PROBLEMS AND ISSUES WITH THE EMERGENCE OF METRO

“In matters of truth and justice, there is no difference between large and small problems, for issues concerning the treatment of people are all the same”.

Albert Einstein

“Culture makes people understand each other better. And if they understand each other better in their soul, it is easier to overcome the economic and political barriers. But first they have to understand that their neighbour is, in the end, just like them, with the same problems, the same questions”.

Paulo Coelho

5.1. Visible Problems and Issues in Bengaluru with the emergence of Metro

According to Business Directory, “Problem is a perceived gap between existing state and perceived state” and “Issue is a subject that people discuss or argue about especially relating to society, politics, etc.” as defined by Mac Millan Dictionary. This chapter deals with the problems and issues the city has faced due to urban influx, the changes brought about in the urban environment due to the population explosion, gender concerns and safety of women/girls and changes in the socio-cultural and economic outlook due to the BPO culture and IT sector. It also deals with the Urban and Socio-cultural Transformation and its impact on physical space and services of the city. It also deals with the problems and issues with the advent of metro like, connectivity and reach, thereby an impact on commute time; impact on business and aspirations of people at stations and aesthetics; issues of accessibility, maintenance and delay in project and the relevance of a good transport mix as a solution.

Eclecticism with its parade of styles beclouded the tradition of city building, concealing the fact that urban forms in all great periods of culture were the contemporary expression of creative workers in their day. There were undoubtedly

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1  http://www.businessdictionary.com/definition/problem.html (20-06-2014)
2  http://www.macmillandictionary.com/dictionary/british/issue (20-06-2014)
accidental effects among attractive features in cities of old, but we may be reasonably confident that the harmony is not due to patina of age alone. There is integrity of character in fine buildings and spaces that commands respect through the years. Cultures grew, expanded, evolved; just so did the forms of their cities. If we were to follow the tradition of great cultures of the past, we would engage today in most powerful period of creative contemporary city building the world has ever seen. We have the people, the tools, the science, the industry and the ingenuity to make the finest cities of all time.

Changes from natives to an influx of people from all over India due to colleges and job opportunities has influenced the demography of Bengaluru and also the urban settlement pattern. Trees were cut down, concrete jungles came up and open space ie green belts vanished, which has impacted the climate. Growth of city & planning or lack of planning has defined a certain pattern of urban land-use. Transportation policies impacted due to traffic and congestion brought the introduction of air-conditioned Volvo’s and now the Namma metro.

With more and more people settling from various parts of the country there was a cultural mix. The orthodox thinking gave way to open ideas in terms of dressing. Also global exposure brought in the change. The BPO’s brought in jobs for people without graduation and a starting salary of Rs.10 to 20 thousand. IT sector brought in very high salaries starting from 30-40,000. This brought in purchasing power to youth and skewed the socio-economic status of Bengaluru. IT industries and growth in retail sector with international brands opening their stores- Tommy Hilfiger, Jimmy Choo, Burberry to the latest is Zara have impacted the lifestyle of the city. This chapter covers these impacts on Bengaluru.

### 5.1.1. Urban influx/migration

Most of the reports suggest that Information Technology (IT) brought the sudden influx of immigrants from across the country, but this is not true, the immigration started much earlier. According to Janaki Nair, in the past 40 years Bengaluru graduated from a small town to a metropolis with a population of about 2 million. City saw two demographic leaps, first with the establishment of public sector units: HAL and ITI followed by HMT and BEL. This saw a boom of migration in labour and
working class. City had to deal with their housing. Suburbs of Rajajinagar came into existence apart from townships. The city saw mainly two types of immigrants: public sector workers and the government servants. They spilled into neighbouring villages where land was affordable but these were illegal settlements with their own problems. The second demographic leap was with the coming of the IT industries.

These migrations created a huge pressure on housing and infrastructure facilities of the city which started deteriorating. Suit clad executives from the IT industry protested in 1996 for better roads to city as their commute to work was a nightmare. BDA headed to their hue and cry and outer ring road was sanctioned, but in the bargain farmers whose land was affected in the process were ignored and their screams were unheard. Bengaluru had developed into the Silicon Valley there was pressure on the government to improve the infrastructure to International Standards else the city would lose these huge investment/revenue generation projects to other cities like Chennai, Hyderabad or Pune which were also being explored by these firms.

5.1.2. Urban transformation and urbanization

S. M. Krishna the then Chief Minister had a vision to make Bengaluru equivalent to Singapore. For this BATF, the vehicle of transformation was set up in 1999 and their first task was to bring private sector to forefront while the existing envisaged public sector city. In order to keep the corporate culture the social, community and ecological issues were to be placed on stride. Singapore was an achievable model; it was linked to Bengaluru with its past history of being under the colonial rule, having an Asian society with few common social features and seeing a sudden economic boom in 40 years. Bengaluru grew in pockets and planning was restricted to within them and the city as a whole was never envisaged. City saw two demographic leaps, first with the establishment of two large public sector units: HAL and ITI followed by HMT and BEL. This saw a boom of migration in labour and working class. City had to deal with their housing. Suburb of Rajajinagar was formed apart from townships. It was hoped that these industrial townships would become self-sustained to tide over the migration influx and develop along the periphery instead as planned for a radial development. There were two types of migrants at this time: public sector workers
and government servants. They spilled into neighbouring villages where land was affordable but these were illegal settlements.

