



# Urban, Planning and Transport Research

An Open Access Journal

ISSN: (Print) 2165-0020 (Online) Journal homepage: <https://www.tandfonline.com/loi/rupt20>

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To cite this article: Isobel Frances Beetham, Marcus Paul Enoch, Martin Morgan Tuuli & Lisa Jane Davison (2014) Stakeholder perspectives on the value of car parking, Urban, Planning and Transport Research, 2:1, 195-214, DOI: [10.1080/21650020.2014.885385](https://doi.org/10.1080/21650020.2014.885385)

To link to this article: <https://doi.org/10.1080/21650020.2014.885385>



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Published online: 29 Apr 2014.



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## Stakeholder perspectives on the value of car parking

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(Received 6 November 2013; accepted 15 January 2014)

Car parking is a routine yet highly complex part of daily life for both drivers and those affected by parking. This paper aims to unravel how key stakeholders value parking, by looking beyond the traditional possibilities associated with supply and demand to help better inform decision makers with their parking related dilemmas, by drawing on a series of in-depth interviews. First, interviews were conducted with eight academics who maintain a research interest in parking, to validate key stakeholders and their parking dilemmas as identified from literature. Second, interviews with 20 representatives spanning an assortment of key stakeholder groups affected by parking were undertaken, to determine their perspectives on the value of parking. The findings indicate that a considerably broader reach of stakeholders are affected by parking than the existing literature suggests, and the process of means by which stakeholders value parking is more sophisticated than previously thought. This new finding dispels traditional beliefs relating to how stakeholders value parking; the article outlines the extent to which such beliefs are mistaken, and provides the foundation for further work to understand the extent of these replacement values.

**Keywords:** car parking; transport policy; stakeholder values; actor perspectives; planning attributes

### 1. Introduction

According to a recent report by the RAC Foundation, ‘the average car spends about 80% of the time parked at home, is parked elsewhere for about 16% of the time, and is thus only actually in use (i.e. moving) for the remaining 3–4% of the time’ (Bates & Leibling, 2012, p. iv). As a consequence, accommodating parking either on or off street in larger towns and cities is a significant problem (Glazer & Niskanen, 1992). In spite of its clear importance, parking remains relatively underexplored by the research community (Verhoef, Nijkamp, & Rietveld, 1995). In particular, car parking can be fraught with misconceptions so it is important to educate and involve stakeholders when making parking policy decisions (Shoup, 1995). The extent to which parking can impact on parking stakeholders essentially derives from how they value parking and what influences them to do so.

The aim of this paper is to investigate how a range of stakeholder groups affected by car parking value parking and what influences them to value parking in the way they do. The objectives are threefold. First, to validate the findings from literature regarding

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who the key car parking stakeholders are. Second, to discover what parking issues are of concern to them. Third, to establish how car parking is valued by the stakeholders and gain an insight into how these car parking issues influence their perceptions of value. The paper comprises a literature review, a method involving preliminary and principal interview stages, findings from each stage, a discussion and a conclusion.

## 2. Literature review

This section aims to identify who the parking stakeholders are and to explore the different meanings behind the word *value* and subsequent connotations for stakeholders, as presented by literature. An analysis of the main parking issues which may affect the stakeholders is also conducted to open up the possibilities of how stakeholder concerns might influence how they value parking. The section begins by reviewing how parking stakeholders and value are construed in literature and moves on to investigate a range of parking issues likely to concern the stakeholders as current in literature.

### 2.1. Identifying parking stakeholders in literature

The conventional approach when seeking to define the term *stakeholder* might be to take the strategic organisational perspective of, ‘those individuals or groups that depend on an organisation to fulfil their own goals and on whom, in turn, the organisation depends’ (Johnson, Whittington, & Scholes, 2011, p. 206). However, literature is less generous in defining *parking* stakeholders (resulting in a gap), so the term stakeholder must be applied. Nevertheless, literature does offer a number of potential stakeholders who are affected by parking.

Some of the stakeholders perhaps most frequently referred to include: commuters (see Enoch, 2002; Feeney, 1989; Marsden, 2006); shoppers (discussed by Matsoukis, 1995; Meek, Ison, & Enoch, 2011); retailers (addressed by Rye, Hunton, Ison, & Kocak, 2008) and employers (discussed by Valleley, Garland, & Jones, 1997). In addition, literature also discusses the various roles the government can play with respect to parking, for instance the responsibilities of planning officers (Forinash, Millard-Ball, Dougherty, & Tumlin Smart, 2003; Kenworthy & Laube, 1996), transport planners (Mcshane & Meyer, 1982) as well as the significance of those employed in enforcement (Barter, 2011; Cullinane & Polak, 1992). Less mentioned by the literature are the stakeholders who are non-parking participatory but who may be either directly or indirectly affected by parking, such as pedestrians (as explored by Wood, Frank, & Giles-Corti, 2010), cyclists, or public transport users (as referred to by Shatnawi, 2010).

In précis, despite a comprehensive review of the parking literature, the smattering of stakeholders found seems somehow incomplete and condensed into pockets comprising individual users, with a particular focus on managing their car parking behaviour. The literature’s show of restraint in this area seems unexpected, as a more testing challenge might be to find anyone who is *not* affected by car parking in some way.

