, clear that in practice the business class/business travel relation depends *inter alia* on corporate policies and individual motives in terms of travel planning. For instance, business travelers do not necessarily travel in business class, while some (ostensibly rich) tourists may well travel in business class because of enhanced comfort². Furthermore, the analytical connection may exhibit a variegated pattern as some business travelers may well fly economy class on short-haul flights because of the short travel time (e.g. some companies have a travel policy that only allows business class travel for intercontinental travel).

To our knowledge, the conceptual and empirical relations between 'business travel' and 'business class travel' have not yet been explicitly broached in research on air transportation. The starting point of this Viewpoint, therefore, is that transport researchers and policy-makers should treat this commonsensical association as an assumption that needs validation and specification rather than as a grounded truth. In our argument, we use a number of recent insights from research on the sociology, economics and geography of business travel summarized in a recent book on this topic (Beaverstock et al., 2010a) to spell these relations out in more detail.

Conceptual relations between 'business class travel' and 'business travel'

Whatever else it may be, 'business class travel' is obviously a high quality travel class. In general, these quality characteristics include (1) travel flexibility (e.g., tickets can often be changed without an additional cost); (2) enhanced comfort and associated amenities in the aircraft (e.g., more legroom and laptop power ports for each seat); and (3) a hassle-free environment between check-in and the actual flight (e.g., lounges with Internet connections and meeting rooms) (Bowen, 2010). It is obvious that many of these amenities are designed to satisfy the needs of 'business travelers' and hence the use of the name 'business class' by many airlines, which in turn leads to the commonsensical notion

¹ There have been other, more refined approaches for estimating the amount of business travel, but these are often based on miniscule sample surveys of travelers, who enter, or leave, the boundaries of nation states rather than systematic appraisals of corporeal business flows (see Beaverstock and Faulconbridge, 2010).

² See Alderighi et al. (2005) for a discussion of the use of low cost carriers for business travel.

that 'business travel' and 'business class travel' are essentially two sides of the same coin. However, there are – in addition to the straightforward example of business travelers not flying in business class – at least two conceptual reasons to call this relationship into question.

The first problem relates to the fact that the notion 'business travel' is in practice a chaotic concept. That is, it is difficult to disaggregate passenger motivations for air travel, because a single trip can assume different roles. As Lassen (2006, 2010) has recently pointed out, although regular travel may well be necessary for a number of employees (e.g. having face-to-face meetings across the globe), their travel may at the same time equally involve engagement in a number of other non-business activities. Lassen therefore argues that the need for business travel is not only constructed on the basis of demands, structures, materialities and expectations associated with work, but also on the basis of more individual orientated conditions such as experience, consumption, tourism, health, identities, spare time, family, life style, values, dreams and goals. This implies that it is quite difficult to work out an unambiguous distinction between 'business air travel' and 'non-business air travel'.

The second problem is that, similarly, 'business class travel' is not a straightforward category. Business class, for instance, has started to disappear from a number of short/medium haul routes. On these routes, seats are the same for all passengers; only the flexibility of the ticket and the food and beverage service differs (e.g. until the recent Lufthansa takeover, Brussels Airlines employed a 'full fare economy' versus 'discount economy' scheme rather than business class versus economy class). Furthermore, most low-cost carriers, such as Ryanair in Europe and JetBlue in the United States, do not offer any premium classes of service. As a consequence, business class is now found mostly on international routes and aircraft that are configured for long-haul travel³. In addition, even if carriers make a distinction between economy class and business class, the division is becoming increasingly complicated. For instance, some airline carriers offer Premium Economy seats (e.g. United Economy Plus on United Airlines flights), a separate class of seating and service offering that provides extra legroom as well as additional amenities, which can include laptop power ports and premium food service. Importantly, this fuzzy distinction has a spatial dimension in that the disparities in 'business class travel' often relate to the different strategies pursued by the so-called legacy carriers. These erstwhile 'national carriers' still largely dominate some key 'national airports' (e.g., British Airways at London Heathrow and KLM at Amsterdam Schiphol). The dominant carrier strategies at such airports lead to an exaggeration of the number of 'business class' travelers for these airports. For instance, Scandinavian cities have until recently enjoyed large proportions of business class travel because dominant regional carrier SAS has long been at the forefront of business class travel. The net effect of this bias is that the measurement of the scale of business travel based on business class bookings for, say, Copenhagen and Stockholm will be somewhat overvalued when compared to, say, Brussels and Amsterdam.