With the entry of the private builders in 1970s, apartment complexes replaced the layout concepts offered by BDA and other agencies. The middle class preferred the stylish housing offered by private builders over plotted development by BDA. By 1980’s permission was being granted on bungalow sites in the city centre to be converted to multi-storeyed structure. This was also the time when the NRI immigrants were investing in India, Dollar’s colony was a result of the same and it came up with all upfront facilities like shopping mall, swimming pool, golf course and gymnasiums.

Another industrial area that grew was Krishnarajpuram that was foreseen as a patriotic space development. Here the site was acquired from the farmers declaring their land to be barren with enough compensation to them. The Durvaninagar Township became the planning benchmark with well laid roads and houses of all types furnished with open fields, playgrounds, gardens, temples, hospitals, schools, bank, post office and hostel for bachelor and spinster trainee. This displeased the neighbouring village and Ramamurthynagar was developed in similar lines to house retired employees with villagers who wanted to settle here. Then Kengeri satellite town and Yelahanka new town grew, both remained middle class suburb.

The other areas that were unplanned just grew along and many developed into slums. The lower middle class migrants settled on the temporary abodes along the tank beds and other unusable sites in the city. Tilaknagar became a designated slum with mainly Muslims yet it was a vibrant economy.

Temple opening to the village square with a katte around the peepul tree concept of the village was never built into the city fabric although the urban city took over the villages in grip. Another interesting feature was seen when the government was acquiring land for infrastructure development like ring roads objections came in the form of, site being their family space to lay the dead to rest or in some cases developed village deity shrines overnight to prevent the land from being taken by government. Government had to step back to maintain the law and order in the city as
it did not want to touch upon the religious sentiments. Hence one can see the difficulties on the path of the government to improve the urban environment.

5.1.3. Urban environment

According to Kishor G Bhat (Bhat 222-232), as Bengaluru developed over the years traffic and transportation became a major concern which not only led to crowded streets but also unpleasantness in commuters due to air pollution, noise pollution, stress of bumper to bumper ride and safety. Pedestrians were the most unsafe on road due to lack of footpaths or footpaths not maintained and thereby uninhabitable as shown in the picture below.

![Fig 48: Pedestrian on road due to uninhabitable footpath](image)
Poor street lighting adds to the misery of these commuters during night drive. The urban sprawl was adding to the agony of the city centre although a radial growth was seen along the five major roads. If there were three members in a family there were three cars in a household especially in the upper middle class families, which did not have faith in BMTC due to poor connectivity. Introduction of Vajara and Volvo did ease a little but they were not door to door service so this segment of people preferred their own vehicles adding to air pollution on road. As per the survey statistics shown in Chapter-3 (3.7), air pollution is well above the mark, thereby a need for MRT which runs on electricity unlike the petrol or diesel run vehicles and would lead to a decline in pollution.

Bengaluru’s noise pollution is much higher than American cities, attributable to the drivers in a hurry on the road and also to the vehicles self-noise. If one stands on a major junction of Bengaluru like Central Silk Board, one can feel not only air and noise pollution but also experience a rise in temperature caused due to the individual A/C cars on roads. All these factors reinforce the fact that Metro Transit System is the only solution to the problem. It is not only a cheaper means but is a comfortable, pollution free, air-conditioned ride to the destination.

Once the need to have a MRT is established, it is important to understand the role of aesthetics as this infrastructure is a prestige of a developing city which it can boast of. According to Oxford Dictionary aesthetics is a branch of philosophy making clear the laws and principles of beauty. Aesthetics finds its origin in art and one wonders the truth in Louis Sullivan’s statement, “Form follows function”. With a higher purchasing power in the hands of the middleclass consumers, function is the basic need at the bottom of the pyramid as shown in the figure, the region that he/she has surpassed and there are competitor brands giving more than just function.

5.1.4. Emergence of Metro: Reach and connectivity

It has been stated in Chapter-1 that there is a need of metro network system in Bengaluru but once the need has been established it is important to understand the reach, connectivity, commute nuances and facilities.

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3 Most of the vehicles run on petrol and diesel. According to the survey done by the Bengaluru Metro Rail Corporation Ltd, Air Quality index around many of the city’s major junctions are in excess of 150, making them unhealthy. Around majestic they are over 300, making it hazardous to health.
The Phase-1 network of Namma Metro consists of two corridors viz. East-West and North-South.