### 2.2. Parking issues

#### 2.2.1. Governmental

Parking policy can help to achieve six desirable urban goals (Mcshane & Meyer, 1982, p. 133):

- (1) healthy economic climate, and a business community able to support local employment needs;
- (2) most efficient use of existing transportation, land, and other public resources;
- (3) ease of mobility/accessibility;
- (4) equity of resource distribution and preferential allocation of some resources;
- (5) environmental goals, especially reduced air pollution and the related goal of minimised energy consumption;
- (6) enhanced amenity and cultural attractiveness; preservation of a city's unique character.

In spite of a potential for making tantalising promises, managing parking effectively seems fraught with challenges for those tasked with making policy decisions, as some of these goals may be construed by some to conflict. For instance, a strategy based on localism forms part of the current UK government's vision for managing sustainable transport and tasks local authorities with the dual objectives of creating growth and cutting carbon (Department for Transport, 2011).

Furthermore, the separation of residential and commercial areas by planning officials often results in daily needs not being met within walking distance, consequently intensifying car dependency (Button, 2010). Residential areas neighbouring commercial areas can experience pressure from overspill by commuters (Rye & Ison, 2005), obliging local governments to find solutions such as the implementation of controlled parking zones (CPZs) which may not always meet with residential approval (Rye, Cowan, & Ison, 2006). Even in the case of UK park-and-ride (P&R) schemes (large car parks located on urban peripheries with connecting bus services to access the town centre), originally intended to reduce environmental negativities in urban centres, there is concern about attracting drivers who would otherwise have completed the entire journey by bus (Meek, Ison, & Enoch, 2010). Therefore, it seems that governments have responsibility for making decisions regarding car parking policy in an environment where transport levels of demand have exceeded supply, and where the demand is characteristically both qualitative and differentiated, and where the supply acts as a service and not as a product (Dios Ortúzar & Willumsen, 2007). In other words, car parking supply cannot be stocked up to meet differentiated demand.

### *2.2.2. Land use*

In many cases, the desire to satisfy demand has resulted in an oversupply, typically through the use of minimum parking requirements. These decisions have resulted in more land being used for parking for each new development built, thus leading to several environmental negativities, including urban sprawl (Forinash et al., 2003). A consequence of high levels of parking in central business districts (CBDs) is that it reduces population density, attracts more car use while suppressing public transport use, thus negatively impacting on town and city sustainability (Kenworthy & Laube, 1996). In addition, as commuter car parking in areas subject to minimum parking requirements is often supplied to commuters for free, there is little incentive for individual users to seek alternative modes (Shoup, 1995).

Also, where car parking levels are high, it is possible that parking requirements may impinge on public space. Public space is described as follows: 'How good a city is at facilitating exchange determines its health – economic, social, cultural and environmental.

Public space forms a vital conduit in this exchange process, providing platforms for everyday interaction and information flows – the basis and content for the public life of cities’ (Tims & Mean, 2005, p. 5). In addition, there is the issue of shared space. Car users’ dominance in areas of shared spaces triggers the segregation of car users from non-users (such as pedestrians) who become less comfortable and confident in engaging with their environment (Kaparias, Bell, Miri, Chan, & Mount, 2012). Therefore, the impact car parking can have on land use seems to be detrimental and widespread, with perhaps the highest costs affecting not only the environment but social spheres also.

### 2.3. *Exploring car parking stakeholder value in literature*

Directly eliciting from car parking literature how stakeholders value parking is challenging as it is not easily detectible. Potentially it can be found where the predominating focus is rooted in quantifiable economics, most specifically in response to controlling car parking behaviour of individual users. The literature seems preoccupied with exploring offsetting decisions made by individual users when presented with a series of choices based on location, time and price attributes, as evident in the work of Glazer and Niskanen (1992), Anderson and de Palma (2004), Shoup (2006), Arnott and Inci (2006), Calthrop and Proost (2006) and Kelly and Clinch (2009). Economics is applied to a range of parking control policies which are directed at exploiting supply–demand relationships. Because of this, the range of stakeholders reached out to could be limited by making assumptions of how individual users value car parking. This is because the word *value* can suggest both a quality and a monetary figure (Thomson, Austin, Devine-Wright, & Mills, 2003), in which case those affected by parking may value car parking outside economics. Individuals also express their interpretation of value differently (Zeithaml, 1988) and so in précis, *value* appears to exist in individual abstract perspectives, thus reflected in stakeholder car parking choices, decisions and behaviour.

### 2.4. *Value losses and gains*

Established ties between parking and economics, as referred to previously, suggest that parking can be valued via the concept of an individual user offsetting relationship using positive and negative attributes (convenience/price), congruent with provider supply and demand elasticities. This notion may be likened to prospect theory which uses *losses* and *gains* to determine value worth (Kahneman & Tversky, 1984) and is potentially reflected in car parking policy decisions, such as with minimum parking requirements where the desire to achieve gains for individual users has appeared to exceed the losses experienced elsewhere.

### 2.5. *Literature review summary*

In summary, the literature presents a modicum of parking stakeholders, focusing predominantly on user–supplier relationships that are often in accord with economic theories of supply and demand. Furthermore, car parking issues seem challenging for decision makers because although car parking facilities can contribute to satisfying multiple urban aspirations, the resulting policies can result in exacerbating parking problems. Also, wider stakeholder and value concepts, outside economics, are not generally reflected in the parking literature despite their potential for application to car parking. This paper seeks to more comprehensively understand who the stakeholders are that are

affected by car parking, what parking issues are of concern to them and what impact these issues have on how they value parking.

