

How can delhi traffic be more human centric sociology essay



**ASSIGN
BUSTER**

Delhi is a complex system of parts. Each part is as critical as the other. Its transport system and its land-use must work in tandem to achieve a well-oiled traffic network. Placing the importance of people in the transport system correctly is critical to its success. But Delhi views the problem differently.

Today, transportation and vehicles are inseparable. The problems faced by city traffic are easily reduced to a simple set of numbers. The number of vehicles, road area, and other statistics dictate contemporary transport design. Transport is far more complex than that. People, the root of all the problems and solutions are left unaddressed. People make the city and therefore its transport system. Their inclusion immediately changes the problem-solution paradigm. How people affect the whole transport construct, their behaviour, social nature, emotions, desires and the rest of the rainbow is under the magnifying glass. (Jacobs, *The death and life of great American cities*, 1961)

Delhi traffic is plagued with problems which can be solved by introducing more people centric traffic design. Congestion, de-pedestrianization, increasing fuel costs, erosion of streets, design misuse and design failure are some of the problems approached in this study.

Congestion for instance is not always a road widening issue. it is an emergent property of large scale interactions of many people or vehicles or both.

De-pedestrianization occurs because of the risks involved in taking a walk .

The transformation of a street to a road marked the end of its pedestrian

<https://assignbuster.com/how-can-delhi-traffic-be-more-human-centric-sociology-essay/>

friendliness. People are forced to turn to safer methods of movement like cars. (Jacobs, The death and life of great American cities, 1961).

But those who can't afford any will have to manage in dangerous Delhi.

In-equity: The industrialization of traffic has thrown the equity and inclusivity scales off balance creating a self-generated need for powered personal transport. There is a lot of memory and aspiration attached to an automobile and its possession. (Illich, 1978)

This point is more emphasized when the automobile is compared to fashion. Vehicles, like clothes form a skin we'd like to wear on the road while interacting with other vehicles. It is a method today of displaying status.

The majority, Low-income groups are left to suffer due to lack of feasible options. They resort to walking or cycling and are constantly posed with a threat on the motorised road. (TIWARI, 2001)

It may be worthwhile looking into integrated multi modal transport because people tend to value choices in movement. Walking may rightfully be the best solution in any highly congested area, but this doesn't apply to other places. For example; pedestrianizing and introducing the metro-rail in Connaught place may be a viable solution, on the other hand, the same may fail miserably in the mega-scale, unsafe, roads of Gurgaon. Planners, authorities, and the designers could resort to a more interdisciplinary approach to the challenge.

How can Delhi traffic be more human centric?

Scope of Study

Although what will be discussed could be applied to all cities in general, this study is specific to the city of Delhi and the National Capital Territory (NCT - Gurgaon, Ghaziabad, Noida etc.)

The traffic problems discussed here pertain to urban local road traffic. Automobiles, two-wheelers, Bus transit, metro transit and pedestrians.

The study deals with contemporary traffic. Any reference to the history of Delhi traffic will be only to assert the contemporary situation.

Although many things are measurable in transport networks, most human reactions are intangible and therefore interviews and observations form a major part of this research, i. e. case studies will be used to substantiate any hypothesis.

Limitations

The western v/s Indian literature perspectives in the studies presented is imbalanced content wise as India is a developing economy and traffic is relatively a new problem. The west on the other hand, has a formidable amount of experience in the matter.

Time is critical to any study. The study should prove sufficient for the abundant or short period of 4 months. There is room to always better any work.

Due to the size of NCT, the study will take an overview approach as well as present one or 2 specific examples to illustrate what is considered to be the generic of that area.

Methodology

This study looks at the following as a base to analyse the case studies

Perception, socio-economic and cultural nature of people. The effect of people on traffic and vice-versa.

Understanding the transport system of Delhi.

Comparing both of the above in terms of different critical areas in the city. eg: Shahjahanabad, Lutyens, and New Delhi etc.

As part of the dissertation the author will broadly research the impact of people in the Delhi transport system and its different facets. Case studies will be prepared, secondary studies will be analysed and interviews will be conducted to excavate the method of including people centrally in traffic system.

Definitions

Now, before any argument is put forth or any finding is validated, we must steer clear of any semantic argument. The definitions below are for that very purpose.