Taken together, it is clear that assumptions of a straightforward connection between 'business travel' and 'business class travel' are problematic at best. A key question arising from this brief review of concepts is whether all this implies that it is *de facto* impossible to derive meaningful measures of the spatiality of business connections based on business class statistics. Put differently: the fundamental question we are facing then is whether statistics on business class travel can provide us with satisfactory proxies for assessments of business-related linkages between

³ However, even the long-haul routes operated by the so-called legacy carriers may give us a far-from-complete picture of the overall spatiality of business class travel. This is because a number of all-business carriers (e.g. MaxJet on the London-New York route) began competing for a share of the lucrative long-haul business class traffic, albeit that high fuel prices and softening demand ultimately made their business model unsustainable. In addition, there is the small but until recently growing market of private aviation (Budd and Hubbard, 2010).

metropolitan areas in the face of these conceptual distortions. To address this issue, the next section discusses some basic features of business class travel.

Implications for theory and practice: does the business class – business travel association hold?

Research on business (class) travel has long been hampered by the lack of readily available data on the geography of business (class) travel at large (Faulconbridge et al. 2009; Beaverstock et al., 2010b). This is because some of the most commonly used airline statistics (Official Airline Guide, IATA, ...) feature information on general flow patterns through the aggregation of connections in different fare booking classes (see Derudder and Witlox, 2008). There are, however, a number of exceptions to this rule. Here we use a dataset devised by SABRE Airport Data Intelligence, which contains worldwide booking information from 2002 onwards. This information is drawn from Computer Reservation Systems (CRS), which are electronic platforms used by travel agencies to manage airline bookings, car rentals and hotel reservations (Devriendt et al., 2010). For each connection, data on carrier, origin and destination, number of passengers (subdivided into different cabin classes), revenues, connecting airports, etc. is stored. This dataset has obviously numerous possible applications (as well as some analytical drawbacks⁴), but for the modest purposes of this Viewpoint we merely focus on the (monthly) air travel flows between the 20 top-ranked 'world cities' in the year 2005 (Derudder et al., 2010). This results in an inter-city matrix summarizing nearly 790 million trips between 57 airports⁵, of which 93% in economy class and 7% in business class.

The two features of this inter-city matrix most relevant for our purposes relate to the temporality and spatiality of economy and business class travel in 2005. If business class flows do indeed capture patterns of business travel, it can be expected (1) that business class travel will primarily peak/dip in non-holiday periods (e.g. March and November) and holiday periods (e.g. July and August) respectively; and (2) that business class travel will be primarily be more orientated towards clear-cut business centers (e.g. London, New York and Hong Kong). If both patterns are found in reality, then this suggests that data on business class travel can indeed be used as a reasonable proxy for an assessment of business travel in spite of the limitations discussed in the previous paragraph.

First, there is indeed a straightforward difference in seasonal intensity for both types of cabin classes. Figure 1 gives an overview of the monthly fluctuations in air travel in 2005 for the 20-city dataset for both cabin classes. The monthly variations in connectivity are gauged through z-scores so that inter-cabin class comparisons are possible in spite of different passenger volumes. The seasonality of air travel is obviously different for economy and business class bookings. The economy class curve increases from January to July/August, and then decreases again towards the end of the year. The business class curve, in contrast, reaches its lowest levels in major holiday periods (July/August and December/January). The major point here is that the contrasting curves in Figure 1 suggest that, in general, air travel in business class does on average capture business travel.

Figure 1 about here

⁴ One important drawback of this dataset is related to its pure CRS-origin: direct bookings with an airline are excluded.

⁵ The airport-based database was converted into a city-by-city database by summing the number of passengers over all the airports for a specific city (e.g. the flows to/from Heathrow, Stansted, Gatwick, City Airport, Oxford and Luton are aggregated in a single London measure). Given that we do not know the home-based location of the travelers, we summed the passengers travelling from city A to city B with those traveling in the opposite direction, and grouped the same connections, resulting in a database of non-directional flows. Aggregating "business class" and "first class" resulted in a measure of "business class travel", whilst data on "Premium coach" and "Discount coach" was summed into "Economy class travel".