### 3. Method

This study is appropriate for a qualitative approach as its purpose is to explore and interpret phenomena that are not currently available anywhere else (Silverman, 2011). To meet the aim of the study, semi-structured in-depth exploratory interviews were conducted: preliminary (expert) interviews, and principal (sector leader) interviews.

#### 3.1. Preliminary interviews

The preliminary interviews with academics, all with a published interest in parking, were selected initially from the literature review and then via a ‘snowballing’ technique whereby participants suggests further experts whose contribution they deem to be of benefit, in line with inductive theory building analysis (Miles & Huberman, 1994). For the interviewees selected, see Table 1. They are referred to from now on by their representative letter, such as A, B or C, etc.

Eight such interviews were conducted (seven via telephone, one via Skype) with 19 questions focusing on three topic areas: car parking stakeholder identification, parking issues and value. The questions asked had three aims. First, to identify who the academics consider are the stakeholders affected by car parking. (To reliably achieve this aim the academics are presented with a table of stakeholders, as suggested by the literature, at the *end* of the interview, presenting the opportunity for further comment.) Second, to establish what the academics consider are the key parking issues that are of concern to the stakeholders. And third, to gauge the academics’ opinion on how they think the stakeholders might value parking. Satisfying these three aims helped to focus the questions for the principal set of interviews with representatives of the stakeholders themselves.

#### 3.2. Principal interviews

The principal set of interviews was conducted with those considered to be sector leaders of parking stakeholder groups as classified and agreed by the academics. Nineteen telephone interviews plus one via email were conducted comprising 20 questions pertaining to three topics based on analysis of the academics’ responses: car parking stakeholders, issues and value. The overriding aim was not only to reveal how the stakeholders value parking but to understand the environment in which their parking issues affect their value of parking. The sub-aims were threefold: first, to further endorse stakeholder

Table 1. Academics interviewed, their role and location.

Academic	Role	Location
A	Professor of Transport Policy	UK
B	Professor of Urban Planning	USA
C	Professor of Public Transport	Australia
D	Professor of Transport Policy and Strategy	UK
E	Professor of Transportation Engineering and Planning	USA
F	Professor of Civil Engineering	Australia
G	Professor of Urban Planning	USA
H	Professor of Sustainable Transportation and Urban Planning	USA

legitimacy; second, to validate and improve understanding of stakeholder car parking issues; and third, to authenticate their own perceptions of how they value parking and to secure insight into their perceptions of the other stakeholder groups.

### 3.3. Analysis strategy

After transcription, the analysis strategy was similar for both sets of interviews. To start, NVivo<sup>TM</sup> data management software is employed to assist with handling the volume of textual data generated. Following data input, an inductive technique following a methodical process of building patterns and applying codes was used. Initial descriptive codes were allocated to segments of transcript where common themes began to emerge, first from the individual responses to an individual question, second from the collective responses to an individual question and third, from the collective responses to the collective questions. Analysis coding enables the data to be synthesised while maintaining interaction (Miles & Huberman, 1994) and facilitates thorough investigation.

## 4. Preliminary interview findings

### 4.1. Stakeholder identification and classification

In the preliminary series of interviews the academics were asked to identify and then classify who they consider to be the key stakeholders affected by parking. They were

Table 2. Car parking stakeholders according to group and role.

Group	Role	Stakeholders
Non-consumers	Individual non-user	Pedestrians Cyclists Public transport user
Consumers	Individual user	Disabled people Residents Owners <u>Renters</u> Commuters Employees/trade unions Travellers Business Leisure
	Local business sector	Shoppers Visitors Retailers Employers <u>Financiers to developers</u>
Suppliers		Developers <u>Architects</u> Professional associations <u>Public transport providers</u> <u>Parking operators</u> Parking entrepreneurs Technology providers Parking enforcers
Governmental	National Regional Local	Officers City planners Transport planners Traffic engineers Politicians Councillors



also afforded the opportunity to comment on an existing classified set of stakeholders as elicited from the parking literature. This resulted in minor adjustments (underlined, see Table 2).

'The academics' responses approve four primary groups of parking stakeholders which serve to identify the sector leader interviews to be undertaken for the principal interview stage, namely non-consumers, consumers, suppliers and governmental. Each of these primary groups comprises sub-groups which describe their roles. Of particular interest here, is that the 'local business sector' sub-group straddles the 'consumers' and 'suppliers' primary group categories, whereby retailers, employers and financiers to developers are classified as being consumers, while developers, architects and professional associations are more likely to be suppliers. Overall, a total of five sets of four interviews were conducted with sector leaders of the parking stakeholder groups (see Table 3).

#### **4.2. *Parking issues according to academics***

Table 4 presents what academics perceive to be the key car parking issues of concern to the stakeholders and how they believe that these are currently being addressed. The academics described various car parking characteristics (see Table 4, 1.0) which they considered were common causes of most parking issues troubling car parking stakeholders.

