

Discussion: Potential for carfree development in the UK

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On reading the interesting article ‘Potential for carfree development in the UK’ by Melia *et al.* (2013), the contributors were struck by the notion that nowhere in the extant literature is there a comprehensive taxonomy of what might be termed ‘carfree communities’ in the most general sense. As a tentative first step in this direction, 10 possible criteria to consider are proposed.

The first relates to the degree or level of ‘carfreeness’ in a community and whether the emphasis is on either ownership or use, or both (Melia, 2010). For instance, in some cases, car ownership is entirely forbidden while in others car use may merely be deterred at particular times of day by the imposition of access charges (Litman, 2012).

The second is the spatial size of such ‘communities’, which might range from certain types of vehicle being denied entry to a single site or road facility (such as the Strøget shopping street in Copenhagen, Denmark), right up to a town (Venice, Italy) or even potentially a region or nation (Cuba) being entirely ‘carfree’ (Crawford, 2000; Wright, 2005).

Third, carfree/-reduced communities can be categorised by their degree of permanence. Thus, such communities can exist over a range of timescales from quite short-term episodes (e.g. where a road is closed off for an afternoon to host a street market), through medium-term controls (say where a bridge is closed to traffic for structural repairs), to situations where restrictions on vehicles are permanent (Cairns *et al.*, 1998; Wright, 2005).

The fourth is whether carfree/-reduced communities occur on a planned and regular basis or whether they are more reactive and/or irregular or ‘one-off’ events (Cairns *et al.*, 1998; Wright, 2005).

Fifth, it is interesting to look at the reasons or motivations for establishing carfree/-reduced communities, which can be thought of as meeting specific local needs and/or addressing broader social, economic or environmental concerns. For example, carfree developments have evolved in London due to restricted space for parking coupled with already low levels of car ownership and relatively good public transport (Morris *et al.*, 2009), while (almost) carfree communities emerged throughout Cuba in the early 1990s due to the economic and political context (Enoch *et al.*, 2004), and the Amish community in North America chooses to remain carfree for religious reasons (Wagler, undated).

Sixth, there are several means by which carfree/-reduced communities have been enforced. These include moral as well as physical, regulatory and fiscal mechanisms (Scheurer, 2001). Thus, community pressures enforce carfreeness in Amish communities, whereas physical barriers prevent car access to the island of Sark in the English Channel, for example.

The seventh is the ‘type of boundary’, whether physical, institutional, socioeconomic, cultural or a combination of these. Many carfree areas are physically isolated by being islands surrounded by water or due to ‘difficult’ terrain (e.g. Venice or Clovelly in Devon, UK) or are institutionally defined, such as the congestion charging zone in Valletta, Malta (Attard and Enoch, 2011).

The eighth is the ‘permeability’ of the boundary; that is, the degree to which carfreeness is ‘enforced’ within the carfree community – a characteristic that is probably influenced by the means of enforcement and the type of boundary in particular.

The ninth concerns the roles of the different stakeholders involved in establishing such a community. In particular, whether the process was imposed by a government agency or

landowner in a top-down manner (as in the case of Sark) or was generated from within the community itself from the bottom up (as in the Christiania area of Copenhagen) (Litman, 2012; Morris *et al.*, 2009).

Finally, the tenth is the nature of the broader context within which each carfree/reduced community developed in terms of whether the surroundings are in any way 'special' or unique and thus more likely to support a measure that seeks to limit car ownership and/or use. Once again, the Cuba example is pertinent here (Enoch *et al.*, 2004), as are the cases of Venice, Italy and Mont Saint-Michel just off the coast of Normandy, France, which – for geographical and historical reasons – have so far remained carfree (Crawford, 2000).

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