

Taxis beyond the comfort zone

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Introduction

Taxi services are a long-standing, well-established, mode of transport, commonly available and instantly recognisable. The mode has a significant history of supply which pre-dates motorised transport in many countries, and relates to a combination of form, function and control.

Against the backdrop of a longstanding consistent supply, the taxi operates within a complicated set of regulations and controls affecting, separately, the Quality, Quantity and Economic (tariff) circumstances under which the mode is provided. Taxi regulation appears regularly, but infrequently, as an issue in many countries, focused on the ‘long-standing’ debate whether the mode ought or need be regulated by civic authority (Cains and Liston-Heyes, 1996). The issue is unresolved, insofar as the dual practices of restricted and open markets continue, often in an apparent contradiction of each other. Indeed the continued prosecution of the regulatory argument some 40 years after its first appearance may in itself create a buffer around the industry, and ironically prove harmful to the industry’s long-term survival.

To make sense of this we need to expand on the concepts of such a buffer - the separation between public and taxi transport, including its history; and address the potential, gaps and opportunities facing the mode against a background of differing public transport models. We also need to consider two potential responses to the comfort zone, characterised, on one hand, by the view “if it aint broke why fix it?” and on the other by a view that change outside a given “box / envelope / restraint” is always good.

Defining a regulatory comfort zone

It is noticeable that in the vast majority of instances taxis fall outside classic definitions of public transport. Any glance at a transport reference book will demonstrate scant (if any) mention of the taxicab. This has often confused me appearing a surprising facet of transport reporting and transport analysis, as the taxi clearly has role in the mix of transport services. The taxi after all provides the majority transport in many cities home from entertainment, late at night. The cab starts or finishes aeroplane or railway journeys, and plays a

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significant role in carrying low income, social and accessible journeys. Historically the mode precedes many other forms of public transport, and while this may, in part, explain the adoption of a "licensing" requirement, London taxis being controlled in this way since the Seventeenth century (see: Darbera, 2010) it does not provide a compelling argument for the subsequent separation of taxi from other transport modes.

Look further and we see key points in the history of "public transport" noticeably lacking significant reference to taxis. Where mention is made, as for example in the UK Transport Act (1985), the taxi will often appear as the addendum of after thought. Application may further diminish the role of the taxi highlighted, in the UK, where eight out of ten compulsory local transport plans make no reference to taxis at all (Cooper, 2005).

Where step changes in public transport are observed, examples including a focus on reducing reliance on private cars (Romilly, 2009) or discussion on transport sustainability (Daugherty et al, 1995; Sinha, 2003) these progress without serious consideration of the taxi. More significantly areas where the taxi offers significant advantage, such as location permeation, these occur (Jepson et al., 1999) noticeably in the absence of a taxicab. The issues of permeation and night time activity are of particular interest to the taxi operator, and we will return to these later.

To assess the reason behind and significance of the taxicab and it's absence from literature, we also need to review the location of the taxi in current planning practice. The mode has, for the vast majority of it's identifiable history, appeared under the guise of licensing control. Licensing departments or legal services executives being given the responsibility of "controlling" the taxicab, a term itself that implies the presence of an impetuous unruly side to the industry, rather than the more genteel public transport that, unlike its impetuous small cousin, sits in highway, transport or public transport departments. Logic exists, both in the history of the taxi mode, and in the different scale and scope of the taxi compared to bus transport, or rail to an even greater extent. But the distinction need not remain appropriate, or for that matter helpful, as the various cycles for and against public transport, it's use and support, narrow, may even eliminate, differences in both scope and opportunity.

Focus, within the taxi industry, may actually conspire - by placing heightened emphasis on regulatory tensions in traditional forms of taxi supply, broadly the split between controlled and delimited market entry. Limitation appearing as the primary focus in current best practice guidance (DfT, 2010; Scotland, 2007), and recent literature (Cooper, 2007; Crew and Kleindorfer, 2002; Boroski, 1998). In truth these are simply the more recent incarnations of the debates of Posner (1974), Stigler (1971), and Coffman (1977). Be certain, these are significant debates, and I offer no conclusion in that particular regulatory argument; simply offer here the view that, despite its polarisation and detailed discussion, the regulatory question limits discussion beyond.

What Lies Beyond?