The second order categories (1.2–1.6) were felt by the academics to be of similar significance; however, 'Land used for parking limits other opportunity uses' (1.1) was of highest interest to the academics located in America. H referred to dilemmas and consequences: 'Cities in America provide way too much parking. By providing more parking they think they are competing with the suburbs and it actually has the exact opposite effect. We find that in cities with the highest amount of parking, there is less population and less jobs per square mile.' G was also frustrated by parking's emotional characteristic: 'Expert knowledge is given no credence compared to emotional knowledge.' He felt that this resulted in 'terrible parking policies'. 'Potential parking issue solutions' (2.0) has three second-order category subsets which the academics identified as commonly implemented policy practice. Dissatisfaction with all three subsets was conveyed across the academics with G venting particular disapproval for 'Free or low cost to the user' (2.3): 'If you're giving away something for free, and there are many who do not need it, it leads to a lot of abuse.'

#### **4.3. *How stakeholders value parking according to academics***

The different ways that stakeholders may value parking according to the academics are presented in Table 5.

Table 5 presents the second-order categories in no significant order except for 'Objective based' (2.1), as the majority of academics felt that how stakeholders might value parking was almost entirely dependent on their primary objective; C says 'Value is about objectives'. Possibly, the remaining second-order categories may be construed to be stakeholder objectives but the academics spoke about them in terms of values. For instance regarding 'Lifestyle facilitator' (2.7), E believes that, 'Parking allows you to have accessibility to whatever it is you're doing. It's the most important factor in the way people value parking.' And B agrees: 'Parking is something that makes their [users'] lifestyle possible.'



## 5. Principal interview findings

### 5.1. How stakeholders value parking

The sector leaders speaking from the perspective of representing the stakeholder groups define their value of parking in eight different ways organised into a matrix, Table 6. How the groups value parking is expressed in either a positive or a negative way, or both, such as in the cases of the local business sector, parking industry and governmental groups, which interchange between the two depending on the context of the value.

In the first instance it is visible from Table 6 that the non-consumer group entertains no positive ways to value car parking. Instead it has a negative perspective on two ways that parking can impact on the environment. In contrast, the consumer group is singularly positive demonstrating values focusing on the environment, access and economics.

The remaining three groups appear divided on at least one environmental value. The local business sector assumes a similar division about an additional environmental value but holds a positive value of the commercial aspect of parking. The parking industry and governmental groups are equally weighted but with one point of difference. The parking industry group exclusively holds a positive value of the combined *convenience, safety and price* and the governmental group is positive in reference to an efficient transport system. No single group holds all eight values and it seems that occupying a central place in the matrix enables the local business sector to see both sides of a value, which may be indicative of their position within the macro environment. Each of the eight values is explored in turn.

#### 5.1.1. Efficient use of land

The question, *Do you consider that using land for parking is an efficient use of land?*, is responded to by all interviewees. Three of the non-consumer group place a negative value on using land for car parking (NC3 is the exception, 'you need to strike a balance') and NC1's response is representative, 'It's a highly inefficient use of space.' The non-consumer group responses concern wider implications than the unrefined issue of 'efficient use of land', such as a lack of priority for cycle parking (NC4) and a car-dominant mindset of policy makers (NC2). The non-consumer group seems conscious of the impact parking has on land use only in terms of a loss and therefore manifests a strong negative value of parking.

In contrast, the consumer group maintains a positive view as it believes that, in some circumstances, using land for parking carries two key gains, facilitating access and helping to sustain economic activity. C1: 'I feel that the car brings enormous benefits to sections of the population ... [the elderly] are engaged in community life, they are also far more self-sufficient than they might be if they were relying on lifts or relying on public transport.' C2 expresses a similar sentiment with regard to the disabled community who are often challenged by alternatives. C3 refers to economic matters: 'For local economies parking is the lifeblood. It is essential to the community and to the economy.' C4 agrees: 'If land used for parking contributes to economic activity then there is nothing wrong with that.'

The rest of the groups are divided. On the one hand there is negativity; LBS1 feels that local authorities should 'hand the town centre back over to pedestrians', by rationalising parking and PI4, 'If you look at land costs, almost everywhere in the city it would be more economically beneficial to use the land for something else other than parking.' Yet, on the other there is positivity; G1: 'Broadly, yes. In as far as its necessary to get

people to and from places.' PI1, 2, 3 and G2 use the phrase, 'It depends', and then describe a balancing act between competing land uses, commercial viability and environmental impacts.

#### 5.1.2. *Impact on public space*

This is a priority for the non-consumer group and stimulates a negative value of car parking as the group perceives that parking can place public space at risk of experiencing a loss. NC1 gives a typical response from the non-consumer perspective: 'People bring vitality, life and economy to a space whereas cars bring dead space to public areas ... parking on the footpath is a critical issue as it's advocating public space to vehicles ... it takes away space for people to walk in and enforces the ownership of space by vehicles.' NC2 raises the issue of broader losses potentially caused by parking's impact on public space such as a loss to quality of life and a negative economic health value.

The issue is not referred to by the other groups except by the local business sector which is split over the matter. On the one hand there is empathy for the non-consumer group's view: LBS1, 'It shouldn't be allowed to override or displace other attributes of society, or the natural and built environment.' Yet, on the other, there is potential for commercial gain for elements of the local business sector if they are in a position to satisfy demand, such as in the case of developers: LBS1, 'Integral parking is perceived as quite a benefit to prospective tenants.'

