

A Pedestrian Lament for Compassionate Safety on Our Roads

Our first citizen of this city, His Worship Mr. Obed Mlaba, the honourable hosts for this evening function, Ministers Sbu Ndebele and Zweli Mkhize; Transport and Health Departments' Chief Executive Officers Dr Mbanjwa and Professor Green-Thompson; Senior officers in both departments; distinguished guests, ladies and gentlemen, comrades and patriots; all protocol observed, I greet you all in the Spirit of the African Renaissance and in celebration of our ten years' democracy; and good evening to you all! Thank you for inviting UNIARC and some of its researchers and associates

First and foremost, allow me to state my point of departure with regard to our subject of discussion this evening. I am a teacher by profession and a spatial scientist by academic training (Geographer) and my task is to interpret what is going on- in our space. As a geographer, I straddle between the two poles of the Natural and Social Sciences which bring about what I call "a sense of balance" in the analysis of a problem. As a result, my interpretation of issues is guided and informed by both these sciences. Other scientists argue that:

"...the factors that affect the travel behavior of the [pedestrians] are numerous, complex and interrelated. Yet it is imperative that they be identified and understood."ⁱ

What I intend to do this evening is to briefly look at:

- the nature of human beings when they naturally interact in space
- the social impact of infrastructure
- the apartheid reconstruction of human space

From this point I delve into the current status on our roads prior recommending strategic actions to consider in response to the pedestrian lament.

Human's Natural Interaction in Space

The nature of a human being is not to walk in a mechanical and robotic manner when approaching its target. Martha Rowenⁱⁱ argues that there are psychological factors in play when people jaywalk and eloquently puts it as:

"...the natural thing for an animate, sentient being (e.g., a human being) to do when it wants to go someplace that is, for example, slightly ahead but mainly to the left, is to move slightly ahead and mainly to the left, in order to get there most efficiently. It is neither natural nor convenient to walk to a corner, wait for a light to change, jammed together with countless other

impatient human beings, and then make a mad effort to get across before the light changes. To do so takes a great deal of self discipline and is a source of frustration, especially for those who are in a hurry...”

This behaviour is further complicated by our socio-econo-politico establishments. In a survey conducted by UNIARC, pedestrians were asked why they sell goods on the freeway although it is illegal, 86% alluded to poverty and also that it created business opportunities (Ntuli, 2003). Recently, a survey conducted in 15 African countries indicated that when respondents were asked what it means to be poor as many as 47% cited “lack of food as an answer instead of “lack of money”.ⁱⁱⁱ

In the face of abject poverty that is facing the majority of our communities would we expect them to unwisely spend the little energy they have to elongate their twenty to thirty minutes’ walk by an additional hour to cross a bridge that is also, in all probability inconveniently positioned.

In expansion to Rowen’s “source of frustration”, the UNIARC study also established that 31% of pedestrian cross roads without looking because they are “stressed out”. Besides the different daily stresses characterized by the world’s systems of socio-econo-politico dictates, and our state’s transitional demands, Rowen further contends that:

“...the fact is that [vehicles] set a standard of speed that forces everyone to move at an extremely stress-producing pace [for] pedestrians to get to the corner in order to be there before the light changes, to get across before the ‘walk’ sign disappears; cyclists to keep up with the pace of traffic so as not to be honked at, harassed or mowed down...”^{iv}

Such is the natural and unnatural interaction of human beings in space

Social Impacts of Infrastructure

As if the issues of “stressful pace” and life are not enough for human beings, our urban infrastructural development in the name of civilization has brought about a huge and unprecedented social impact. De Boer succinctly summarises it as:

“...improvements to transport systems like roads and railroads are essentially intended to improve access, and to open up residential, occupational, educational and recreational opportunities for its users. Alas, the more they seem to serve this purpose by offering high travel-speed, the less they themselves are accessible: motorways and inter-city trains are available at relatively few places and at much higher cost than the average street and streetcar.

Here at home, van Schalkwyk argues that:

“...main roads and highways cut through peri-urban and rural communities. Communities are split in half or even into three or four segments. People have traditional routes they have always taken to important points in the community including water, clinics, schools and churches. Now there is a road dividing these community structures. Bridges do not always accommodate the path taken by community members...”^v

Infrastructure also has more incisive and pervasive impacts such as:

- 1) Access (time-distance to facilities) both geographically and socially people live at varying distances from facilities and unfortunately differ in their ability to overcome this by means of transport.

