

Safety Seen, User Unseen

A K Roy

Hazards Centre

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Most (if not all) planners tend to see the world in their own image. They define the problems as they see them and the solutions emerge from the same perspective. Thus the modern urban planner often drives a car to work and, therefore, instinctively visualizes the road from behind the steering wheel. For such a planner any impediment to the progress of his car is seen as being a 'problem' and, hence, the 'solution' is somehow to remove that impediment. This is perfectly 'natural'. But what is equally 'natural' is that those 'impediments' are on the road by virtue of the fact that they also need the road. How they 'see' the road should, logically, be part of a design approach. However, since they do not have the same social and economic privilege as the planner, their opinions are rarely, if ever, incorporated into the principles of road design. But if those informed opinions are heard in conferences such as this one, then they could prove to be quite startling indeed. This paper is precisely about some of those views as we have experienced in the course of working with underprivileged communities in Delhi.

Some years ago we were assisting several community groups from low-income settlements in Delhi to document their own socio-economic status. A simple self-administered questionnaire had been designed for this purpose and we eventually received over 1600 responses from a variety of households in slum clusters, resettlement colonies, and unauthorized colonies. Just to give an idea of the status of the inhabitants, it may be sufficient to mention here that the majority were working people, employed in offices or factories and shops and markets, with a small percentage engaged in domestic work. Literacy rates were quite high, particularly in the resettlement and unauthorized colonies. There was a fairly equal distribution between unskilled, semi-skilled, and skilled work, with about half in permanent jobs. Family incomes averaged about Rs 2000 per month.

What will be of interest to this gathering is that the distance to the place of work averaged to 10 km for resettlement and unauthorized colonies, while slum dwellers traveled about half that distance. Consequently, all the residents traveled largely by cycle and bus, although slum dwellers had a significantly larger number walking to and from work. A tiny percentage owned motorized vehicles or took the train. We had, almost by accident, included a question on the perceived hazards at work. While roughly one-third of respondents identified mechanical and electrical hazards as being of importance, what was surprising was that a much higher percentage, particularly in the slums, marked 'others' as being more hazardous. Further enquiry revealed that the huge majority was referring to the dangers they faced on the road as cyclists, pedestrians, and even bus passengers. Here, therefore, was an unusually different dimension to who was the road user and how did he or she view road safety.

It is difficult to speculate on what such users would say before an audience such as this, but several events over the last four years have given an indication of what they might say. We shall recount here some of those events to provide a sense of what this unseen user sees. We may begin with the cyclist. The Anand Mayee roundabout is a major intersection that lies between the two phases of the Okhla industrial area and provides a link to the nearby working class residential areas of Tughlaqbad, Madangir, and Sangam Vihar. It, therefore, sees an enormous mix of heavy transport, light commercial vehicles, cars, buses, cyclists and pedestrians as raw materials, finished products, owners, managers, workers, and customers travel on their way to and from workplaces. This mix ensures that motorized vehicles enter at high speeds without yielding to traffic already in the roundabout, creating dangerous conflicts with bicycles, pedestrians, motorcycles, three wheelers, and trucks.

To make matters worse, buses do not stop at designated stops, which are at least 50m away from the roundabout, but stop at the entry points to the roundabout for convenience of passengers, thus adding to the congestion. As is to be expected, collisions are frequent and injury and even death, mainly of cyclists and pedestrians, is reported often. Traffic volume data collected by workers and volunteers, at the initiative of a labor union, during the peak traffic period between 8 to 9 AM revealed that bicycles constituted at least 45% of total vehicles on the road. Heavy volume (2000-4000 persons/hour) of pedestrians and cyclists was present on all the four roads leading to the roundabout. The painted pedestrian crossings were of no help because all motorized vehicles were moving at high speeds. Hence, from the point of view of the majority of the cycle-mounted workers (some of whom could not even afford a cycle) the biggest hazard on the road was the unregulated motorized vehicle. Interestingly enough, all planning of road architecture has been from the perspective of the motorized vehicle.

