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The contradiction of Demotorisation: a Literature Argument

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Abstract
This paper is aimed at outlining the flexibility of capitalist consumption (Harvey, 1990) through a review of literature that has condemned the modernist era of the automobile for its consumerist tendencies but has failed to recognise that this flexibility of capitalism has been re-invented through demotorisation as a new tool for consumer culture. Demotorisation here is used to refer to the removal or partial removal of cars from roads and replacing it with cycling and walking. The research employs a review of theoretical as well as secondary empirical analysis. It must be emphasised that this paper is not aimed at discrediting demotorisation of streets but rather to point its postmodern nuances.
Key Words: Demotorisation, Pedestrianisation, Consumerism, Automobile, Cycling, gentrification.

1. Introduction

> *"And I will tell you another thing, boy: there is no future for the automobile. We cannot let there be! Consider the man on horseback, and I have been a man on horseback for most of my life. Well, mostly he is a good man, but there is a change in him as soon as he mounts. Every man on horseback is an arrogant man, however gentle he may be on foot. I know this in myself and in others. He was necessary in his own time, and I believe that time is ending. There was always extreme danger from the man on horseback. Believe me, young man, the man in the automobile is one thousand times as dangerous. The kindest man in the world assumes an incredible arrogance when he drives an automobile, and this arrogance will increase still further if the machine is allowed to develop greater power and sophistication. I tell you, it will engender absolute selfishness in mankind if the driving of automobiles becomes common. It will breed violence on a scale never seen before. It will mark the end of the family as we know it, the three or four generations living happily in one home. It will destroy the sense of neighbourhood and the true sense of nation. It will create giantized cankers of cities, false opulence of suburbs, rainized countryside, and unhealthy conglomeration of specialized farming and manufacturing. It will breed rootlessness and immorality. It will make every man a tyrant. I believe the private automobile will be suppressed. It will have to be! This is a moral problem, and we are a moral nation and world; we will take moral action against it. And without the automobile, rubber has no real future. Opt for the interurban stock, young man"* (R.A. Lafferty, 1971)

This piece from R.A. Lafferty's *Interurban Queen* (short-fiction book) somehow captures the dawn of the paradigm shift away from car transport. Take for instance, the date the book was written -1970s- the oil crisis was surging up, green movements had started to voice their discontent for the car; and the car was soon to take the position from hero to villain.

This article focuses on treading a historical trajectory of Consumer culture and demotorisation[1] through academic literature reviews. Through this evolution, the article highlights the consumerist critique levelled against automobility especially in the modernist through to the postmodern era. It then goes on to explore demotorisation as a practice seen as a solution to the ills of the automobile (especially related to anti-consumerism and equality). It then goes on to draw the argument that contemporary demotorisation efforts by cities are undertaken with the aim of creating new spaces of conspicuous consumption which could result in gentrification and related inequalities; something that cycling and pedestrianisation was supposed to criticise. This literature is mostly based on historical and secondary empirical analysis. The chapter is then concluded with a summary and a literature argument on which the hypothesis is based.

2. Exploring the historical context of Consumer Culture

The role of consumer culture in everyday life cannot be understated. It has always provided sustenance, shelter, safety and entertainment. It also provides mobility and counterbalances the effects of nature (Wallendorf &

[1] Demotorisation can be defined as a reduction or total elimination in the road capacity for automobiles. This can be achieved through either a road diet; that is the reduction in the effective width of a road to allow for more access for bicycles or pedestrians (Hass-Klau, 1993). Pedestrianised streets are also a form of demotorised streets. Pedestrianised streets can be categorised into three for the purposes of this research. 1. Full - time pedestrian streets; it forbids cars entirely except emergency service vehicles. 2. Part - time pedestrian streets: it allows cars at certain periods. and 3. Traffic calming streets: it reduces the speed and dominance of road vehicles.

Arnould, 1988, p. 531). In order to understand this phenomenon it is important to trace its origins and its different forms especially in the global west through the pre-modern, modern and the post - modern timeline.

In the pre-modern era (that is, before the 18th century), devotion to the public good, religion, cultural beliefs and poverty superseded most inhibitions of consumerism in Western Europe; although the aristocracy showed luxury, but not in a consumerist fashion (Stearns, 2006). Factors such as rapid urbanisation and the emergence of enlightenment-thought provided a bedrock for the burst of modernist consumer culture.

Consumer Culture in the modernist era can be successfully traced first from the 17th and particularly the 18th century (first phase) and then the second phase from 1850 onwards (Stearns, 2006, p. 15). It first focused on centres with already developed commercial economies and where access to global products was rapidly expanding with colonial trade as a backdrop (mostly, Britain, France, the Low countries and parts of Germany and Italy). This entailed an explosion of shops and new marketing methods; especially when shopkeepers and consumer goods producers realized that wants and needs are infinitely stretchable (Stearns, 2006, p. 18). The second phase of consumer culture in the modern era (after 1850) entailed the entry of leisure into the consumer orbit for the first time (Stearns, 2006, p. 47). This also promoted faddism as a key factor in consumer culture. Also, this phase witnessed a shift from the shop to the department store; which also introduced the ideas of display and 'mass' into selling to stimulate a 'dream world' of material luxury and ultimately buying (Stearns, 2006). Fordism, which introduced changes in the methods of production and distribution, was also a major influence.

Transportation also gained a lot of consumer attention during this period; spurred by both its novel products and the expansion of cities. The bicycle craze was ignited in the 1870s -1880s (especially in the USA and Europe) which was then taken over by the automobile. Car purchases began at the top of the social scale but soon spread to the masses, especially in the USA (Stearns, 2006).