Movement: The Merriam-Webster dictionary defines 'movement' as the act or process of moving, especially, the change of place or position.

The philosopher Ivan Illich in his essay " Energy and equity" defines the following quite aptly.

Traffic : Any movement of people from one place to another when they are outside their homes.

Transit : Those movements that put human metabolic energy to use.

Transport: That mode of movement which relies on other sources of energy. (illich, 1978)

Why Do We Move?

In simple terms, we move because we can. We are capable of mobility from a very early age. It can be safely said that movement is 'life' itself exemplified. With respect to the city man lives at home, he moves to work, for food, clothes, and moves back to his shelter.

His movement is what adds life to the city. His movement along with many others movement induces 'liveliness' in the city. (Jacobs, The death and life of great American cities, 1961)

Methodology flowchart

IDENTIFYING THE QUESTION

UNDERSTANDING DELHI'S TRANSPORT SYSTEM

UNDERSTANDING DELHI'S PEOPLE AND THEIR NATURE

IDENTIFY AND ANALYSE CONFLICTS

BUILDING A CASE FOR DELHI

PRIMARY STUDIES

SECONDARY STUDIES

DELHI

OTHER

INFERENCES

INFERENCES

ANSWERING THE QUESTION

SHAHJAHANABAD

LUTYENS DELHI

NEW DELHI

URBAN VILLAGES

SATELLITES

3

2

1

INTREVIEWS

AUTHORITY

LAY MAN

INFERENCES

Before even beginning understanding traffic, it is important we understand the city. The city and its traffic system are so intricately intertwined that for urban areas to be capable of economic activity, an easy and sustainable flow of people and goods must exist. Poor mobility is known to be a major economic dampener and can even lead to deterioration of everyday life. .

(POLICY, 2001)

It goes without saying that the city and its traffic are inseparable.

Delhi an Introduction

In 1639 AD, the Mughal emperor Shahjahan built a walled city in Delhi which served as a capital of the Mughal Empire from 1649 until 1857. The British had captured Delhi by 1803 and announced in 1911 that the capital of British India would be Delhi. So a new capital city, New Delhi, was built to the south of the old city during the 1920s. When India gained independence from British rule in 1947, New Delhi was declared its capital and seat of government. During the partition of India, thousands of Hindu and Sikh refugees, fled to Delhi, while many Muslim residents of the city migrated to Pakistan. Migration to Delhi from the rest of India continues (as of 2012), contributing more to the rise of Delhi's population than the birth rate, which is declining.

The Constitution (Sixty-ninth Amendment) Act, 1991 declared the Union Territory of Delhi to be formally known as the National Capital Territory of Delhi. (Wikipedia)

Construction, power, telecommunications, health and community services, and real estate form integral parts of Delhi's economy. Delhi has India's one of the largest and fastest growing retail industries.

In 2001, the population of Delhi increased by 285, 000 as a result of migration and by an additional 215, 000 as a result of natural population growth - this made Delhi one of the fastest growing cities in the world. By 2015, Delhi is expected to be the third-largest agglomeration in the world after Tokyo and Mumbai. (Wikipedia)

The districts and the satellites

E: workdissertationwrittenintro to delhi634px-Delhi_districts. svg. png

Central Delhi

North Delhi

South Delhi

East Delhi

North East Delhi

South West Delhi

New Delhi

<http://mapsof.net/map/delhi-districts-map>North West Delhi

West Delhi

Districts

New Delhi - Lutyen's brainchild, New Delhi has its fair share of circuses and axes. Built to the south of Old Delhi, It consists of India gate, Connaught place, etc.

Central Delhi houses the central business district and high-rises. It includes Shahjahanabad (Old Delhi) which served as capital of the Mughal Empire, and is home to the monuments like the Delhi Fort and the Jama Masjid, Delhi's principal mosque.

Administratively, the district is divided into three subdivisions, Darya Ganj, Pahar Ganj, and Karol Bagh.

North Delhi administratively, the district is divided into three subdivisions, Sadar Bazar, Kotwali, and Civil Lines.

South Delhi administratively, the district is divided into three subdivisions, Defence Colony, Hauz Khas, and Kalkaji.