#### 5.1.3. *Facilitates access*

The consumer group gives a sense that parking is intrinsic to everyday life as it enables lifestyles by providing accessibility, which the group values as a positive gain. C1: 'Parking is important because it allows all of us to do what is considered to be very normal activities that make up life in the United Kingdom. That's engaging in work, sporting activities, social activities, and so on.' C3 agrees and C2 emphasises the importance of parking facilities to particular groups such as rural communities who are otherwise restricted by a lack of alternatives. C4 reiterates the perceived positive gains: 'There are many social advantages to car park provision in the same ways that there are social advantages to owning a car.'

Comparable responses emerge from the parking industry. PI1: 'Society is dependent on the motor car. Therefore if we want to be a car owning, car-borne society we have to manage parking.' PI4 also sees the positive gains from access and PI3 is consistent yet mindful of the challenges involved: 'Parking is an essential part of any journey. You have to have somewhere to park; the question is what is the most efficient way of doing that.'

The governmental group also positively values parking's ability to facilitate access. At a regional level, G1: 'It isn't so much to do with parking it is actually to do with access. So let's equate parking with access more readily, let's not make it all about the car.' Parking facilitating access and the consequential potential business and community gains are underlined at the national level by G4: 'Parking plays an important role for both business and leisure; without it we would not be able to access even our most essential amenities.'

#### 5.1.4. *Sustains economic activity*

Sustains economic activity is ascribed by the consumer group as a way in which to find positive gains and therefore value from parking and in particular, *free parking*.

For instance, C2's response is representative of the consumer group: 'Out-of-town shopping centres have free parking and so customers go out-of-town. What is happening today is that there are fewer shops on the high street, one of the reasons for this I'm sure of, is that parking is so expensive.' Valuing parking through its potential ability to sustain economic activity is not referred to by the other sector leaders except for G1, at a regional level, who is sceptical about the motivation behind pro-free parking opinion: 'This link between business viability and free parking is a growing one and I have a feeling that it's almost used in some cases as an excuse by smaller shops. *My shop is failing because you've made parking more difficult*, is something I hear even when I show them that I've actually made parking easier and more people are getting there as a result, they still insist on taking the irrational sort of view.'

#### 5.1.5. *A commercial product*

The local business sector group alludes to a positive value of parking by treating it as a commercial product: LBS2, 'I value it as a commercial product.' The rest of the group discuss their perceptions of the local business sector environment and how parking can be indirectly used to attract commercial gain. LBS1, whose employer provides consultancy services to various entities including developers, believes that 'Parking is still seen as a benefit, or an advantage, or as a value for developments.' Likewise, LBS4 is representative of an organisation with a significant retail portfolio: 'Parking is important to me and my business as it provides a major role in our properties.' These statements are supported by a sector leader from the governmental group G1: 'In strict commercial terms parking space can be an incredibly commercially viable asset', indicating that the local business sector can realise a positive commercial gain from parking, despite it not being their priority business. Most surprising perhaps, is that the word *commercial* does not feature in any of the parking industry's transcriptions.

#### 5.1.6. *Revenue stream*

Positive gain from parking as a revenue stream is inferred from both the parking industry and the government group's transcripts. From the parking industry perspective, P11 says: 'Parking is a revenue generator'; and P12 and P14 expand by detailing how the positive gains can be felt by the user; P14: 'Income needs to go back to the motorist in the form of better quality, facilities, better management, and through the work of Park Mark by the British Parking Association (BPA).' P2: 'If you put the right amount of resources in parking has a value to the customer but if parking is given no value, then it has no value.'

From the governmental perspective, G4 (national level) states: 'Parking is an important funding stream for local authorities, even more so given the wider financial constraints in which we find ourselves.' Equally, the positive value of a revenue stream is emphasised by G3 (local level): 'Parking revenue is very important for a local authority ... The revenue is reinvested into public transport ... So it's important in terms of our wider transport priorities in the city.'

This is further supported by some speculative remarks made by the other stakeholder group respondents, aimed predominantly at the governmental group. P14's comment is characteristic: 'Parking does give them an income and increasingly these days it is an important income particularly in times of austerity.' Yet P13's observation is representative of an underlying unease or suspicion about the issue: 'They strenuously deny that

they are using parking as a way of generating income ... it clearly does provide a contribution towards their finances.'

#### 5.1.7. Convenience, safety and price

Convenience, safety and price are value perceptions held by the parking industry regarding how it perceives that the individual users it serves receive positive gain from parking. PI2: 'Convenience is always going to be the first choice, and when having a choice, choose the safe one, rather than the cheapest one. So convenience, safety, price is my view.' Two of these values, 'convenience' and 'price', are understood by PI3 who describes a troubling example of how an outpatient might value parking: 'It may seem [unfair] to charge somebody who is going for cancer treatment to park their car at a hospital, however it may be a better thing than not charging and that person not finding a space because they've been taken up by a lazy commuter who can't walk a bit further to another car park and pay for parking.' This is supported by PI3 who is fearful of the impacts of an increasing trend to make hospital parking free of charge leaving patients struggling to find available spaces: 'What was called the *tax* on the sick has now become an *attack* on the sick.'

Price is raised by the majority of the consumer group and their comments imply that they generally accept paying for parking. C1's remark is typical: 'I think charging for parking is entirely fair, simply in terms of paying for a service which somebody has had to provide.' The other groups take a similar view; NC3, LBS4 and G1 describe priced parking as 'necessary'; NC2 as 'fair'; G2 as 'logical'; NC1 says, 'I take a user payer approach to this'; G4, 'It is important that we have a system that is fair to the motorist, but which also recognises the cost of regulating and maintaining parking facilities.'