What lies beyond the taxi will actually depend on your starting point. The rest of the transport world lies beyond the classic taxi, but this implies a certain isolation of the taxi mode that may, in some circumstances, be unfair. Differing innovations appear regularly in the taxi arena, though many of these continue as small scale examples as to what might be possible on a grander scale. Moreover, the public transport world is not without issues of control and regulation. Let us chart the changes in public transport on a similar trajectory to that applied to taxis above.

Public transport has moved through areas of control, liberalisation and in the UK privatisation, the latter following what might be described as a deregulatory movement from about 1979 (Maunder and Mbara, 1996). Other countries reflect the same issues of private versus public provision, and many (most) maintain support mechanisms to ensure continued supply in instances where this does not occur as a result of market forces. Quality controls exist, and continue to be applied, predominantly in the field of safety, and increasingly to vehicle design. The role of the state as funder of last resort is enshrined in UK Transport Act 1985, allowing a local authority to provide financial support to “non-commercial” bus transport services felt socially necessary.

Railways in Great Britain followed buses into private operation from 1993, with a change in emphasis, compared to bus privatisation, from competition in the market to competition for the market. London remains different, with a single transport authority, ironically with taxis under its wing; and in Northern Ireland, where public transport is still publicly owned and operated. Wider Community and social services have, since the 1985 act, followed as supported private services, similar in many ways to the model applied in the USA to achieve lowest price or best value services.

A review of the contemporary literature, both that proffered at the time of and post each change in regulation provides an insight into the effectiveness of the change, whilst overview far enough back suggests an element of circular argument, see table 1.

Table 1: Illustrative UK Legislation affecting transport control

Date	Instrument	Effect
1840	Act for regulating railways	Created requirement for inspectorate, and determined “parliamentary trains” and regulated workmen’s fares
1921	Railways Act	Entry Restriction, groups rail services into four main operators
1947	Transport Act	Nationalization, groups rail services under the British Railways Board, and bus services into regional companies (National Bus / Scottish Bus)
1985	Transport Act	Deregulates bus services, removes barriers to entry
1993	Railways Act	Liberalizes Railways, creates national infrastructure company and allows entry to private operating companies

Transport, in general, and public transport in particular reflects the movements in and out of regulation over time, often reflecting significant changes in social and political focus. The supply of railways in Great Britain moved, as a result of the 1921 Railways Act (the Groupage Act) from many small operators to a group of four mainline companies (large natural monopolies) and, following the Second World War, to a large single monopoly – British Rail. Deregulation followed, in the US as a result of the 1980 Staggers Act, and in Great Britain the 1985 Transport Act (Bus), and 1993 Railways Act, achieving (Shaw 1998), a “broadly similar organisational outcome to that intended by the 1921 Act”.

Current events may also affect the mix of transport, as the significant reductions in public budgets (UK 2009, ongoing) place pressures on the assumptions underlying the 1985 Transport Act. In short a reduction in authority support to public transport, places increasing pressure on the network of services traditionally the role of supported bus, and may actually prove the catalyst for innovation in transport supply with an increasing role for the taxi.

Taxi Innovation

Whilst we have, thus far, referred to a generic separation of taxis from other forms of public transport, this does not in itself indicate a lack of innovation in the mode, but rather a lack of its widespread application. Examples of innovation where observed within the confines of a tightly regulated industry should begin to suggest wider opportunity beyond the traditional comfort zones. Development of which may be - should be pursued to the advantage of passenger, taxi operator, and local authority. Both require a wider view of supply to be taken by their respective constituents.

Table 2 highlights the traditional operating practices in the UK and France, and has been widened to show some of the areas in which innovation may be observed. New operating practices can be seen in some instances as a broadening of the traditional roles of the taxi, and this may in turn reflect constraints applied to the industry by current regulatory limitations. The traditional definitions of Hackney Carriage, and Private Hire (PHV) may not, in reality, fully reflect the wider potential of the taxi vehicle, and so doing restrict its development. the potential of the taxicab.

