The Prospect of Carfree Cities in South Asia Impossible Dream or Need of the Hour?

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When we think about our South Asian cities, are we content with how they are and only wish for minor changes? Or would a complete reworking of our cities and transport systems yield infinitely better results, converting dangerous, congested, and polluted cities into genuinely pleasant and nurturing places to live, work and play?

This paper addresses what a carfree city means in the South Asian context, some of their advantages, what role electric vehicles might play, and what specifically a transition towards carfree could involve.

What do we mean by carfree cities?

While there may be different conceptions of the term, or diverging goals associated with it, "carfree cities" refers to the common vision that cities would be much better with far fewer (or no) cars. "Cars" is a general term meant to include motorized 4-wheelers, 3-wheelers, and 2-wheelers. Rather than continue to plan for movement (and parking) by private motorized vehicles, carfree cities create an ideal environment for movement by foot, bicycle, cycle rickshaw and public transit.

J.H. Crawford, in his books *Carfree Cities* and *Carfree Design Manual* provides a carefully designed blueprint for how to make cities of any size fully functional, completely without cars or most other motorized transport. See <u>www.carfree.com</u>.

What do carfree cities offer?

Carfree cities start by understanding that the endless quest for ever-greater movement in cities (as discussed in John Whitelegg's book *Mobility*) is destructive, dangerous, and incompatible with healthy lives and a healthy environment. Carfree cities prioritize localization, ensuring that most needed destinations are close enough to be accessible without motorized vehicles. Carfree cities are thus closely aligned with the concept of a 15-minute city, and an emphasis on accessing necessities close by rather than supporting long-distance travel.

Carfree cities encourage and reward movement that is gentler on the planet and safer for people, transport that does not burn fuel, does not create danger to other people and animals, and does not waste enormous amounts of space, money, and energy. This all helps to create liveable and vibrant communities based on a dignified existence and respect for all life, where nature is welcomed back into our cities.

Carfree cities ensure that there are abundant open public spaces that are green and inviting to all: parks and playgrounds, as well as public plazas. Carfree cities can provide an abundance of attractive public space and they make it possible to move freely within one's neighbourhood, even in cities that are currently very congested and where public space is a luxury available only to the few. Enjoying the benefits of nearby green and public spaces has the added value of encouraging less travel in general. Carfree cities encourage people to live full lives within their neighbourhoods rather than constantly travel about.

Carfree cities are an aspirational goal that has real-life practical applicability: retrofitting intersections to make them safer for cyclists and pedestrians; increasing and improving parks and other public spaces rather than providing ever more parking for private vehicles; making it safe, comfortable, convenient and pleasant to walk and ride a bicycle; encouraging rather than banning cycle rickshaws; and responding to the needs of people for a safe, inclusive, healthy urban environment rather than subjugating people to the needs of our motorized vehicles.

Carfree cities are thus calm places free of traffic noise. They save incredible amounts of space, money, and energy, thereby creating opportunities that are not available in today's conventional car-oriented cities.

The cost and other advantages of a carfree city

A carfree city offers huge relief for the public and private purse. The costs of constructing and maintaining roads that are used primarily by automobiles are considerably higher than streets that are traversed by pedestrians and cyclists. The infrastructure costs associated with the use of concrete as well as support structures for bridges, highways, and parking are immense. Most of these high-cost items can be saved when building a carfree city.

Parking alone is extremely costly to maintain. Parking also comes at a high individual price for users. In fact, the spending on highway and parking capacity is cumulatively greater than the US defence budget, according to Donald Shoup, author of *The High Cost of Free Parking*, who has researched and written extensively on this subject.

Further, governments provide subsidies for fossil fuels at an estimated \$5.9 trillion per year. These subsidies go to companies that deal in fossil fuel-powered industries, such as petroleum, cement, and automobiles, as well as to individuals, in terms of subsidised consumption of gasoline, road use and parking. All of this would be eliminated in a carfree city. The health benefits of a carfree city are also immense: the near elimination of road injuries and deaths as well as respiratory diseases and cancers caused by car exhaust and tire dust pollution. Healthier people able to move about using active transport (walking and cycling), which benefits their health while also reducing pollution. Improved mental health as people get more physical activity, interact more with others, and are liberated from the imprisonment of the one-ton steel box in which we are too often trapped. The comfort of knowing that we, our children, our elderly, and those with disabilities can finally move about our neighbourhoods safely and actively.

There would also be enormous benefits in terms of the environmental costs of dependence on fossil fuels and automobile use, for human beings, other life forms, and for the vitally needed dramatic reductions in greenhouse gas emissions to ensure a stable climate.

Carfree cities in the South Asian context

Even – or rather especially – in cities that are stuck in constant gridlock, where traffic madness has spiralled out of control, and where many would see flyovers and elevated highways as the only relief to such levels of traffic, the carfree concept provides urgent and effective solutions.