South district is considered to be the most affluent of all residential districts of Delhi. With upscale areas like Greater Kailash, Chittaranjan Park, Alaknanda, Hauz Khas, Green Park, Defence Colony, New Friends Colony, Gulmohar Park, Gulmohar enclave and Vasant Kunj, it has the highest land prices outside Lutyen's Zone in Delhi.

<https://assignbuster.com/how-can-delhi-traffic-be-more-human-centric-sociology-essay/>

South West Delhi administratively, the district is divided into three subdivisions, Delhi Cantonment, Najafgarh, and Vasant Vihar. (Wikipedia)

In this study, we will focus on places in New Delhi, Old Delhi, and South Delhi.

Satellites

Gurgaon

NOIDA

With focus on Gurgaon

The Transport System of Delhi

The automobiles

Prior to the early 1990s when India opened its then-restricted market, owning a vehicle was viewed as a luxury and taxed accordingly.

Today, along with increase in spending power, a combination of issues are dissuading potential buyers in India from actually buying a car:

India is "scarcity use" economy, one in which families find ways to continually reuse products until the products completely wear out. The combination of fuel cost and insufficient infrastructure has led Indian consumers to purchase primarily two-wheelers and small cars. So, even though some people can afford larger cars, many purchase smaller ones. (Bruce M. Belzowski, 2009)

Automobiles are often conveniently tagged as the villains responsible for the ills of cities and the disappointments and futilities of city planning. But the

<https://assignbuster.com/how-can-delhi-traffic-be-more-human-centric-sociology-essay/>

destructive effects of automobiles are much less a cause than a symptom of our incompetence at city building. .

Suppose automobiles had never been invented, we would still have essentially the same. It is questionable how much of the destruction wrought by automobiles on cities is really a response to transportation and traffic needs, and how much of it is owing to sheer disrespect for other city needs, uses and functions.

The mechanical vehicles, in their overabundance, work slothfully and idle much. As one consequence of such low efficiency, the powerful and speedy vehicles, choked by their own redundancy, don't move much faster than horses. Trucks, by and large, do accomplish much of what might have been hoped for from mechanical vehicles in cities. They do the work of much greater numbers of horse-drawn vehicles or of burden-laden men. But because passenger vehicles do not, this congestion, in turn, greatly cuts down the efficiency of the trucks. (Jacobs, *The death and life of great American cities*, 1961)

Economy and Production

In the mid-1990s, foreign manufacturers entered the market through Joint Ventures with domestic manufacturers as required by the government. This entry raised the level of competition and brought many global suppliers to India to support their manufacturer customers.

In 2000, the government lifted the requirement that foreign companies establish JVs with domestic companies. As its gross domestic product (GDP)

grew, India built and sold more vehicles, reaching the 1-million-vehicle mark in the 2004-2005 fiscal years.

There has been a shift in the vision of Delhi. Delhi earlier emphasised on the development of the public, but now seems to be concentrating on the middle class.

Roads of Delhi

Delhi is a city for the car owners. The number of car owners and the variety of cars available in Delhi has increased exponential over the last 15 years. The car has gone from a vehicle for the elite to a necessity for every middle class household. The type of car one owns projects one's status and the car is now seen as one of the symbols of one's success. They are no more marketed as a way to commute but as a product that is essential for one to own. The lower classes aspire to have one while the upper classes aspire to have more. All this comes from the global level competition to become the biggest consumer. One would expect that, at this rate, the maximum number of people use motor vehicles to commute but the distribution of commuters over the different types of transportation facilities says otherwise. (Nair, 2012)

According to a study conducted by Unified Traffic & Transportation Infrastructure (PLG. & ENGG.) Centre (UTTIPEC), 14% of the total commuters in Delhi are car owners, 13% own 2 wheelers (scooters & motorcycles), and 40% use public transport and 34% are pedestrians and cyclists. Though a large percentage uses public transport, it should be understood that that percentage is also required to walk, to and fro from the point of pick up and

drop off. The planning of the city does not seem to accommodate this. (Nair, 2012)

'Delhi city has invested heavily in its road infrastructure in the recent past... and was welcomed with much fanfare. However, in order to create a private vehicle oriented infrastructure, the public transportation system was neglected. Furthermore, with the city's buoyant economy, cars have replaced buses on the road and cyclists have switched to two-wheelers and motorcycles. Pedestrians are therefore increasingly being treated like the most marginalised commuters on the road' (Public Transport International, 2009)