To expand this further we might consider the range and nature of innovation currently observed. This ranges on a continuum from operating across a traditional regulatory boundary, as for example a Hackney Carriage operator offering pre-Booked services, to market entry in DRT markets, the latter being permitted but little applied following the 1985 Transport Act in the UK. Innovation on the edge of regulation, being the expansion of a regulatory practice, includes taxi based DRT, examples of which are observed in some areas of Highland Scotland. To the most ground breaking including the use of the taxi fleet as integral to the operation of mainstream public transport, though few examples of this are seen in regular practice in a transit oriented environment, scheduled Jitneys go some way toward demonstrating practice, as do the specialist use of Taxis in contracted journeys.

The continuum of taxi innovation as described actually relates to the positioning of services vis-à-vis the regulated environment of a given location, and this will reflect the nature of a location's transport priorities, historical approach to taxi supply, even to the economic circumstance of transport in general, the latter potentially the most significant "driver" in achieving innovation beyond a traditional comfort zone.

Form of supply	Definition of market segment	UK	UK	France	France
			Observed Innovation		Observed Innovation
Hackney Carriages (Public Hire Taxi) (SPSV)	A vehicle for hire able to ply for hire, by hailing, using taxi stances, and/or by pre-booking	Mix of restricted and delimited entry to market, by number. Operates within geographic limitations (city / district).		Mix of restricted and delimited entry to market	
Private Hire Vehicle (PHV) (Taxicab) (For Hire Vehicle) (“Hackney” – Ireland)	A vehicle for hire by pre-booking	Markets not restricted by number. Typically operate within the same geographic area as per Hackney Carriages.		Not permitted	VTAC (voitures des tourisme avec chauffeurs), a separate transport licence, equivalent to the UK “excursion bus” used in the taxi market by motorcycle “taxis”
Specialist PHV	A vehicle for hire in specific markets		A distinct market exists for “accessible” vehicles, typically wheelchair accessible vehicles.		VSL (véhicules sanitaires légers) specialist vehicles used in health journeys
Taxi DRT (Demand Responsive Transport)	A vehicle available by pre-booking operating as a public transport alternative on an area wide basis		A recent market sector emerging as a result of growth in DRT. Using taxis (both Hackney and PHV) to deliver DRT		Some local governments have contracts with taxis, either directly or through public transport companies
Taxi Bus	A vehicle available by hailing operating as a public transport alternative on fixed routes		A market sector permitted under the Transport Act 1985, but rarely taken up. Positive examples in		

Table 2: Innovation in Taxi Supply

Categorising development potential

In previous sections we have highlighted regulatory structure, existing patterns of supply and opportunities based on observed "novel" approaches. We now categorise these in relation to three levels, being innovation within a regulatory framework, innovation pushing the boundaries of the regulatory framework, and innovation clearly outwith an existing licensing structure. These are summarised as:

1) Innovation, accommodated within a current regulatory framework:

- Competition within the market, examples of which include Hackney carriages competing head on with Pre-booked PHV market, like for like competition. Requires no regulatory change to occur. Seen with reasonable frequency. Can also exist between PHVs, and taxis, seeking to compete in specialist markets, but the latter may more frequently be seen as competition at the extremes of the regulatory structure.

The category requires the least additional accommodation in law, and may be seen in normal everyday activity.

2) innovation, possible at the limits of a current regulatory framework

- Competition beyond mainstream markets. Innovation which may occur at the extremes of current regulation, in which taxis provide services under contract beyond the geographical limitations of a traditional taxi license. Good examples of this relate to health care and schools journeys, and may exist in a grey zone between city taxi and regional transport markets. The category should also be extended to include grey market pick ups within the hackney market by out of region taxis, and illegal pick ups made by PHVs on hailing by the public. The latter providing a visibly illegal service - beyond the legislated comfort zone; but frequently ignored by authority, typically ignored by the police as the practice may be felt to alleviate the (worse) issue of public disorder, particularly later at night.

The category requires some accommodation beyond a traditional interpretation, and this may be observed in legislative extension (see DOE, 2006), the creation of special categories of license; or be more informally observed as "light" enforcement in given circumstances.

3) Innovation requiring additional regulatory accommodation, or falling within the gambit of other transport legislation

- Competition outwith the market. Innovation which utilises taxis in (relatively) unconventional markets. This including the use of taxis as a direct alternative

to bus based transport. Such a model raises significant questions, not least opposition from mainstream bus operators, but also from regulators, and within the taxi community itself. Main examples of innovation outwith taxi markets tend to be seen in locations with poor bus transport, and reflect the opportunity for taxis to operate as buses in low demand areas - typically rural communities; or on the periphery of more urban areas providing links and radial, rather than linear services.

