



ARGnote

Vol. 1 No. 5 2014

ISSN 2054-4561

A vision for cities: the 5-city model

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Overview

This note explains the 5-city model for cities, which was developed as part of the approach to producing a transport strategy for transport for low carbon cities in Colombia.

Key Findings

- A city is a complex system, which provides support for the people who use it by combining sectors (e.g. Transport, Energy, Health) into an intersectoral design.
- Current approaches to city analysis tend to fall into a sectoral analysis: transport, health, public space, crime, housing etc. Although these are thorough and of considerable interest and use, they tend to result in a rather silo-like approach to a city and a reluctance to consider what the city is for.
- A better way of analysing a city is therefore to consider its ability to deliver this facilitation.
- This delivery is encapsulated in a simple model in which a city is viewed as five different principles for delivery of improvement in wellbeing – these are the 5 cities of the title.

Aims & Objectives

To provide a high-order set of principles for city design based on the needs of people.

Background

The classic city analyses of Mumford⁽¹⁾ and Hall⁽²⁾ are examples of comprehensive reviews of cities through the ages. Many other works about

cities have been written but few convey such authoritative understanding of what cities are or how they work as a whole. However, even these works develop their arguments along lines of urban sectors – e.g. housing, transport, health – and this causes us to consider a city as a collection of systems, each of which has its own set of constraints, challenges and considerations and a set of offerings to the city. Yet living in a city means having to deal with all of these at once. The UK government, for example (but it is not unique in this respect), has no ‘ministry for cities’ even though 80% of the population lives in them⁽³⁾. Instead, cities are left to be dealt with by a combination of their local administration, national sectoral departments such as Health, Transport or Work & Pensions. The Department of Communities and Local Government really exists to pass down to cities requirements on planning and similar matters. Yet a city is really a complex system in which all these subsystems combine dynamically to produce a support mechanism for its population. The fragmentation of government means that many opportunities for realising cross-sectoral benefits are lost in practice.

Methods

The UCL Accessibility Research Group was asked to draft a National Strategy for Transport in low carbon cities for Colombia⁽⁴⁾. This provided an opportunity to review how to look at a city in a holistic way to avoid the fragmented outcomes described above and to develop a visionary approach to urban development. Although the Strategy was for Transport, it is essential to know

what the transport system is being asked to support in the city before it is possible to start designing the system.

Discussions were held with various city stakeholders, including politicians, business communities, academics, public officials and the public in general. These discussions were conducted in a series of workshops in Colombia, Peru, China and the UK. A major influence was the city of Medellin, Colombia, in which the whole vision and rationale for the city had been rethought on the basis of restoring the people's feeling for and confidence in the city after a lengthy period of trauma. Here, the primary function of the integrated transport system (metro, cable car, Bus Rapid Transit⁽⁵⁾ (BRT), cycleways, etc.) is not to carry people from A to B but to engage the population in social cohesion, irrespective of wealth, age or political sentiment. This informs how the transport system is operated as well as its alignment. Thus the transport system, particularly the metro and cable car is a source of education, inspiration, social cohesion, information and stimulation to continuing improvement in the future. Everything the transport system does is driven by these intentions. We deconstructed this into a set of high level principles with which the stakeholders could all agree. These principles are being tested against technical challenges such as the analysis of wellbeing, personal and social aspirations, at which level they can bear comparison with Newman & Jennings' 'Characteristics and Strategies of Sustainable Societies'⁽⁶⁾.

Results

A city should function on the basis of five principles. We described each principle as a 'city' because it implied that the principle applied across the entire city, whatever particular function was being considered and independently of spatial or temporal considerations:

A courteous city: a city in which stress levels are deliberately lowered through design which encourages behaviour which emphasises the social priority rather than the individual. *The Medellin metro is easy to use, provides books to read, conveys social messages etc.*

An active city: a city needs many activities in order to thrive. These include economic activities, social, educational, health, leisure and so on. These have to be distributed around the city and there is a need for every activity to be available to the entire population to avoid exclusion and social isolation. *The Medellin metro is accessible, and includes connections to the poorer hard-to-reach*

parts of the city so that economic, social and educational activities are truly available to all

A city of public space which is available and accessible to all users of the city and in which they feel safe, secure and able to continue their desired activities. *The Medellin Metro has opened up public parks, libraries, ecological areas to the whole city. Public escalators have been designed to encourage ownership by the citizens, especially the young people, of the public space.*

A healthy city which actively promotes improvement in the health of its occupants through good design, the use of appropriate materials, clean technologies, minimising the use of energy and associated harmful emissions so that the population achieves a higher quality of life, health and an increased healthy life expectancy. *The Medellin metro provides zero-emission mobility, provides access to health centres and public health education.*

An evolving city which opens opportunities for future generations too meet the needs and desires they will encounter (and which are currently unknown), by ensuring the design is adaptive and able to change, whilst delivering a sense of 'stable change' to the population over time. An acceptance of the fact that what works today might not work tomorrow (and vice versa) drives this approach to design. *The Medellin metro, by employing university students to drive the trains is showing them at first-hand how important the metro is in delivering the social cohesion desired in the city; these students will become the future engineers, planners, architects, doctors, business and political leaders and will carry this ethos into their future decisions.*

Conclusion

The 5-city model, by prioritising functionality over the means by which such function is delivered places the vision – the inhabitants' desires and needs are set at the top of the planning and design hierarchy. Thus before the means are considered at all the requirements of the city's people set the parameters that are available to and constrain the various elements of provision.

Future Research Areas

Development of wellbeing analysis for evaluating the 5-city model.

Endnotes: 1 Mumford L (1961) *The City in History*, Harcourt Brace and World, USA 2 Hall (P) (1998) *Cities in Civilisation*, Weidenfeld and Nicholson, London, 3World Bank (2013), <http://data.worldbank.org/indicator/SP.URB.TOTL.IN.ZS> Accessed 16/11/13 4 Tyler et al. (2013) *Draft National Strategy for Transport in Low Carbon Cities in Colombia*, Report to Ministry of Transport,

Colombia **5** Wright, L., W. Hook (2007) *Bus Rapid Transit Planning Guide*, 3rd ed. Institute for Transportation & Development Policy,

New York. **6** Newman, P., Jennings I. (2008) *Cities as Sustainable Ecosystems*, Island Press, Washington DC, USA (p109).