It is understandable that for many people in a growing economy and with rising income, acquiring a car can be seen as a status symbol. This can partially be explained by a barrage of consumer advertising for shiny new automobiles, targeting populations with a newfound purchasing power via a message that having an automobile is equated with acquiring freedom. However, reality soon sinks in, as anyone who is stuck in Dhaka's insane gridlock, for instance, can tell you. A flyover might temporarily relieve stop-and-go traffic – but then the flyover too gets stuck in gridlock. Should the many people injured and killed in traffic crashes simply be billed as collateral damage on the way to newfound freedom? For anyone who considers the logical consequences and follows them to their conclusion, it becomes clear that an entire population attempting to acquire an automobile means a terrible trap that will only worsen congestion, pollution, road injuries and deaths, and the climate crisis.

It is also ironic that vastly wealthier cities, such as Hong Kong, Singapore, and many Scandinavian and Western European cities, have done much to reduce automobile use while cities with far fewer financial resources are eager to follow the misguided example of North American and Australian cities with their costly, dangerous and deadly obsession with the car.

But just as there are dystopian visions to avoid, so too there are much better visions to follow. Abundant good international examples exist of making neighbourhoods or large portions of the central city carfree.

The best way to appreciate the many solutions that carfree cities bring is to try them out first hand. That is why a range of activities including temporary street conversions should be carried out to show the range and beauty of what is possible.

Far-reaching visions cannot be achieved overnight. A steady approach of introducing new concepts and interventions is needed. Practitioners and advocates should understand individual steps as part of a complex organization of connected events. Thus, for example, ensuring that children can safely reach schools by walking and cycling should be conceptually linked to a vision of entire carfree neighbourhoods.

There may also be intermediate solutions that can be considered as "compromise solutions" that can be acceptable at certain stages of the transition to carfree, but are identified as non-ideal and aren't a part of the fuller vision of carfree cities. For example, para-transit (such as motorized rickshaws) is quite common in Asian cities and performs a vital transport backbone where sufficient public transport is in short supply. In moving towards liveable cities, there are likely other areas to be focussed on first. Thus para-transit in particular requires a closer study and integration into a wider strategy. It should also be remembered that even in large megacities, a significant portion of trips is short enough to be manageable through walking and cycling, modes that are too often neglected in South Asian cities.

What about electric vehicles?

Carfree cities advocates agree that simply replacing the type of engine, from internal combustion to electric, does not solve any of the other problems caused by cars: dangerous speed and crashes causing death and disability, the domination of available public space, prohibitive financial costs, and the high carbon cost of materials and manufacturing. There may, however, be some room in carfree cities for electric buses and of course trams, a few electric four-wheelers, such as ambulances, and for some electric two-wheelers, though pedal vehicles are preferred.

If there was ever any doubt as to how little e-mobility contributes to sustainable cities or combats climate change, consider how the unchanged road allocation for cars, effectively keeping people stuck in traffic trapped in unfriendly metal boxes, to the heavy mining price needed for batteries, to energy grids needed, all suggest that electric vehicles are a very poor solution indeed.

Policy experts, the general public, and decision-makers all need to accept that electric vehicles are not going to solve our major urban problems such as urban blight, inefficient spatial planning, transport poverty, lack of inclusive spaces, lack of child-friendly and elderly-friendly spaces, lack of green and recreational spaces, health problems due to lack of active travel, and time and money sacrificed to the existing transport system.

Carfree "wish list" in South Asia

What, specifically, could be some of the changes along the way towards carfree cities?

- Active and safe routes (walking/cycling) for kids to school;
- Protected pedestrian zones around schools and playgrounds'
- Ample, high-quality footpaths (sidewalks) and pedestrian facilities on all streets and roads, without curb cuts for cars;
- Safety improvements at intersections;
- More recreational space (playgrounds, public squares, parklets, etc.) especially for children, families, and the elderly;
- The introduction of carfree corridors, especially in downtown areas; ideally, every neighbourhood should have its own pedestrian street;
- The development of action plans for greater inclusivity for all residents. This should include a careful multi-stakeholder approach to provide appropriate services and amenities for all who dwell in the city, paying special attention to those currently underserved;
- Efficient and safe public transport as the cornerstone of an effective sustainable transportation plan;
- Protected bicycle lanes, especially between major destinations such as schools, universities, residences, workplaces, shopping, and entertainment;
- Ample green space made available and understood as a right for all urban dwellers. Parks, parklets, and greenways need to be guaranteed for all population groups (including for people with disabilities) and neighbourhoods, so that everyone has access to an open green space within a short walk or cycle ride from their residence;
- Proactive policies adopted by cities to reduce the need to travel, and to reduce dependence on automobiles and high modal shares of driving. This involves developing a complex action plan with sticks and carrots, to encourage an evolution towards more sustainable transport practices. This should also include annual increases in the available pedestrian zones/carfree spaces, with conversions taking place in an ongoing fashion.

Carfree cities would involve a radical reworking of our approach towards movement in cities. They would require a shift in focus from mobility to accessibility, and a shift away from motorized vehicles towards gentler, more sustainable transport modes. Along with those shifts would come tremendous improvements in quality of life and the environment.

Difficult though it would be to dramatically reduce or eliminate the automobile and other individual motorized vehicles in our cities, it might be no more difficult than continuing to exist in our current congested, dangerous, polluted, alienating cities. It is certainly worth reflecting on what our cities have become, what we wish for them to be, and how to bridge that gap.