Priced parking seems to concern all the stakeholder groups, yet only the parking industry seems to understand its potential as a positive gain or *value* to the consumer, such as to an outpatient. Instead, the consumer group, along with the other groups, perceives cost as an expected part of a parking activity and is less attentive to its broader potential. With regard to 'convenience' and 'safety', the consumer group seems to prefer to discuss *access* to enable a lifestyle (see 5.1.3), adding a depth to the value. Safety is absent in all the different groups' transcripts, except for C2 who links the *safety* of parking facilities with *price*, concluding that safety is a minor concern outside the parking industry.

#### 5.1.8. Part of an efficient transport system

This is of positive value to the majority of the governmental group. G3 (local level) gives a typical response to the question, *How do you value parking?*: 'Parking is an integral part of our transport policy for the city and for the city centre. Our policy in the city is very clear, we will continue to accommodate the car and we will promote public transport.' G4 (national level) develops the point further: 'I want a system of parking which supports local businesses and allows local residents and visitors to access our towns and cities conveniently. But it must also help to ease congestion, thereby reducing the time taken to navigate urban areas cutting unnecessary emissions.'

The perceived positive gains resulting from a vision of an efficient transport system demonstrate a depth of understanding by the governmental group of the range of issues that parking can impact on. This is not articulated by the remainder of the sector leader

interviewees as discussion is dominated by specific issues, such as managing the high street (NC1), parking on private land (PI2) or adequate provision (PI3), despite asking all the groups an identical set of questions.

## **5.2. Stakeholder perspectives on how they each value car parking**

The ways in which the stakeholders describe how they value parking are influenced by a range of parking issues which the sector leaders drew attention to during the interviews. These are classified into three key groups of government, land use and a focus on the consumer (as presented in Table 7).

### *5.2.1. Government*

Four of the five stakeholder groups express negative concerns about issues related to the government, as given in Table 8.

The devolution of UK parking powers from national to local levels is of particular concern and is frequently held responsible by the stakeholder groups for leaving some local authorities feeling isolated and deficient in essential knowledge and expertise, which they believe is necessary to enable them to resolve their local issues. As the instigators of devolution, the UK government (national level) seems determined to persevere and encourage a local approach. Through its lack of references the parking industry gives a sense of operating independently from government, possibly due to a lack of national guidelines and standards.

### *5.2.2. Land use*

Land use is of most significant concern to the non-consumer and governmental groups (see Table 9).

The non-consumer group perceives that the government consistently delivers car-dominant policies in terms of land use, thus disseminating a distorted view of what optimal land uses might otherwise be. For the non-consumers, a consequence of witnessing a car-dominant landscape is a general tolerance of parking intruding into public space in the absence of any clear alternatives or retribution. Public space is found to be something of particular value to the non-consumer group (see 5.1.2) and as such non-consumers feel that government should demonstrate a responsibility for its prioritisation. The governmental levels show awareness of competing land uses but they also experience a broader range of pressures, such as austerity and accessibility, which they perceive as something they must be accountable for and are challenged to prioritise and offset.

### *5.2.3. Focus on the consumer*

The parking industry stakeholder group seems to express its value of parking through focusing on consumer issues, such as: facilitates access (see 5.1.3); convenience, safety and price (see 5.1.7). Table 10 presents some of the issues the stakeholders feel are of concern to the consumer which seem to influence how the parking industry values parking.

The industry is responsive to consumer parking dilemmas and so endeavours to provide facilities accordingly by delivering competitive standards. It speaks of reforming

consumer perceptions of paying for parking as a ‘grudge purchase’ by supplying consumers with facilities they might instead value, hence *convenience, safety and price* (see 5.1.7). Parking consumers are of no concern to the non-consumer group and of secondary value to the local business sector and governmental groups, and as such are scarcely mentioned, but they are of significant interest to the parking industry.

## 6. Discussion and conclusion

The use of in-depth exploratory style interviews conducted to identify who the stakeholders are that are affected by parking, what parking issues are of concern to them, how they value parking and how the issues that concern them impact on their value of parking has to some extent confirmed and added to the literature review findings.

### 6.1. Stakeholder identification

The academics interviewed sanctioned and contributed to the stakeholders identified from the literature and the classification of their groups (see Table 2), thus comprehensively authenticating and advancing the range of car parking stakeholders that literature currently offers. This establishes a platform for further investigation into stakeholders which extend beyond those within the consumer group. It is hoped that in the future, an equal number of stakeholder groups will be afforded the same attention.

### 6.2. Parking issues which motivate how stakeholders value parking

Parking policy’s capacity to contribute to the six desirable urban goals (see 2.2.1) as specified by the literature appears to address many of the key parking issues held by the stakeholders which form the motivation behind how they value parking. What this paper has achieved is that it has exposed which stakeholder group values which urban goal and whether they perceive that value to be either a positive or negative value of parking.

For instance, the second goal mentions the efficient use of land. This was perceived by the academics to be of priority interest to the stakeholders and was indeed discussed by all of the stakeholder groups in terms of how they value parking. However, only the non-consumer group shared with the academics the wholly negative view of using land for parking (mostly in relation to the fifth urban goal), leaving the consumer group in opposition through their perceptions of only the positives (mostly in relation to the first and third urban goals), and the rest of the groups divided between positive and negative views.

Table 3. Car parking sector leader interviews outlining their group role and code.