Even though improvements of infrastructure may have redistributive effects, yielding better access to those who had more of it already. They make other systems less attractive and cause them to deteriorate, and in the end improve access for the better off and worsen it for the underprivileged.

- 2) Severance where the existing distribution access may be changed even more radically by the physical character of traffic and infrastructure

Destinations relatively near are virtually placed out of reach for pedestrians when road connections are disconnected, or when existing roads become increasingly dangerous to cross

- 3) Displacement due to construction or reconstruction of transport network as a rule requires changes in land use patterns. These in turn create new mobility patterns like:

- 3.1) Migration: Changes in access and amenities induces migration
- 3.2) Disintegration of the local community may also result.

Apartheid Reconstruction of Human Space

The residential segregation of South Africa’s urban landscape in particular and the removal of black townships to the fringes and bantustans created conditions for the development of a dynamic transport need and traveling patterns. As a result, the average commuting and walking distances of blacks was twice as long as that of whites. Suffice it is to provide you with Hattingh’s dramatic narration of “a tale of homes apart” in Appendix 1.

Current State of Affairs on Our Roads

In addition to the above problems some of which are currently in redress, pedestrians are faced with:

MOTORISTS FACTORS:

- Bad-mannered, impatient, speed stars, highly indignant, and inconsiderate

ENGINEERING FACTORS:

- Institutional barriers compound the problem.
These include a lack of co-ordination between local and state engineers and planners, educators, law enforcement officials, and citizens to provide for child pedestrian safety
- Bias to motor vehicle infrastructural construction/development
- Inadequate funding allocated for pedestrian improvements and safety research
- The low priority that elected officials place on walking as a mode of transportation

EDUCATIONAL FACTORS:

- Too much emphasis on vehicle related issues (UNIARC study)

SOCIO-ECONOMIC FACTORS:

- Formal and informal traders invading pavement space
- Unemployment leading to selling along the streets and junctions
- Use of public transport & lack of parental guidance

TECHNOLOGICAL FACTORS:

- Speed & eye sight problems: Vehicle speeds are very fast for human reaction to timely avoid crashes
- Colours of vehicles blend with the environment
- Engine noise very low to play it with the ear
- Traffic lights bias against pedestrians

Responding to the Pedestrian Lament

- Pedestrianise our approach to transport and road safety
 - 1) Speed reduction through engineering traffic calming
 - Humps / tables
 - Raised pedestrian crossings
 - Pedestrian refugee islands
 - Traffic circles
- Promote bicycle use with emphasis on health & environmental issues
- Promote & encourage use of daytime running lights
- Consider international plans that have merit for South Africa
 - Pedestrian Access and Mobility Plan (PAMP)

Properly implemented PAMPs can provide wide transportation, environmental and social benefits to the community, such as:

- more appropriate pedestrian facilities, especially in busy areas
- improved access for mobility-impaired groups in the community, including older persons
- safe and convenient crossing opportunities on major roads
- reduced injuries to pedestrians
- links with other transport services to achieve an integrated land use and transport facilities network
- integration with planning instruments

The campaign objectives would be to:

- Improve pedestrians' knowledge of pedestrian facilities, specifically the use of pedestrian refuges;
- Improve pedestrians' knowledge of how to use pedestrian signals, particularly to properly understand the flashing red phase;
- Improve driver/cyclist understanding of pedestrian entitlements during flashing red phase; and
- Improve tolerance between drivers and pedestrians at signals.

Conclusion

I concur with other scientists when they argue that:

“...the mobility difficulties of the [pedestrian] population stem from a host of constraints that range from physical, [socio-econo-politico] and mental

limitations to the inability of administrators and planners to meet the needs of the disadvantaged.”^{vi}

So a response to the pedestrian lament should attend to the constraints outlined in this article, discussions of this day, and somewhere else. To make a much better national and international contribution on these issues, UNIARC also needs some financial backing to strengthen its research resource base as it also trains and empowers young and promising scientists in the field of safety research. This would be an interim measure whose contribution could be gradually decelerated with satisfactory progress whilst mobilizing its resources towards self sustainability.

Honourable Minister, Mr. Ndebele and your “twin brother”, Chief Executive Officer, Dr Mbanjwa and staff, your Department is capable to handling and implementing some or all of the recommendations and has a good track record of being a trail blazer on road safety related matters.

You have turned the KwaZulu-Natal into Province a laboratory of road safety where other provinces have admitted tapping into your expertise and very soon, the whole of the African continent and the countries in the northern hemisphere shall be knocking on your door for help and advice as demonstrated in the case of road courts. The presence of the Minister of Health, Dr Mkhize, CEO Professor Green-Thompson, and their entourage strengthens the battle front against this scourge. The earlier we start the better.