- East-West corridor is named Purple Line
- North-South corridor is named Green Line

The two corridors intersect at Kempegowda station which is a two level interchange station. A commuter who intends to travel from a station in one line (say Trinity in Purple line) to a station in another line (say Peenya in Green line) will have to change the train at Kempegowda station without coming out of paid area. The commuter can buy a single token for the complete journey.

For implementation of the Project, four elevated stretches of area called Reaches have been identified as below for convenience of project implementation. Besides, there are two underground sections connecting Reach-1 & Reach-2 in East-West Corridor and Reach-3 & Reach-4 in North-South Corridor respectively which have been shown in the table below taken from BMRC official website⁴.

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⁴ http://bmrc.co.in/Network.htm (15-08-2014)
The foundation stone for Phase 1 of Bengaluru Metro was laid by Prime Minister Dr. Manmohan Singh on 24th June, 2006. The construction work of Phase 1 of Bengaluru metro began on 15th April, 2007. Reach 1 of the East-West corridor of Phase 1 connects Baiyappanahalli to Mahatma Gandhi Road and the commercial services started from 20th October, 2011. It covers a distance of 6kms in 15 minutes. Reach 3 & 3a of the North-South corridor connects Sampige to Peenya Industry whose construction started in 2009-10 and it opened to commercial services from 1st March, 2014. It covers a distance of 6.6kms in 12 minutes. However, Phase 1 of Bengaluru Metro was scheduled to cover a distance of 42.3 km and have 40 stations.

The Union cabinet has also approved the Phase 2 extension of Namma metro on 30th January, 2014 which would cover 114 km and will have an addition of 61 stations to the metro network, out of which 12 stations will be underground. The construction of Phase 2 would start after the completion of Phase 1 and is expected to be completed by 2017-18. Phase 2 will consist of the extensions of all four reaches of Phase 1 and the addition of 2 new lines. On conversation with Metro officials the scheduled completion of projects was: North Line Reach 3 & 3A was September 2013, North Line Reach 3B March 2014, Reach 2, 4 and 4A was December 2014 and Underground Corridors was March 2015. However, the project is delayed due to various bureaucratic reasons and also the terrain difficulties.

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5  http://www.karnataka.com/bangalore-metro/about-bangalore-metro/ (15-08-2014)
After having understood the reaches and the functional route an understanding about connectivity to the farther most station is important. Hence the distance radius of 5km is mapped from Byppanahalli Metro Station in the map and the current connectivity provided by BMTC is studied and shown below. These are determinants that would decide the success of the transport network. For example if a commuter located in Sarjapura Road has to use the metro facility to commute to MG Road, then he has first to reach Indranagar or Byappanahalli Station. But there is no direct connecting bus to either of these stations. The commuter has to change at least 2-3 buses to reach these stations. It would take him same amount of buses change to reach MG Road directly. Hence currently metro is only serving a small pocket and its totally functionality is little difficult to be assessed.
Fig. 49: Showing 5km radius to Byappanahalli Metro station
This map shows the places that would come under 5kms reach to Byappanahalli Metro Station for the feeder buses. The connectivity currently of feeder buses to Byappanahalli Metro Station is taken from the BMTC website as shown below.

<table>
<thead>
<tr>
<th>SI No</th>
<th>Route No</th>
<th>From</th>
<th>To</th>
<th>Via</th>
<th>No of schs</th>
<th>No of trips</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>MF-7</td>
<td>Baiyyappanahalli Metro Station</td>
<td>Kadugodi Bus Station</td>
<td>Bagmane Tech park, C.V.Raman Nagar, Kaggadasapura, Basavanagudi, Marathahalli, Whitefield</td>
<td>8</td>
<td>51</td>
</tr>
<tr>
<td>2</td>
<td>MF-9</td>
<td>ITI Colony</td>
<td>Domalur TTMC</td>
<td>Ramamurthy Nagar, B.Channasandra, Kashturi Nagar, Baiyyappanahalli Metro Station, suranjandas Road, HAL</td>
<td>6</td>
<td>103</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Total</td>
<td>54</td>
<td>154</td>
</tr>
</tbody>
</table>

As we can see here two routes: towards Whitefield and Domlur have been covered, however, there is no connectivity towards the other side: Banaswadi and Hennur.

Facilities at the station are another important concern by the people apart from connectivity. The basic amenity like toilet is missing at the stations which were later incorporated in few stations that too as a paid service. BMRC does not promote commuters to hang out at the stations. The stations are not so handicap and senior citizen friendly, lift facility is not conspicuous and the escalators take them up but to come down they have to use staircase. Signages are also missing at many stations.

The stations in the world focus on making travel an experience to its commuters by incorporating a mall at stations, even Delhi Rajiv Chowk station has eat outs at the stations as shown in the images below. Namma metro may take precedence from them and incorporate them. However, certain attempts have been made in the right direction as per international standards, here too the metro connects the first mall: Mantri mall, and two railway stations are connected to Metro stations: Byappanahalli and Yeshwantpur.