Let us now move on to the possible viewpoint of the pedestrian. On the request of a voluntary association working with handicapped children in the Lal Kuan area, residents of the area were helped to conduct a survey of the traffic patterns on the adjacent Mehrauli-Badarpur road. This road is of great significance because it provides a link between NH8 leading to Jaipur and NH2 going to Agra. But the heavy traffic it carries is a problem for the residents of Lal Kuan because the school lies on the other side of the road. Several accidents, especially involving schoolchildren have been reported at this site. The school is situated right next to the road and the pavement narrows significantly between the school wall and the road. There are no pedestrian crossings on the road even though three lanes from the residential areas emerge on to the road opposite the school. This is presumably because it is assumed that high speed motorized vehicles must have unimpeded right of way. To make matters even more complicated, immediately beyond the school, the main road abruptly bifurcates into a secondary road but there is no gradual widening of road space at the junction, leading to periodic congestion.

The survey was conducted both during morning and afternoon hours corresponding to school timings. It revealed that morning traffic was almost double the afternoon traffic volume. But while 70% of the morning traffic comprised of cyclists and motorcycles, 85% of the afternoon traffic was motorized vehicles. While the number of cars remained about the same during both periods, the number of buses in the afternoon was two-and-a-half times that in the morning. Thus the schoolchildren were exposed to very high risk of traffic accidents both while going to and coming from school. The high volume of two-wheeler traffic in the morning, and the large number of buses in the afternoon, increases the risk and difficulty of crossing the road. The existing traffic light is 45m away from the point where the children cross the road and the signals are anyway not being observed by the moving traffic. Thus, from the point of view of the pedestrians, the biggest obstacle to safety is the speed and urgency with which the motorized vehicles occupy the road.

We now come to the bus passengers. Two sets of surveys were carried out by voluntary agencies at 7 bus stops in the north next to Delhi University, and at another 7 bus stops in the south near the Tughlaqabad institutional area. These surveys included a physical inventory of the bus stops, counts of numbers of buses and commuters alighting and embarking, hawkers and para-transit modes waiting at the stops, and interviews with commuters during one peak hour in the morning and another in the evening. Some of the findings of the survey may be of interest to participants at this seminar. On an average, there were 56 commuters and 3 buses waiting or parking at a bus stop. In addition there were an average of 16 cycle-rickshaws and auto-rickshaws waiting for passengers, and an average of 8 hawkers peddling their wares at each bus stop. On an average every commuter had to walk 10 minutes

to get to or go away from a bus stop. The distance covered by bus averaged 15km. These figures give some idea of the needs of bus travelers.

What was remarkable, however, was that not one of the bus stops was designed with regard to the requirements of numbers of buses or passengers, nor was any formal space provided for para-transit modes or hawkers. Hence, the road itself or the pavement became the arena where all these activities had to perforce take place. Hence, what occurred, in the jargon of the planner, was ‘encroachment’ and ‘congestion’. The ‘official’ non-recognition of the organic needs of the bus commuter thus created the necessity for ‘unofficial’ management of space, connived in by the municipal and police officials. On the other hand, the official policy of allowing buses to ply on contract enabled the ‘privatization’ of a ‘public’ service and passengers had to put up with fierce ‘competition’ which further enhanced harassment and anti-social behavior on buses. In addition, the ‘green’ policy of converting to CNG had resulted in rising fares as well as shortage of buses. So, from the perspective of the bus commuter, judicial and administrative activism was the major cause of rising insecurity.

What do all these experiences point to? From a technical vision of safety, they cumulatively illustrate four specific issues:

- slow down or physically obstruct motorized vehicles
- forcible regulation of traffic movement
- segregation of non-motorized from motorized users
- formal provision of space for non-vehicular uses

However, these concepts of safety are conditioned by the fact that they are a product of the experiences of the ‘unseen’ road users. For them, the road is not merely a space for transiting from one point to another, but integrally linked to livelihoods and citizenship. Thus, any denial of their views is a violation of their security and safety. Thus, road safety, as a dimensionally different concept, can come into being only when they are seen – and heard; when they too have a say in planning and policing. Hopefully, this conference will mark a step forward in that direction.

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