For now and for this function I rest my case.

I thank you.

Dr Mongezi Noah

6th April 2004.

APPENDIX 1

“A Tale of Homes Apart

03:00 Pretoria

03:40 First commuter train departs from Mabopane & arrives in Pretoria station on the southern fringe of the Pretoria CBD 53 minutes later

04:05 The average worker in north-eastern Bophutatswana leaves home for Pretoria

04:09 The train departs from Mabopane & arrives at Belle More Station the northern fringe on the Pretoria CBD 47 minutes earlier

04:15 The average worker in KwaNdebele leaves home for Pretoria by bus. First commuter train departs from Ga-Rankuwa and arrives at Pretoria stations 52 minute later.

04:17 First commuter train departs from Atteridgeville and arrives at Pretoria station 22 minutes later.

04:24 First commuter train departs from Mamelodi and arrives at Pretoria station 31 minutes later.

05:10 The average worker in the border towns of Bophutatswana leaves home for Pretoria.

06:00 The arrival of 13 commuter trains from Mamelodi, 12 from Ga-Rankuwa & Mabopane 5 from atteridgeville at Pretoria station between 06:00 and 08:00, as well as the arrival of 8 commuter trains from Ga-Rankuwa and Mabopane at Belle More Station.

06:30 Early morning traffic peaks until 07:00 on the main arterials in the outer city.

This includes a centripetal movement of mostly African to the buffer zone industries as well as the city core and centrifugal movement of mostly whites to the buffer zone industries.

06:55 The average worker in Atteridgeville/Laudium and Mamelodi/Eersterus leaves for Pretoria

07:00 Industrial workers start their shifts. Within a period of 30 minutes most whites leave home for their daily activities

Morning traffic peaks until 08:00 on the secondary as well as the arterials in the inner city. An average of 2 500 vehicles *en route* to the Pretoria CBD pass within the hour on the main arterials, this includes 2 000 private vehicles and *combi taxis* as well as 50 buses

07:15 The average African domestic worker reports for duty within the white suburbs of the city core.

07:30 Many Africans have a quick breakfast at the many cooking houses of the CBD.

08:00 White-collar professionals have an early meeting....

12:30 Lunch break. While whites flock to 'tea rooms' (cafes) and restaurants, African crowd in soup kitchens and court yards

13:00 During the afternoon period white children are either occupied by educational after school activities or under supervision. In the African towns and settlements the children flock to the streets unsupervised. Domestic workers gradually return to their homes in African areas.

16:00 Beginning of the afternoon traffic peak in the inner city

16:15 Civil servants leave their offices.

16:45 The average white person arrives from home.

17:00 Workers in industries and the private sector leave for home.

17:20 The average worker from Atteridgeville/Laudium & Mamelodi/Eersterus arrives home.

17:30 Late afternoon volumes reach a peak in the outer city.

18:50 The average worker from the border town of Bophuthatswana arrives home.

19:20 The average worker from KwaNdebele arrives home.

19:50 The average worker from north-eastern Bophuthatswana arrives home.

20:00 Families are united. Many whites use the various public social and recreational facilities within their domain. African socialise informally in the towns and settlements.

22:00 As night falls the African, Indian and Coloured components of the city are almost exclusively occupied by a particular ethnic group. In the white suburbs up to 20% of the nocturnal population is African, accommodated in rooms or outbuildings.

ⁱ Koutsopoulos, K. C.; Schmidt, C. G., 1986: Mobility constraints of the carless, in de Boer E., (ed): TRANSPORT SOCIOLOGY, Social Aspects of Transport Planning, Pergamon Press, Oxford, pp.169-181.

ⁱⁱ <http://www.rightofway.org/littera-scripta/rowen.html>, 20 January 2004: The Psychology of Jaywalking.

ⁱⁱⁱ Deane, N., 2004: African suffer in hope of a better tomorrow, Mail & Guardian, April 2-7, pp.14.

^{iv} Rowen's

^v van Schalkwyk, S, forthcoming UNIARC study on pedestrians and road safety

^{vi} Koutsopoulos, K. C.; Schmidt, C. G., 1986: Mobility constraints of the carless, in de Boer E., (ed): TRANSPORT SOCIOLOGY, Social Aspects of Transport Planning, Pergamon Press, Oxford, pp.169-181.

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