Fig 50: Metro Station, Japan with a shopping arcade

Fig 51: Metro Station, Singapore with a shopping arcade

Fig 52: CCD inside the Metro Station, Delhi

Fig 53: CCD outside the Metro Station, Bengaluru

Fig 54: Mantri Mall Metro Station connectivity
5.1.5. Aesthetics

Once the basic function is achieved aesthetics comes into play. Aesthetics has been defined and interpreted by various scholars. According to Rajat and Ganesh (Baisya and Das 2008: 42-50) the two qualities of aesthetic response are ‘hedonic value’ and ‘profound experience’, meaning it appeals to pleasure, emotion and experience.

Role of aesthetics in Urban Design has been described by William H. Wilson in his chapter,” Ideology an Aesthetics”, in the book “The Urban design reader” (Larice and Macdonald 2013:62-77). The chapter talks about relevance of aesthetics in urban space. After ‘Garden city’ concept by Ebenezer Howard another concept that came into existence for a short span of time was ‘The city Beautiful Movement’. This was limited to America and came into existence by the American Social and Design Movement Society at the turn of 20th Century. This was the time when neo-classical styles were in vogue. This movement advocated the idea to make cities better by improving their public realms. Their focus lay in civic beauty including parks, boulevard systems, underground utility wires, restricting billboards and providing benches and water fountains in public spaces. City beautiful aesthetics spoke of natural beauty, naturalistic constructivism and classicism.

Landscape design was given prominence. However, this movement was short lived as it catered only to the rich class as seen in Marx class theory.

A designed space must keep in mind the individuals perceptions about the desirability of walking, bicycling or engaging in recreational exercises within a particular place. This was given importance to in the city beautiful movement, but was later shunned down. The question cropped up again in the 21st Century, when the need was felt to design the characteristics of the immediate environment as it would influence the joggers, walkers or cyclists who traverse short distances with utmost engagement to its immediate surroundings like the streets, parks, squares, plazas, buildings, lawns, bus shelters, and billboards and so on. Hence there was a tussle between aesthetics and mere functionality. By the 21st century aesthetic was given a prominent place and street and site design got eminence. Jacobs quotes that, “If a city’s street look interesting, the city looks interesting; if they look dull, the city looks dull”.(Jacobs 1993:37). It was important to make the street safe rather than dangerous and
unpleasant to encourage activities like walk, jog or bicycle. It’s unfortunate that today streets are where the cars rule with no place for pedestrians or cyclists. Streets could become places of social-interaction which was a concept in Indian villages but today is lost to urbanization.

“Streetscape is a multidimensional space that shapes and is shaped by objects in its periphery”.

Hence, it’s not just the streets but the surrounding sites also matter, to the visual impact on the passer-by. Pedestrians would prefer to travel if the characteristics of buildings and other site level design attributes are interesting. Architectural styles must be complementary and not uniform and boring. But slowly the society moved to individualism and houses were an independent identity. The porches which were the two way interactive features moved from façade to rear and a mere slab of garage door replaced it making it more introvert privacy driven space. Office spaces and shopping centres with larger front setbacks and green spaces were lost to the asphalt and cars in the glass and concrete setting.

According to Cuthbert (Cuthbert 2011:193) in his book titled ‘Understanding Cities’, “Aesthetic values are progressively modified through modes of production, perception, history and individuation”.

Since culture, urbanism and human imagination are a dynamic process, assessment of aesthetics also remains vibrant, and it evolves with society. Three main aesthetic determinants are: environment, experience and communication. Environment deals with man’s relation to his surroundings: natural or manmade; experience deals with conditioning of an individual and his senses to his environment and the last is conditioned with media. His responses to aesthetic pleasures are determined by these above factors that make him an individual and a part of the society. Therefore, aesthetics deals with beauty, art, pleasure and sensuality.

Numerous endeavours have been made to create a particular Marxist style, one that would consolidate the Marxian theory of history and class awareness and investigate the common belief system, to produce standards of dissection and assessment and demonstrate the spot of workmanship in the theory and practice of insurgency. William Morris in England and Georgy V. Plekhanov in Russia both endeavoured to
unite Marx's social feedback with a notion of imaginative and creative work. Artist
must not be evaluated in isolation as play and work would be inversely correlative
similarly is an artist working in a state of social decline7.

“A thing of beauty is a joy forever”. John Keats. Fashion or art have a short life span
in comparison to architecture. Hence one cannot compromise on aesthetics here.
There are a few concepts of beauty which when applied one would never go wrong in
designing a beautiful object, like the golden ratio applied with right colour
psychology. Aesthetics lies in cognitive, affective and behavioural response of
the consumer.

