Conference Presentation

A Pedestrian Typology Mismatch: One Walkability Paradigm, Yet Two Types of Pedestrians

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Background

People walk the world over. There are two primary reasons we walk: as a principal mode of transportation to reach everyday destinations such as work, school, and shopping or for supplemental activities such as to exercise, for pleasure, or to consciously reduce our carbon footprint. We use the term *captive pedestrian* to identify those who walk out of necessity, most often due to low-incomes; we use the term *choice pedestrian* to identify those who have regular access to personal vehicles or reliable transportation. For millions of captive pedestrians around the world, especially those who are poor, disabled, very young or very old, or are marginalized by gender, walking is an essential mode of transport.

After a century of planning around motorized vehicles, walking is regaining its place within the transport portfolio, primarily as a response to concerns such as climate change, rising rates of obesity, and growing social isolation. Walkability is used to describe the degree to which places support and encourage walking as a synthesis of the built environment, a sense of safety and comfort, and access to socioeconomic services. Walkability is a core design principle of planning and development models such as New Urbanism, Smart Growth, Transit Oriented Transportation or TOD, Safe Streets for All, Complete Streets, Walkable Cities, Community Design for Physical Activity, and the 15-minute City. The models vary in specifics, but they consistently conceptualize pedestrians as choice pedestrians.

These models emphasize walking as a choice, focusing on comfort, physical activity, and access to public transport with walking as the first-last mile, especially for costly light rail systems. Economic development is a core principle, as well, with programs such as Main Street America. Inducing people out of personal vehicles and commercial activity are measures of success. With few exceptions these models are the products of planners working in high-income countries (HICs), drawing from the urban form of older European cities, and are taught in university planning programs everywhere.

The lack of recognition or awareness of captive pedestrians result in certain regions of the world working with mismatched walkability models. In addition to failing to address the needs and

concerns of captive pedestrians, these walkability models employ costly infrastructure—far out of reach of many low- and middle-income countries (LMICs), at least without substantial reliance on external funding and added debt. Planners working in LMICs need walkability models that better address the fundamental issues facing captive pedestrians and that are financially and logistically feasible.

Aim

This work critically assesses pedestrian and walkability literature to argue that choice pedestrians are the implicit target of walkability planning models yet they constitute a minority of the world's pedestrians, whilst the models omit solutions for captive pedestrians, the majority of the world's pedestrians.

Method

This research used an *integrative literature review* to synthesize and critique scholarly and grey literature from two specific transport areas, pedestrians and walkability. We began by reviewing pedestrian literature, including pedestrian safety, to identify the implicit and explicit typologies associated with pedestrians, leading to what we believe is the first-ever rigorous definition of two types of pedestrians—captive and choice. Next, we examined walkability literature to consider the ways in which pedestrians are typologized. Our critical analysis suggests that unconscious bias and blind spots have led to the disproportionate emphasis on choice pedestrians in walkability literature.

Results

Two findings emerge from this work: (1) a novel definition of pedestrian typologies—captive and choice, with correlations to needs and concerns for each type; and (2) a critical assessment of how walkability models conceptualize pedestrians due to unconscious bias and blind spots and how this impacts our ability to meet the needs and concerns of both types of pedestrians.

Conclusions

- There are two primary types of pedestrians—captive and choice, each with different needs and concerns; captive pedestrians far outnumber choice pedestrians.

- Prominent walkability models disproportionately address the needs and concerns of choice pedestrians, leaving planners without tools to address the needs and concerns of captive pedestrians; this oversight is believed to be rooted in unconscious bias.

- New walkability models are needed to better address the needs and concerns of captive pedestrians, ideally generated by planners working in and with communities of LMICs, including and especially Africa.