Second, the absolute magnitude of business class travel is indeed higher for major 'world cities'. Table 1 contains three world city rankings, i.e. (i) according to their connectivity in the office networks of globalized business services firms as measured by the Globalization and World Cities (GaWC, <http://www.lboro.ac.uk/gawc>) research network (Derudder et al., 2010; Taylor et al., 2009), and (ii-iii) based on their total number of business class and economy class passengers in our dataset. When statistically correlating cities' connectivities in globalized business networks (values are to be interpreted as percentages of the most connected city, i.e. New York) to business class ($r = 0,81$) and economy class ($r = 0,66$) flows respectively, it can be seen that the business class connections maps closer onto global urban networks made up of myriad business flows (knowledge, information, capital, people,...). The key point here, however, is that this seems to validate the assertion that business class travel does indeed provide us with reasonable proxies for measuring business travel.

Table 1 and Figure 2 about here

Conclusions

The starting point of this Viewpoint was the observation that the analytical connection between 'business travel' and 'business class travel' should be treated as an assumption that needs constant validation and specification rather than as a ground truth. We have thereby argued that the relation between both notions is indeed fuzzy and continuously being reworked (i.e. not all business travelers take a trip in business class), just as at the standalone meaning of both notions is being reworked (i.e. the continuous re-enactment of the 'need' for business travel alongside the continuous revising of 'travel classes' in the airline business).

These complex and interwoven biases imply that it is quite difficult to derive unbiased measures of inter-urban 'business flows' from transport geography data on business class flows. However, at the same time such data remain the most straightforward statistics for systematically measuring the importance of 'business centers' in air transport flows. The critical issue, therefore, is whether the biases are so strong that they totally undermine an analysis of business travel on the basis of business class bookings. Through a straightforward examination of the relative spatiality and temporality of business class flows versus economy class flows in the airline network centered on the world's key cities, we have shown that such an analysis is still useful. Our overall suggestion, therefore, is that data on business class flows remain insightful in the context of the analysis of economic and knowledge flows through air transportation, albeit that the analytical connection should never be treated as a given.

It is clear that the very rich dataset used in this Viewpoint has much more potential, both in general and in the context of business travel. In future research, we will therefore use this dataset to explore the spatio-temporal variety of booking classes in general and business travel in particular in more detail. This will include (i) a more detailed analysis of the different booking class (i.e. an assessment of the geographies of the different economy class-type classes), (ii) a more comprehensive analysis of how air travel relates to ongoing developments in a network of world cities (see O'Connor, 2003; Taylor et al., 2007 for early attempts in this direction), and – in the context of the previous topic – (iii) a systematic assessment of how and why cities do not follow the apparent correlation between business class travel and world city formation in corporate terms. Furthermore, these and other empirical analyses will be used as the background for a wider project on the spatialities of corporate travel as set out in Beaverstock et al. (2010a).

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Table 1: Ranking of world cities based on business class and economy class air travel (Sabre, 2005), and connectivity in the office networks of globalized business services firms (GaWC, 2008)

Rank	City	Business class (Sabre, 2005)	Economy class (Sabre, 2005)	WCN connectivity (GaWC, 2008)
1	London	9.887.834	84.363.649	99,3
2	Paris	6.651.140	47.767.572	79,7
3	New York	6.636.365	78.572.417	100
4	Taipei	3.102.926	50.131.228	56,2
5	Hong Kong	2.717.643	23.450.654	83,4
6	Tokyo	2.408.636	68.802.190	73,6
7	Madrid	2.014.120	21.931.406	66
8	Chicago	2.002.306	47.523.252	57,6
9	Singapore	1.807.332	16.915.751	76,2
10	Seoul	1.343.947	24.728.516	62,7
11	Shanghai	1.299.734	37.093.949	69
12	Milan	1.270.864	21.234.459	69
13	Mumbai	1.213.745	12.038.666	59,5
14	Sydney	1.097.084	21.466.843	70,9
15	Moscow	1.096.223	22.362.205	64,9
16	Kuala Lumpur	1.077.151	14.071.784	58,4
17	Brussels	981.565	12.367.777	63,6
18	Toronto	941.439	18.991.438	62,4
19	Beijing	906.920	34.607.478	67,7
20	Buenos Aires	574.221	9.792.366	60,6

Figure 1: Monthly distribution of passengers for business and economy class travel between 20 world cities (Sabre, 2005)

Figure 2: Correlation between business class travel (Sabre, 2005) and connectivity in the world city network (GaWC, 2008)

Key: LO = London; PA = Paris; NY = New York; TA = Taipei; HK = Hong Kong; TK = Tokyo; MA = Madrid; CH = Chicago; SI = Singapore; SE = Seoul; SH = Shanghai; MI = Milan; MU = Mumbai; SY = Sydney; MO = Moscow; KL = Kuala Lumpur; BR = Brussels; TO = Toronto; BE = Beijing; BA = Buenos Aires;