Fig 55: Maslow’s hierarchy needs8 shown for Singapore but
applicable to Bengaluru too

According to Ann Marie and Patricia Anne ( Fiore and Kimle 1997:3-18) “ aesthetic
experience can be defined as the sensitive selection or appreciation of formal,
expressive or symbolic qualities of the product or environment, providing non-
instrumental benefits that result in pleasure or satisfaction”. Aesthetics experience
comes from the sensitivity of the consumer to the environment, because each
individual spends in a different way. But the basic formal qualities including the

7  http://www.britannica.com/EBchecked/topic/7484/aesthetics/11690/Marxist-aesthetics
29-08-2014
elements and principles of design and also the expressive qualities evoking an emotion of the product must be met. The colour evokes emotion for example blue used in the Pennya station evokes calmness as it’s an industrial area whereas the red on MG Road evokes vibrancy as this is the vibrant CBD as well as the important shopping centre. Form also has an emotional response; if a cube is tilted and placed on an edge as a building it might inhibit people from entering it although it is a very stable structure. Symbolic qualities represent the visual quality of the product which range from realistic to stylised and abstract representatives. In MRT it may be seen in the signage’s how aesthetically the message has been conveyed which shall be dealt in detail in the following paragraph. Environment is another aspect that can impact the consumer aesthetics. For example, a consumer (here commuter) would be apprehensive to use the service if it is smelly and dirty, hence an aesthetic enhancement may help in luring more commuters. Aesthetic experience affects three aspects of an individual namely, the body, soul and mind. This area has been dealt in detail in the paper titled, “Social Survey of Aesthetics and Functionality of Namma Metro - Phase I”, Annexure-II.

A comparison of few metro stations (interior and exterior views) visually explained to compare them with the aesthetics of Namma Metro, Bengaluru. Paris Metro has been built on Art Nouveau style and . As we can see in Figure: 54, Namma Metro has a beautiful design but the poor execution and maintenance spoils its beauty.

Fig 56: View of Paris Metro station

Fig 57: Dubai metro station exterior view

Fig 58: Namma metro Mantri mall station exterior view (edited version)

10 http://media-cdn.tripadvisor.com/media/photo-s/05/2a/f6/25/metro-dubai.jpg (29-08-2014)
Fig 59: Namma metro Mantri mall station connectivity exterior view
(unedited version)

Fig 60: Tokyo metro station interior view
Fig 61: Singapore metro station interior view

Fig 62: Namma metro Mantri mall station interior view
5.1.6. Signage’s

“What we need is not more information but the ability to present the right information to the right people at the right time, in the most effective and efficient form.”

Robert E. Horn

Information design has been in existence from time immemorial but is gaining momentum only now in India. It is ubiquitous and omnipresent, be it road signage’s helping people to navigate in a complex landscape or be it in the form of a simplest brochure for a product or service. This study is of metro route signage, to in-platform navigation, to audio-visual signage announcements on MRT. They have to be user centric. India is a country where this field has a big lacuna. How many times have we driven on the junction and not known to take a right or a left to reach our destination? Until recently that the google navigation has traded us off!

Fig 63: Entrance signage, Singapore MRT  Fig 64: Floor signage, Singapore MRT
Fig 65: Entrance signage, Singapore MRT  
Fig 66: In MRT signage, Singapore MRT

Fig 67: MRT Terminus signage, Tokyo MRT  
Fig 68: In MRT signage, Tokyo MRT
Fig 69: Entrance signage, Mantri Square Sampige Road, Namma metro

Fig 70: In-station signage, MG Road, Namma metro

Fig 71: In metro signage, Namma metro

Fig 72: In metro signage, Namma metro
As can be seen in these images, the signage in Namma-metro are equally evolved but in terminus there are lack of signage’s, especially at Pennya station.

According to Kim Baer (Baer 2009:195-228) signage are a rescue else travelling can be stressful, be it on road or inside airport, MRT terminus or a shopping mall. Paul Mijksenaar quotes, “As a designer, you have to think in time and see things in sequence. You have to see information as a narrative form.” There are different ways to do so; one may be through colour coded hierarchy. For example New Jersey airport has a colour coded signage system: Yellow when flying (Ticketing, Gates, Check-in); Black for airport services (Restrooms, Escalators, Phones) and Green when leaving the airport (Ground transportation, Parking). Signages must be simple to convey the primary message proficiently and effectually. Colour coding certainly helps as it delivers the primary message from a distance and is helpful to even elderly and illiterate or transit immigrants unfamiliar with the language.

5.1.7. *Gender equality concerns*

According to Tepperman and Rosenberg (Tepperman and Rosenberg 1991:75-79) gender is a social construction, a manufactured dichotomy which is learned through the socialization process. Just like class or ethnic differences, gender differences, advantage or disadvantage people although being male or female is an inevitable human biology. However, gender roles are taught early in life, right from birth. A differentiation between boys and girls and as they grow the differences between toys they play with and girls are asked to keep away from boys. Boys are expected to be rough and tough and girls to be soft and emotional. Media also supports and reinforces such thoughts. Gender is a culturally learned notion of masculinity and feminity. In our society men are supposed to be the bread earners whereas women are to be the homemakers.