The streets are designed in a way that best accommodate the car. This compounds the idea of trying to portray New Delhi as world class city even if this image only depicts a small section of the society. The streets are centred on the road with maximum area given to it. The pedestrian area is hardly comparable while the area given to cyclist is minimal, and in most cases absent. The advertisements that one sees while travelling on the road, ranging from huge billboards to those on bus stands all give central focus to the road. Even with a minority using the vehicular roads, it is still given the utmost importance and the central view point. (Nair, 2012)

On the road, preference is given to the car over the bus. Nothing is provided for better and safer bus travel. Better buses and bus stops are the most acceptable improvements as they do not hamper the car owner. Any other changes that have tried to be implemented have been received with

scepticism and protest. The Delhi Bus Rapid Transport System is a great example of that. (Nair, 2012)

Delhi Bus Rapid Transport (BRT) System

The Delhi BRT was introduced to combat the rising requirement for better public transport and to decrease congestion on the roads. The BRT was designed to provide dedicated lanes for buses, cyclist and pedestrians who make up 50-60% of the total number of commuters. Comparing that to the fact that buses only make up 2-2. 5% of the total number of motorised vehicles on the road, goes to show that there are large inadequacies in the infrastructure of the public transportation systems.

A total of 26 BRT corridors were planned, covering a total length of 310 km in major parts of South Delhi. These corridors were placed in the centre of the road, along with bus stands on pedestrian islands, and were divided from the rest of the road by barriers. The pedestrian islands were universally accessible, had well designed street furniture, and even had a demarcated auto rickshaw bay. These changes led to the reduction of motor able area left for the cars. (Nair, 2012)

The Delhi Metro

The latest mode of transport; the metro, is considered to be inclusive. It does not break all boundaries and include everyone, but it compresses the social gap in society. As of now, the widest range of people from different classes use the metro over other modes of transport. (Nair, 2012)

" The metro 'It has also made public transport a more egalitarian experience. A plumber from Jahangirpuri, in kurta-pyjama and plastic chappals, sits beside a slick-haired, shiny-shoed executive armed with a laptop.'"

(Chaturvedi, 2010, p. 6)

On the other hand, only 4-5% of the commuting population use the metro. Those that travel by cycle or walk to their destination still don't consider this a viable option. Even compared to other modes of transport like the bus and train, it is expensive. The metro was not targeted for the public but for the ever increasing middle class and upper classes. The metro was designed to look 'world class' for the upcoming Common Wealth Games, 2010. The materials used and the general appearance of the metro and its stations brings to light the demographic the metro is directed towards. These features dissuade people from lower sections of society from using the metro, as it makes them feel uncomfortable. It is also not as easy to get into the metro as it is to get into a bus.

It is wrong to state that this outlook is unjustified as one of the objectives of the metro was to reduce traffic on the roads; which it did. This was due to the fact that it targeted those people who used private modes of transportation who were used to more affluence. This is also why it was well received (Nair, 2012)

On the flipside, the metro has completely ignored those that do not fit into the preferred bracket of society. The construction of the metro has left many homeless, including the workers hired to construct it. It has also led to the gentrification of the areas surrounding the metro. The Delhi metro bridge the

gap between the middle class and the rich but expands that between the poor and the rest. (Nair, 2012)

'So it is a sleeker, more prosperous Delhi that the Metro has helped create, a city that spares no space for housing its workers even as it continues to rely on their labour to make life easier and smoother for the better-off'
(Chaturvedi, 2010, p. 8)

Owning a car is seen as the ultimate goal in society by the lower classes in terms of mode of transportation and this desire is accentuated by the commercial images one sees every day. While the number of people with financial capacity to own cars continuously increases, the notion that one requires a car to be social acceptable rather than to commute is also becoming true. While sitting in a bus, one sees numerous cars zip past them. The car owner always seems to have the right of way and arrogantly so. Consumerism is also influencing us subliminally on the road, with the constant advertisements of various products. (Nair, 2012)

'We are exposed to numerous commercial messages while driving on the freeway: bill boards, radio advertisements, bumper-stickers on cars, and signs and banners placed at shopping malls that we pass. Most of this exposure is random-we don't plan to seek it out.' (Woodward, 2000)

If one is to compare the Delhi Metro with the Delhi BRT, both were given similar importance and propagated equally. The difference lies in the demographic it was intended for.