The third category diverges the most from traditional interpretations of legislation, and role. Use of taxis within a transit arena, despite the obvious relationships, is the most regulatory challenging, and may be achieved by development of either (or both) changes to taxi legislation, or broadening of bus legislation to include taxis. Significant barriers arise from differences in scope between taxi and transport departments, with additional challenges in differing scales and geographical areas.

Barriers to application

Having categorised three areas in which innovation may occur, we now observe application and comment on barriers. Of the three categories, within, at the edge of and outwith regulation, innovation within existing regulatory structure is largely a market response, commonly observed, and unlikely to prove contentious.

Innovation at the edge of a regulatory structure may be appropriately considered in terms of the limitation imposed by the structure itself. Taxi licensing areas, particularly in agglomeration or conurbations face issues with boundaries, limiting (legal) movements and restricting pick ups. The most ready example of which being that of airport taxis being licensed by an authority different to the city they serve. The result of which including enforced empty running on one leg of an airport run. Similar examples may exist where central cities represent small areas within a conurbations - spatial limitation, or where excess demand at particular times of day result in grey market pick ups - temporal limitation, and limitation of scope. Of particular interest the role of the taxi in night time urban economies, as a mode of choice, often a majority mode of transport at night. In all of these examples barriers may be allied to the nature of regulations, with a positive desire by the taxi community to develop the market.

By contrast, innovation outwith existing taxi regulation may also face opposition from within the trade. Using the example of integrating taxis as a part of local transport we see a series of concerns, as well as potential benefit. Opportunity arises where taxis are used as alternative to bus vehicles, typically on low demand routes, and in circumstances where the vehicle size (taxi versus bus) is more appropriate to levels of demand. This, in itself, raises the spectre of bus routes being replaced by taxi bus routes - an issue to the commercial bus operator; but may also be an effective method of providing

new access to locations without bus transport. The concept has some traction, the UK introducing a number of legislative amendments to remove institutional barriers - Transport Act section 11 and 22 1985 act, section 12 2006 act, all allow non-traditional vehicles to operate as (restricted) buses. But remain little applied. Indeed conflicts between taxi and bus legislation may leave taxi companies open to accusation of out of area taxi operations on the taxi side whilst operating as restricted buses.

The largest of barriers, however, may actually relate to the relationship between supply of a traditional taxi service and innovation. In this respect we highlight a possible divergence between the interest of the individual, a taxi driver seeking to maximise income, and a collective industry. Perceptions of multiple occupancy exist, not least the fear that accommodating three unconnected passengers in one vehicle represents a loss of income - from the alternative of three jobs. Additional difficulties arise where restricted taxi markets may be seen as an (sub?)optimal balance between supply and demand, with innovation that removes taxis threatening the measured numbers of vehicles required to meet demand. In this respect the restricted market limits innovation in a risk adverse collective trade. Furthermore, whilst individual operators may be more likely to move instinctively toward additional income opportunities, single vehicles are unlikely to deliver the service levels required.

The role of vested interests need also be considered, particularly that of bus companies who may have traditionally seen such support as is available from the government as income to them. Whilst many bus companies operate and deliver fully transparent costs and support cases, the extent to which rural transport remains supported is significant.

Public transport departments may also face institutional barriers in identifying roles for taxis within the transport mix, as the vehicle differs, methods of procurement and contracting may differ, as will information systems appropriate to publicising services to the public.

Benefits from application

Despite the, significant, barriers to market development, the potential benefits from innovation beyond the comfort zone may be significant. Financial benefits arise where per passenger journey costs fall, an incentive to reallocate some bus to taxi bus services. Personal access benefits are also seen where communities without service can be reached by the smaller taxi vehicle. Indeed significant economic benefits arise where individuals are able to gain employment as a result of new access opportunity. Examples of such services have been documented (see Cooper et al 2009) with significant positive Social Returns on investment. Economic returns may not, however, occur with the same domain as investment, with savings from reduced social support arising at central government, not at local government. More

significant at a local level may be the reduction achieved in public transport support resulting from the use of a more appropriate vehicle.

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