According to Tepperman and Rosenberg (Tepperman and Rosenberg 1991:227-279) gender or gender relations could not be effectively explained through any of the three sociological perspectives: functionalism, conflict theory and interactionism. Very few studies had been done in this area until recently as most of the sociologists were men. Functionalists believed that gender differences were natural and they benefitted the society as roles for both sexes were defined. Friedrich Engles defined this to be at its
peak during capitalism, when women work at home for no pay and their job was not considered as real work. This may be equalled to class difference.

It’s only around 1970’s due to a rise in female sociologists gender issues were taken seriously. These were seen through two perspectives: ideology of gender and reality of patriarchy as defined by Tepperman and Rosenberg. In the first case, men are assumed to be aggressive, competitive and rationale where as women are emotional, dependent and nurtures. Men have a place in public affairs whereas woman’s place is at home. Men wear uniforms but women are expected to wear flowing costumes which hinder physical activity. Men were taught to be authoritarian whereas women were expected to be subordinates. The second case is patriarchy, as the name indicates male dominace. It has been seen that gender differences begin right from birth. Daughters are assigned more household work after coming back from school, if they are sent to one. In India there were other issues related to the patriarchal mind-set where women had to pay dowries to men for marriage and this greed of easy money made dowry a major social evil and families preferred to have only sons and not daughters and cases of girl homicide were seen. This started to change when more and more women got educated and stepped out of houses to take up jobs and in some cases earned more than men. The dramatic increase in women’s workforce has signalled a major change in gender roles. For a long time there were differences in wages between genders even though a woman at work may do same amount of work or even more than man. This change was not well received by many men who did not want to share the burden of the domestic work hence women were forced to take up part time jobs or be less ambitious and settle for less paid easy jobs or look for outside agencies to take care of children when young.

Married women in comparison to single women suffer wage disability as they are expected to take care of the family leading to part time jobs or easy jobs with less pay. This has been a major concern in Japan where more and more women prefer to remain single. An invisible limitation to rise in career called the ‘glass ceiling’ effect is seen in bureaucratic organizations. Weber states that rationality is good and bureaucracy is rational therefore bureaucracy is good and since men are rational, men are more suited for bureaucratic jobs. Liberalism however, came to be rescue of
women and proved otherwise. Liberal feminist argued that there is no difference between both sexes.

However in today’s liberal world the metropolitan cities have seen changes but the tire two towns and cities and villages have to see these changes. These are less of class differences but more seen as racial and ethnic differences. In India for example Kerala and North Eastern states follow matriarchal system where men have to give money to the girl’s family for marriage. But however, the rest of the country barring a few educated mass still looks as women as weaker sex. This is evident through violence against women like domestic violence or increasing rape, molestation and sexual harassment cases in society or at work. The famous Tejpal case is an example of the same. The women have to be bolder to report such cases only then things would change else they will continue to happen being shoved under the carpet. However, government is rising to the needs of women equality and more and more stringent laws are being passed to protect them.

5.1.8. Socio-economic transformation

There is huge disparity in the incomes. Many urban ecologists have noted, in most cities, there is a social movement of the elite and effluent to gravitate towards the centre of the city, while the less influential are moved out to the periphery. However, Bengaluru grew as a multiple nuclei city according to Janki Nair; there was the City centre (non-interventionist capitalist society), the Cantonment centre (planned British city) and the Market centre (business centre). But it saw a sudden boom of population explosion twice, once in 1950’s and the other in 1990’s. The first was drive by the start of public sector companies like HAL, BEL, HMT and ITI and the other by the Information Technology. Bengaluru graduated from a small town to a metropolitan city in a span of 40 years. Thereby it had to deal with issues like housing and infrastructure and services for these immigrants. But these developments definitely brought an economic boom also to the city. There were different types of immigrants to the city: the labour and working class, public sector workers and government officials and lower middle class. The affordable middle class looked for better housing facilities which paved way to the private developers in 1980’s. Apartment housing with world class amenities was being preferred by them. Whereas the lower middle class settled for designated slums and low type quarters provided by
government. One such development that grew was Tilaknagar which housed mainly the Muslim community. But they were economically very stable with and vibrant through manufacturing of steel cupboards, autorikshaw and stove repair shops, fabrication, tailoring shops and so on.

IT industry brought a new revolution to Bengaluru. Even the young could afford a lot of facilities which was a distant dream for their parents. Globalization brought emulation of America and American culture, one of them being EMI culture. Thus at the time of their marriage they were proud owners of a residence and a car. There was a need to wear branded clothes which saw a rise in multinational brands investing and opening stores in Bengaluru.

