Journal of Transport Geography 70 (2018) 275–276

Contents lists available at ScienceDirect

Journal of Transport Geography

journal homepage: www.elsevier.com/locate/jtrangeo

Book review

Non-motorized Transport Integration Into Urban Transport Planning in Africa, by W. V. Mitullah, M. Vanderschuren and M. Khayesi (Editors). London: Routledge. £105 (hardback), £36 (eBook). ISBN 9781472411402.

This edited book does two things. Firstly, it analyses the challenges faced by pedestrians and cyclists in African large cities - and there are plenty of challenges. Secondly, it explores the opportunities that these cities have for avoiding the errors made in other parts of the world. Most African cities can still choose to follow an urban development pathway that does not rely solely on the mobility provided by private cars, a pathway that European, American, and Asian cities have already followed, with the negative social and environmental consequences that are well-known.

The title of the book is a bit misleading. The focus is not really on urban African but on three very large cities (Cape Town, Dar-es-Salaam, and Nairobi) that may not be representative of the "typical" African city. But on the plus side, the book does a good job in comparing those three cities. Several chapters compare two of the cities, or all three. The main conclusions of the book are stated upfront. Almost all the contributors are based in African institutions, which is refreshing in a world where a large part of research on Africa is still done outside the continent.

Infrastructure provision is one of the major challenges. There is a general lack of good-quality pedestrian pavements and road crossing facilities in the three cities studied. Moreover, the provision is uneven (some areas have poorer infrastructure than others) and discontinuous (and so it is not useful for whole walking trips) (Chapter 7). Cycling infrastructure is almost non-existent. There is also minimal concern for the needs of people with disabilities.

Safety is another major challenge. Road fatalities per capita are much higher in African cities than in other cities in the world and pedestrians are overrepresented in the number of fatalities (Chapters 4–6). Pedestrians are vulnerable not only because of poor infrastructure but also because of poor enforcement of speed limits, substance abuse by both drivers and pedestrians (that is why weekends account for around 40% of fatalities) and because of something that is specific to large African cities: a high incidence of pedestrians crossing motorways. As car ownership and use grows, the safety record of African urban roads only seems to be getting worse.

But there are opportunities for reversing these trends. Walking is still the dominant mode of transport in African cities. There is also growing interest by city governments and other stakeholders in interventions to improve the conditions for pedestrians and cyclists. For example, Chapter 10 describes how 'walking buses'and 'cycle trains' can improve children's mobility and promote physical activity.

However, not all interventions are effective. The "infrastructure-first" approach which is common to most interventions does not result in increased take-up of walking and cycling if it does not take into account factors such as travel demand, law enforcement, amenities, personal security, and cultural context. For example, pedestrians only use road crossing facilities if they are located along 'desire lines' - which explains why in one case study reported in Chapter 3, only 1–5% of pedestrians use those facilities. Building cycling lanes, without a similar effort in law enforcement and measures to promote cycling (such as car-free days, financial incentives, and provision of showers), also results in under-used infrastructure (Chapter 13).

A more fundamental concern is whether the goal is really to have more non-motorised trips. Unlike cities in developed countries, in large African cities, walking is not always a health-enhancing activity. Low-income households tend to live on the outskirts of the cities - a legacy of colonialism, apartheid, and economic and urban growth. Many people need to walk for a long time (up to 4 hours, as shown in Chapter 2) to access the opportunities that the city offers, often along (and across) busy, polluted, and unsafe arterial roads. In this context, increasing the number or the length of walking trips may not be the best solution for improving mobility and health – providing better public transport and decentralising facilities is. In other words, sustainable transport planning needs to happen in conjunction with suitable land use policies.

Interventions also need to consider social and cultural aspects. Walking is the dominant mode of transport in African cities only because of economic, not health or environmental reasons. Chapter 2 shows that as income levels increase, there is an exponential decrease in the share of non-motorised trips. Using private vehicles gives social status and protects people from crime and from the discomfort of walking or using crowded public transport. An "infrastructure-first" approach to improve the conditions of pedestrians is therefore not enough to change people's perceptions and attitudes about walking.

The main conclusion of the book is that to take advantage of the opportunities, a radical shift in policy priorities is needed. Urban transport planning in Africa relies on a car-centric paradigm, with insufficient attention given to the needs of non-motorised users. But to achieve a shift in political priorities, institutional arrangements are as important as technical details. For example, Chapter 12 argues that the provision for walking and cycling in poorer cities has been mostly driven by development partners such as the World Bank and the African Development Bank, and not by proactive strategies by local institutions.

Research also plays an important role. Walking is not usually included in transport statistics and transport models because of the lack of reliable data. As a result, the number of pedestrians tends to be underestimated both in the number of trips and number of road fatalities (Chapter 11). More effort should be put into the quantification and modelling of walking (and cycling) trips. Some of the chapters in this book contribute to that effort, proposing innovative methods to measure non-motorised mobility.

Paradoxically, this innovation in research methods becomes the main weakness of this book. A lot of the material presented is 'dry' and descriptive, more suited to journal articles or technical reports than to book chapters. There is too much detail about methods and the case study roads and not enough synthesis and discussion about the lessons learned from those case studies. There is also some duplication (for example, studies of pedestrian road crossing behaviour in Chapters 3

https://doi.org/10.1016/j.jtrangeo.2018.06.014

Available online 22 June 2018
0966-6923

and 6), and few links or comparisons between chapters.

But overall, the book is a welcome contribution to an under-researched topic and fits well with other recent books on sustainable urban transport in developing countries (e.g. Behrens et al., 2016; Pojani and Stead, 2017; Priya Uteng and Lucas, 2018). It still leaves some gaps in the study of non-motorised mobility in African cities, which is not only about walking and cycling - hand-carts and animal-drawn transport are still important transport modes in these cities. It would be interesting to know about how the needs for these modes are being met (or not), and what could be done to improve them.

References

Behrens, R., McCormick, D., Mfinanga, D. (Eds.), 2016. Paratransit in African Cities. Routledge, Oxford.
Pojani, D., Stead, D. (Eds.), 2017. The Urban Transport Crisis in Emerging Economies. Springer, Cham.
Priya Uteng, T., Lucas, K. (Eds.), 2018. Urban Mobilities in the Global South. Routledge, Oxford.

Paulo Rui Anciaes
Centre for Transport Studies, University College London, Chadwick Building, Gower Street, WC1E 6BT London
E-mail address: p.anciaes@ucl.ac.uk