Group	Group role	Code
Non-consumer	British campaigners and organisations supportive of alternatives to the car	NC 1, 2, 3, 4
Consumer	British campaigners and organisations supportive of motorists	C1, 2, 3, 4
Local business sector	Organisations representative of the British local business sector affected by parking	LBS1, 2, 3, 4
Parking industry	A broad range of organisations representative of the British parking industry	PI1, 2, 3, 4
Governmental	Representatives from local, regional and central UK government	G1, 2, 3, 4

For the non-consumer group, a clear issue was the impact that car parking can have on public space; they seem to value public space for qualities similar to those presented in the literature, as given by Tims and Mean (2005, p. 5). They perceived this impact as a significant loss or disbenefit to society and thus a negative value, endorsed by the sixth desirable urban goal, and to some extent the fourth. Car parking's impact on public space was of no concern to the rest of the stakeholder groups (or to the academics), except for the local business sector, which was again split between the views of the non-consumer group and the first urban goal of a *healthy economic climate*.

Access was a key issue raised by the majority of stakeholders, with three of the five groups understanding only the benefits that car parking can bring to enabling a lifestyle for consumers of car parking. Access forms the third urban goal and was also perceived by the academics to be a way in which only the consumer group of stakeholders would value parking (see Table 5, 2.7). Additionally, at least three of the ways that the

Table 4. Academics' perception of car parking issues which are of concern to stakeholders and commonly implemented policy solutions.

First-order category	Second-order category	Description
1.0 Characteristics of parking issues	1.1 Land used for parking limits other opportunity uses	The impacts of dedicating land to parking which then limits other opportunity uses is magnified in urban environments where land is more scarce and populations are higher
	1.2 Parking is complicated	The potential of parking is not fully understood or sometimes recognised. Parking spans both transport and land use, consequently understanding the impacts on one in an effort to resolve the other can be challenging
	1.3 Parking problems usually exist in areas of density	The majority of parking problems are mostly linked to the urban environment
	1.4 Parking is one component	Parking is a part of a mechanism used to achieve a broader aim. For instance, parking can be used alongside improved public transport provision to contribute towards influencing travel behaviour
	1.5 Parking triggers emotion	People often trivialise parking offences, possibly because they believe that parking should both be provided and be provided for free as a matter of course. This can lead to people becoming emotional about parking. Some people are starting to take a different attitude to parking
	1.6 Challenging decision making	Parking decisions are challenging due to both the complex nature of parking and a volatile stakeholder environment
2.0 Potential parking issue solutions	2.1 Pricing	Parking pricing is often seen as a less effective policy, particularly when compared with road user charging (RUC)
	2.2 Oversupply	Particularly in the US, parking policies have traditionally supplied more parking than might otherwise be required
	2.3 Free or low cost to user	Parking is often provided to the user for free or at a low cost



Table 5. Academics' perspective on how stakeholders value car parking.

First-order category	Second-order category	Description
2.0 Stakeholder parking values according to academics	2.1 Objective based	The value of parking for most stakeholders is motivated by their end goal
	2.2 Revenue stream	For some supplier stakeholders such as parking operators, parking is valued as a direct source of revenue For some supplier/consumer stakeholders such as airports, parking is valued as a supplementary source of revenue For some supplier/consumer stakeholders such as independent retailers, parking is valued as an indirect source as they believe that customers rely on parking in order to access their premises
	2.3 Policy facilitator	Some cities may value parking as something which they can use to help them realise their wider vision
	2.4 Lack of complaints	As local authorities respond to complaints, a lack of complaints potentially liberates them to focus on other issues
	2.5 Unwanted cost	Some stakeholder suppliers of parking are required to provide parking and incur the cost
	2.6 User perspective	The user value of parking is the main perspective through which the value of parking is viewed (it comprises multiple factors)
	2.7 Lifestyle facilitator	Most users value parking as something which enables them to go about their daily lives, particularly if they are not charged for their parking

stakeholder groups positively value car parking are economically underpinned (see Table 6): sustains economic activity (see 5.1.4), a commercial product (see 5.1.5) and revenue stream (see 5.1.6). Despite none of these being raised as a parking issue by the academics, they were touched on in the academics' perception of how those in the consumer/supplier stakeholder group (all stakeholders except for the non-consumer and governmental groups) might value car parking (see Table 5, 2.2 – revenue stream) and are perhaps best reflected in only the first of the desirable urban goals.

The second desirable urban goal, in addition to mentioning land, also considers the efficient use of existing transportation. This seems to be a contributor to a key positive way in which only the governmental stakeholder group values car parking (see 5.1.8). The academics come close by referring to 'policy facilitator' (see Table 5, 2.3) as a way they perceive local governmental stakeholders might value car parking, but neglect to address it specifically as an issue, instead considering it more tenuously as 'parking is one component' (see Table 4, 1.4).

A missing element from the desirable urban goals is that of convenience, safety and price (see 5.1.7), as motivators behind a key way in which the parking industry stakeholder group values car parking. Instead, both convenience and price are extensively addressed in the literature through such works as Glazer and Niskanen (1992), Anderson

Table 6. The losses and gains of how stakeholders value car parking according to stakeholder groups.