The image and exclusivity of a transport system has become very important. The different transport system segregates society depending on their economic status irrespective of the majority that use them. (Nair, 2012)

'In Delhi, however, it has meant that car owners have felt deprived of what they feel is their birth right. The BRT, therefore, is perhaps the largest symbolic manifestation of the class struggles' (Chaturvedi, 2010, p. 96)

The implementation of the BRT in Delhi led to the shift in importance from the car owner to the public transit user. Though the BRT created inconveniences, it was also not given the chance to succeed. It was not the type of transportation system the consumer Indian would use and so, it received much criticism when it was introduced. (Nair, 2012)

'The success of the BRT system mainly depends on managing the behavioural changes. This requires comprehensive planning and on-going efforts at improving the system, as well as driving its acceptability in order to bring about necessary behavioural changes.' (Public Transport International, 2009)

Infrastructure

Designing an automotive infrastructure for over one billion people is a daunting task for a developed economy, but developing economies must also contend with other challenges, including limited funds and inadequate roads. (Bruce M. Belzowski, 2009)

Transportation infrastructure is a vital element to the automotive industry.

Road construction is the key, and it is a task only India's government can tackle.

" There is a direct relationship between better connectivity of the metropolitan areas and the progress the industry can achieve. Roads are clearly the biggest bottleneck, both the quality and availability of roads."
(Bruce M. Belzowski, 2009)

Lack of traffic-law enforcement is often cited as an inhibitor to growth.

Traffic fatalities in India are 8.7 per 100,000 people, as compared to 5.6 in the United Kingdom, 5.4 in Sweden, and 6.7 in Japan. (Bruce M. Belzowski, 2009)

As congestion grows, enforcement becomes increasingly more critical.

" Driving and road discipline needs to be enforced both individually and by policy."

30% of drivers have had no driver's education, do not understand signals or lane discipline and, as a result, are causing accidents on roads.

Progress in government education, national auto testing centres, licensing of individuals, and the reduction of varying velocity vehicles on the same roads are key to dealing with the problem. (Bruce M. Belzowski, 2009)

" We need to improve on the oil tanking facilities at ports, oil terminals, and cross-country pipelines. Significant investment is required to provide a level playing field between public and private sector companies."

India's government needs to build more and better roads to support future not just current growth, and hasten the vehicle friendliness of India's cities including wider roads and more parking spaces. Improved air quality is also critical. (Bruce M. Belzowski, 2009)

The percentage of urban Indians is currently around 30%, but, this figure is exponentially increasing. The stabilized western countries have over 60% of their share living in cities.

India is going to grow till at least twice its size before it stabilizes. This calls for a plan where the future of a city is well predicted and duly buffered . i. e. Prepare for expansion and concentration. (POLICY, 2001)

Of course, India is only adequately prepared for the present. As basic necessities such as education, recreation, work, are getting more difficult to get to, India is still grappling with the burst in number of automobiles and the lack of road space.

" During 1981 to 2001, the number of motor vehicles went up by over 7. 75 times during the same period." (POLICY, 2001)

Safety

In her book, the death and life of great American cities, Jane Jacobs discusses the importance of safety and security on the street. The success of a city district lies inevitably on the safety and security of streets. The failure of which results in the discomfort of its residents, and that is only the beginning of the problem. (Jacobs, THE DEATH AND LIFE OF GREAT AMERICAN CITIES, 1961)

<https://assignbuster.com/how-can-delhi-traffic-be-more-human-centric-sociology-essay/>

Travel in the city has become more risky with accident rates having gone up from 1.6 lakh in 1981 to over 3.9 lakh in 2001. The number of persons killed in road accidents has also gone up from 28,400 to over 80,000 during the same period. (POLICY, 2001)

The poor end up in the wrong end of most things in the city and here again is no exception. Among those who are frequently hurt are cyclists, pedestrians, and pavement dwellers. (POLICY, 2001)

Delhi's People and their Nature

Perception of Spaces

'We experience the world as a series of spatial patterns and we store them, and we recall them and we match them up against reality and we are making predictions all the time' (TED, 2003)

Every individual has the ability to observe, understand and respond to their environment. Through the course of one's life, one's brain stores every experience that one encounters as mnemonic devices which help them process further situations.