5.1.9. Socio-cultural transformation

According to Tepperman and Rosenberg (Tepperman and Rosenberg 1991:33-59) culture can be divided as real or ideal and as material or non-material culture. Ideal culture deals with values people claim to believe in but real culture is the way they dress, talk, act, relate and think. Material culture deals with all the physical objects that members of a culture create and use but non-material culture is idealistic and lies in beliefs and philosophies. What has been dealt in this thesis is real culture. Today’s real culture sees that even if a whole family is sitting in the same room they are all into their cell phones and communication has become minimum or they are sitting in front of television and there is hardly any conversation among them and from food to drinks everything happens on the couch. Religion, beliefs and rituals have come to a readymade age. No longer are cumbersome sweets prepared for the festivals and the pujas are not as elaborate as they were during a previous generation. But thankfully community living in apartments or gated community have kept few of the festival celebrations alive.

According to Stark World, “Bengaluru and Karnataka” pages 15-18, Bengaluru turning to a cosmopolitan city is a proof to the hospitable nature of its citizens. As Bachi Karkuria in her article on becoming ‘Bangalored’ speaks of the metamorphosis of the 1990’s, she states.” It (Bengaluru) was changing its sex and sensibility, its pride and prejudices. The Pensioner’s Paradise had suddenly been not just botoxed, but given an all-over silicon implant”. She further talks of the schizophrenia this created,”
It was like your grandmother changing into a sequined thong”. This was a time which saw immigrants from the North India with seats in colleges to pub tables. Skyline and hemlines went up. Apartment complexes were preferred to old bungalows and the offices could see girls with sandal paste on their forehead with cowboy boots. The city saw a rise in multinational eateries like KFC to Miss World pageant competition held here, although they did not go too well with the locals and became a matter of controversy and conflict with the natives. The city dargahs and churches are visited by people of all faiths which reflect the multi-lingual and multi-ethnic status of Bengaluru and the tolerance of people towards all religions.

Brigade Road and MG Road have seen a sea change from the golden days when there were pedestrians and bicycle users who today have been replaced by honking cars. The colonial architecture and stone and brick structures have given way to steel and glass. The lending libraries and second hand books stores have been replaced by music stores. Multinational brands have changed the face of Brigade road. Pubs have mushroomed at every corner. Dosa joints have got lost the last of its type the ‘Indian Coffee House’ has got obscured into oblivion and have been shifted from MG Road to a lost corner of a multi-storied building.

The city has seen a dichotomy of cultures in unison: the traditional and the new. The five day a week culture gives two days in-hand to involve in other activities. The city has seen musical concerts from Dr. L Subramaniam to Akon, theatrical plays from "Benda Kaalu On Toast" to “Tumhari Amrita”, dance danseuse Yamini Krishnamurthy to Salman Khan (DID-Season-I winner) or Lourd Vijay’s Jazz and hip-hop moves and Karaga festival to Durga Puja.

According to Stark World, “Bengaluru and karnataka” pages 153-173, the art and culture of the city range from traditional to modern. A week long Bengaluru Habba in December sees artists across the country performing to artists from across the globe performs at Palace Ground. Artists and sculptors have been equally recognized through mushrooming art galleries. Sunday bazaars held at oldest business centre of the city hosts a range of products from electronics to books at this weekly flea market. Digital arts and photography has been another culture on the rise. Photography and heritage walks over weekends and visits to flea markets like Soul Sante have got them rooted to Bengaluru’s cultural lineage.
Another culture prevalent among these young IT professionals is Saturday pool-parties with a group of friends over music and drinks. Bengaluru has been sensitive to social causes be it anti-corruption of Anna Hazare move to anti-rape/ woman equality issues all came out in huge numbers to support the cause at Freedom Park. Amongst all these the other modern activities like a visit to amusement park (Wonderla), malls, multiplexes and INOX and golf clubs and resorts for family/ community picnics over weekends. Eating out over weekends is another new culture which has seen a splurge of multi-cuisine restaurants. Last not to forget the fashion quest ion of the city. With globalization the Western clothes have become a norm. Personal grooming has gained importance as it is of prime importance to corporate woman who want to be in step with global fashion. This led to rise of grooming brands like VLCC. Another rise is seen on stress management issues and people have resorted to Shri Shri Ravishankar’s ashram looking for inner peace over weekends. Health and fitness have seen a rise in gym culture and now a lot of people are looking for alternative means like yoga and dance therapy to break from the boring gym routine.

5.1.10. Transportation mismatch/ Transportation Mix

The forecast, contained in Transport Department documents obtained by The Sunday Age under freedom of information, in an article by Deborah Gough, City bound for commuter hell, Dated: June 19, 2011, reveals that within a decade, Melbourne's already bursting train services will have to accommodate an extra 1 million passenger trips a day and average weekday travel on trains will rise from about 800,000 trips to 1.8 million by 2021-22. This will put unprecedented pressure on the city's beleaguered rail network, which is already costing Melbourne's central business district $80 million a year in lost productivity.