		Parking stakeholders				
		Non-consumers	Consumers	Local business sector	Parking industry	Governmental
Significant ways that stakeholders value parking	Efficient use of land	–	+	+ / –	+ / –	+ / –
	Impact on public space	–		+ / –		
	Facilitates access		+		+	+
	Sustains economic activity		+			
	A commercial product			+		
	Revenue stream				+	+
	Convenience, safety and price				+	
	Part of an efficient transport system					+

Table 7. Key influencers of how stakeholders value parking according to stakeholder group.

		Non-consumers	Consumers	Local business sector	Parking industry	Governmental
Key influencers of how stakeholders value parking	Government	•	•	•		•
	Land use	•				•
	Focus on the consumer				•	

Table 8. Stakeholder government concerns.

Influencer	Concern	Description	Elicitations
Government	Parking management	Inconsistency, inadequate policies, insufficient understanding of parking	<p>‘There is no consistent application [of parking policies].’ (NC3)</p> <p>‘There is a willingness on the part of the person setting the policy to do it their way.’ (C3)</p> <p>‘At a local level parking can be a key political football.’ (LBS1)</p> <p>‘The UK Coalition Government has pledged to protect and extend the autonomy of local authorities, and I am keen that they take decisions like this which impact their local areas.’ (G4 national level)</p>

Table 9. Stakeholder land use concerns.

Influencer	Concern	Description	Elicitations
Land use	Unchallenged user dominance	Inadequate compensation, competing land uses, centralised amenities, a stimulator of economic activity during times of austerity	‘If we reduce the amount of parking, we can increase the amount of public space that is available for people to walk and spend time in ... how you impact on public space should be reflected in a pricing structure, but people don’t feel they should have to pay for parking, they feel annoyed about it and that public space should be managed for parking.’ (NC1) ‘It is an efficient use of land ... but it has to compete with other demands for the use of land.’ (G2 national level)

Table 10. Stakeholder consumer concerns.

Influencer	Concern	Description	Elicitations
Focus on the consumer	Parking provision and funding	Frustrations experienced by users have been responded to by the parking industry yet passing the costs on to the consumer leads to consumer perspective of parking as a ‘grudge purchase’	‘Individuals have to pay real cash to park, they have to get money out of their purse put it in the machine and the whole process focuses attention on to actually paying money. In addition, people feel that the roads belong to them, they pay our taxes for providing and maintaining them so why should they have to pay any extra to park.’ (PI3) ‘There is no such thing as a free parking space. Someone’s paying for it so why should that not be the user.’ (PI2)

and de Palma (2004), Shoup (2006), Arnott and Inci (2006), Calthrop and Proost (2006) and Kelly and Clinch (2009); the issue of safety is not sufficiently attended to.

This paper develops the findings from literature by presenting clarification in the positive and negative ways that particular stakeholder groups value parking, as motivated by their issues with parking. What specifically influences the positive and negative values is focused on next.

### 6.3. Influencers of how stakeholders value car parking

The literature review revealed two prevalent concerns, governmental (see 2.2.1) and land use (see 2.2.2). These encompass a multitude of parking issues which concern the car parking stakeholders interviewed. They are significant as they seem to be key influencers of how some stakeholder groups value car parking.

For instance, the preliminary interview findings disclosed that car parking experiences included various parking *characteristics* (see Table 4) which can intensify more widespread complications involving issues of supply and demand (Dios Ortúzar & Willumsen, 2007). Included in ‘Characteristics of parking issues’ (see Table 4, 1.0) as given by the academics, are six second-order categories, many of which include dilemmas experienced by the governmental stakeholder group, such as parking is complicated (1.2) and challenging decision making (1.6). Indeed, almost all the stakeholder groups expressed concern that the government might be struggling to manage car parking to meet with their satisfaction (see Table 7). Consequently, it is the stakeholder groups’ perceptions of how the government manages parking that influences the stakeholders to value parking in the ways in which they do.

With regard to land use, car parking’s impact on public space was a key concern for the non-consumer group and contributed to its negative value of parking (see 5.1.2). Indeed, the literature seems to agree by also presenting negative environmental impacts of car parking (Forinash et al., 2003; Kenworthy & Laube, 1996). The findings from the preliminary interviews pointed to land use as a dominant issue for the academics although their concern was more focused on land opportunity uses and was neglectful of perceiving land use as connected with public space.

The parking industry group’s value of car parking was found to be influenced by their focus on consumers (see 5.2.3 ‘Focus on the consumer’). This group seems preoccupied with pacifying their perceptions of consumer frustration, such as over paying for parking, by delivering what the parking industry deem to be good value themselves, that is, convenience, safety and price (see 5.1.7 ‘Convenience, safety and price’). The closest representation of this in literature is perhaps best presented in 2.3 ‘Exploring car parking stakeholder value in literature’, which explores consumer behaviour in relation to convenience and price. Despite being of significance to the parking industry, safety as an influencer of how the parking industry values parking seems not to be reflected in the car parking literature.

#### 6.4. Summary

This paper aimed to unravel how key stakeholders value parking and has productively achieved this aim through a series of clear and comprehensible tables. The tables concisely present who the key stakeholders affected by car parking are, the issues that lie beneath how they value car parking, the key ways in which they value parking and what influences their value of parking. Despite the literature’s acknowledgement of a range of stakeholders, the findings have extended that range and exposed that car parking stakeholders value parking in multiple ways which stretch beyond conventional economic controls. Those making decisions in car parking, particularly at a policy level, may benefit from the findings in application.

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