This inference is taken from the cognitive theory of the brain. According to this theory, the observations that one makes are stored in a part of the brain as a database which is the memory. One's brain is continuously interpreting every instance by cross-referencing every sensory input to their memory. The person then reacts to the environment depending on their inference. (TED, 2003)

The database that each of us creates individually, can be attributed to our culture, local environment and society. As a group of people belonging to the same environment, one can say that, they all share similar inferences and therefore, respond similarly. At the same time, the behaviour of an individual is not constrained only by their society and culture but also by the choices they have previously made.

Culture

All over the world, people have the same basic requirements and perform similar activities to sustain themselves. The basic human needs can be satisfied in any environment. The difference lies in the way they fulfil those needs and that difference is contingent on the physical environment. These variations reflect in the distinctions between cultures.

The 'constancy, homogeneity and uniformity among traditional groups' can be termed as a groups' culture. (Moore(Editor), 2000, p. 183)

Culture gives a society a set of guidelines which tells them how to behave and interact with each other and the spaces around them. It is a form of transmission of information from one generation to the next, through the design of spaces and artefacts and by how a person interacts with them. (Moore(Editor), 2000, p. 180)

Segregation & Exclusivity

Class is a further division of society within a culture. It is the class that one belongs to in a society which establishes for a person their position and status in society. In most societies, occupation was the common basis of

segregation at the commencement, but soon occupation as well as status became hereditary. The segregation was also based on the value of ones occupation in society but very little on the character of the person. (Ross, 1920, pp. 404-405)

There is always an aspiration of the lower classes to progress to a higher class. In earlier times, it was impossible to bridge that gap and progress from a low class to a higher class, but, through the ages, the ability to climb up the social ladder has become possible and comparatively easier.

In all cases, the upper class is smaller in number and has greater power than the lower class masses. Those who are part of the upper class try to maintain that divide. They prize and try to maintain that gap, as it makes their position more exclusive. (Ross, 1920)

Exclusivity is the act of excluding or placing restriction on something to only a certain group of people. Exclusivity is a dominant social phenomenon today. It is the modern interpretation of caste and class in most Indian cities.

Architecture has always responded to the divisions in society and compounds exclusivity. Spaces have always been designed to respond to these aspects of culture and society and to propagate these notions.

Cities over the world now have the ability to communicate with each other and influence each other. This has led to an increase in trade and has changed the culture in most cities.

Globalisation & the New Culture

This new culture of the 20th century is highly influenced by the political shift to capitalism and widespread privatization. These changes, along with the boom in technology, lead to great economic growth in many parts of the world and affected the world economy. The privatisation of most major economies has led to economic globalisation.

Today, culture, has grown past being distinctive and unique and is moving towards a common globalised culture which is highly determined by currency. In India, the culture prevalent is still one that is rooted to its people, but in major cities, this is slowly changing and its effects slowly trickling down to the rest of India.

There has been a global shift from state control to privatization. This, combined with the invention of mass productions and better mean of communication and transport, has led to a fierce competition among manufacturers to sell and sell fast. The global culture has now become one based on the mass production of goods and their consumers. (Featherstone, 2006)

The perception of a human being has changed to one of a consumer and their monetary value. One's income becomes the determining factor of their class in society. This has led to a shift in how people value themselves and others.

'Consumerism is a social and economic order that is based on the systematic creation and fostering of a desire to purchase goods and services in ever greater amounts' (Wikipedia, Consumerism)
<https://assignbuster.com/how-can-delhi-traffic-be-more-human-centric-sociology-essay/>

This new culture, which is broadly termed as consumerism, has started emerging in major Indian cities. Today's society and culture is based on monetary standing. The socio-economic group now determines one's class. The products one buys, the concept of brands, etc. are the factors that govern how one judges another. One bases their value in society on their buying index and the products they have. Society is now divided on their economic standing and from this stems the underlying exclusivity that is present today in cities like Delhi.

India and especially Delhi, is trying to portray itself as world class city. The modern Indian is represented by the booming and ever increasing middle class, always aspiring to reach the higher classes. They have