The estimate, contained in Transport Division records got by The Sunday Age under opportunity of data, in an article by Deborah Gough, City headed for worker damnation, Dated: June 19, 2011, uncovers that inside 10 years, Melbourne's as of now blasting train administrations will need to suit an additional 1 million traveller treks a day and normal weekday go on trains will climb from around 800,000 excursions to 1.8 million by 2021-22. This will put extraordinary weight on the city's ambushed rail system, which is as of now costing Melbourne's focal business area $80 million a year in lost benefit.
The archives acquired by The Sunday Age demonstrate that the following decade will see a surge in the utilization of all modes of open transport: not just will prepare support climb at all times of the day and on weekends, transport fly out is required to twofold and tram utilization is anticipated to climb by one third. The anticipated climb in train utilization will intensify the congestion emergency and increase the officially significant expense to the CBD in lost benefit, as per the Monash College research. On the off chance that congestion on trains proceeds with, it will drive business out of the CBD in light of the fact that more individuals will search for work in the suburbs so they don't need to arrange general society transport pulverize, the examination cautions.

Many Metro Rail Travel suburbanites were harmed on Wednesday, as reported in Metro Manila on August 13, 2014, "MRT mischance as of now predicted as 'a calamity holding up to happen", after a flawed mentor pummelled into a steel hindrance at the Taft Road station. Anyway the incident maybe came as meagre shock to travellers stuck on the day by day drive on the stuffed train framework. One daily paper editorialist Jarius Bondoc even anticipated the occurrence and noted that the MRT was "a calamity holding up to happen" just about three months back. This happened because of poor support of rail tracks and wheels which have got worn off about whether, a lesson to be learnt for India where upkeep is an enormous issue.

The documents obtained by The Sunday Age show that the next decade will see a surge in the use of all modes of public transport: not only will train patronage rise at all times of the day and on weekends, bus travel is expected to double and tram use is predicted to rise by one third. The predicted rise in train use will exacerbate the overcrowding crisis and ramp up the already substantial cost to the CBD in lost productivity, according to the Monash University research. If overcrowding on trains continues, it will drive business out of the CBD because more people will look for work in the suburbs so they don't have to negotiate the public transport crush, the research warns.11

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Dozens of Metro Rail Transit commuters were injured on Wednesday, as reported in Metro Manila on August 13, 2014, “MRT accident already foreseen as 'a disaster waiting to happen’,” after a defective coach slammed into a steel barrier at the Taft Avenue station. But the mishap perhaps came as little surprise to passengers stuck on the daily commute on the overcrowded train system. One newspaper columnist Jarius Bondoc even foresaw the incident and noted that the MRT was "a disaster waiting to happen" almost three months ago\(^\text{12}\). This happened due to poor maintenance of rail tracks and wheels which have got worn off over time, a lesson to be learnt for India where maintenance is a big issue.

These two incidents show the relevance of introducing more lines to save the economy of the city and the other to show the importance of maintenance. Bengaluru has a mis-match of transportation if one has to use only bus and metro. Connectivity is a major concern. Feeder busses are not enough and their reach defeats their purpose. If one has to rely on buses for commute and one has to travel from Sarjapur Road to Indiranagar for work/shopping, he/she has to change 2-3 buses, which is very tedious for the commuter. Similar is the story on other routes.

After having understood the issues and concerns of Bengaluru city the objectives and hypothesis of the research were formulated to find the truth through surveys interviews and observations with respect to safety of women, need for metro and aesthetics of the city and station.

The gap between existing state and perceived state has been documented through visual observations and through interviews. The urban influx into the city for various reasons primarily education and work saw a burden on infrastructure of the city. Traffic grew on road leading to noise and air pollution. It also saw a rise of apartment blocks and office complexes, for example the unknown Sarjapura Road which was almost a jungle in 2003 is today a concrete jungle. The old colonial facades are being replaced by glass and concrete. Roads are being widened to accommodate the extra vehicular pressure on roads but there is no place for pedestrians. Even if a pedestrian walkway is present it is not maintained and is dangerous. Bengaluru was known as a garden city in past but today a lot of greenery has been cut off to accommodate

infrastructure facilities. Bengaluru is also known as a design friendly city and the expectations are a high quotient of designed space. However, the metro stations do not speak of the same. The conceptual designs might have been interesting but the execution and maintenance do not show the same effect. Lighting could have played a major role in making the place look aesthetically appealing and giving it a dramatic look even during the night which has not been given much importance. Signage’s and basic facilities are another concern at the stations. However, safety has been given utmost prominence, yet women would have preferred woman’s compartment in the metro. There is currently a transportation mismatch, many commuters were observed coming in their chauffer driven vehicles or cabs for a drop to the metro stations. Hence, until the metro starts functioning on a larger scale its actual impact over the city is a little difficult to comprehend.