In the postmodern era (1960s/1970s)[1], much of the facets of modern consumption practices were carried on with new and interesting influences. Postmodern consumer culture has been highly influenced by the aesthetisation of everyday life. This refers to the rapid flow of signs and images which saturate the fabric of everyday life in contemporary society. It also points to the expansion and extension of commodity production in the big cities resulting in new buildings, department stores, arcades, malls etc (Featherstone, 2007). Postmodern consumption (in the marxist sphere) also entails the replacement of the exchange value of a commodity by its 'sign-value' (Adorno, 1967). This meant that commodities were also consumed for their cultural and symbolic value (especially by the middle class). This symbolism was not only evident in the design and imagery of the production and marketing processes but to also emphasise differences in lifestyle (Leiss, 1978). Lifestyle has therefore become a life project in itself, to display individuality and sense of style in the particularity of the assemblage of goods, clothes, practices, experiences, appearance and bodily dispositions (Featherstone, 2007, p.84).

A central aspect of postmodern consumption is the influence of cultural intermediaries (e.g. media, advertising and marketing agencies). They are involved in the commercial manipulation of images through advertising in the media and the displays, performances and spectacles of the urbanized fabric of daily life through a constant reworking of desires via images. Consumption in the postmodern sense has also consequently taken on new meanings to also involve the consumption of experiences and pleasure. Leisure activities such as visiting theme parks, shopping centres, malls, museums and galleries is therefore a convergence of the postmodern city as a centre of consumption, play and entertainment (Featherstone, 2007, p. 94).

It is certainly daunting to attempt a classification of the forms of consumer culture, but as early as 1899, Thorstein Veblen produced a seminal academic piece on conspicuous consumption[2] which argued that wealthy individuals often consume highly conspicuous goods and services to display their wealth and advance their social status (Veblen, 1899; Bagwell & Bernheim, 1996). This argument was able to distance consumption as a necessity and consumption as a class identity.

2.1 Consumer Culture Theory

This body of knowledge addresses the dynamic relationships between consumer actions, the marketplace and cultural meanings (Arnould & Thompson, 2005). This school of thought is very postmodernist in view; it looks at the sociohistorical processes and structures related to (i) *consumer identity projects*, (ii) *marketplace cultures*, (iii) *the sociohistorical patterning of consumption* and (iv) *mass - mediated marketplace ideologies and consumer interpretative strategies* (Arnould & Thompson,2005;Holt 2002).

3. How Automobility is situated within Consumer Culture

The early 20th century marked a pivotal epoch in transportation with the privatisation of the automobile (Freund and Martin,2007). This new development was especially sparked by Henry Ford's Model-T. Automobility was

[1] Featherstone (2007) provides a good account of the back and forth academic debates surrounding the word 'Postmodern', its beginning and timeline.

[2] The theory of the Leisure Class (1899)

consequently able to form a nexus between transportation and social values like progress, freedom and the good life (Manderscheid, 2013, p. 285; Sheller & Urry, 2000, p. 739). Fast forward to the mid-twentieth century (especially after 1970) and the image of the car had rapidly changed to a symbol of capitalist consumption and source of other auto-social formations (Freund and Martin, 2007); to the point of being labelled a 'Frankenstein - monster' that combines freedom with constriction (Sheller & Urry, 2000).

The foremost attack on automobility and 'hyperautomobility' (Freund and Martin, 2007) was sparked by the oil crisis of the 1970s with concerns over energy use and the petroleum industry becoming an obvious target of protests from the environmental movement (Sheller & Urry, 2000, p. 750). Other forms of literature also related climate change and obesity with fossil fuels and car culture as one major cause of both (Freund, 2012, p. 118). As at 2012, transportation accounted for a fifth of global oil usage with passenger transportation constituting a quarter of energy- related carbon dioxide emissions (Newman, 2013, p. 458). Thus fuel based transport mobility came to the forefront of the scientific and political discourse on climate change, and the reduction of personalised car travel seemed to be one of the points of agreement in terms of finding remedies (Manderscheid, 2013; p. 284).

On a more wider spectrum, automobility was connected to capitalism and consumerism; the car is the major item of individual consumption after housing (Urry and Sheller, 2000; p. 738). It encapsulated neoliberal ideologies and normative values about how the city should be configured and by whom (Scott, 2013, p. 400). It was seen as a mode of consumption whose reproduction and growth was important for the growth of capitalism and provided the largest sources of corporate profit in the last century (Freund, 2012, p. 121). Scott (2013) for instance cites Henri Lefebvre's (2008) criticism of the central role of the car in a pervasively commodified built environment, sustained by the voracious consumption of natural resources. Debord (1955) also identifies the abundance of private automobiles as perhaps the most successful example of capitalist propaganda thus far deployed upon the masses.

Other authors drew a direct link between automobility and consumer culture; Alvord (2000: 21) claimed that the automobile helped to usher in consumerism, by allowing the car and consumer culture to roll hand-in-hand through the rest of the twentieth century. Soron (2009) identified the car as 'the foremost example of compulsory consumption which constituted the lynchpin of a whole system of interlinkages'. An interesting example that stresses these linkages is what Goodman (1972) describes as "asphalt's magic circle"; an auto-industrial complex between hydrocarbons, public highways, auto-manufacturing and real-estate based on near compulsory consumption (Scott, 2013; Furness, 2010). These kind of linkages can also be related to Sheller and Urry's (2000) idea of a *Machinic Complex* which also indicates technical and social interlinkages of cars with hotels, roadside service areas and motels, new retailing and leisure complexes, advertising and marketing among others.

The automobile has also been blamed for deepening the chasms of inequality because it is not usable or available to large sectors of people, even in the most - saturated societies. This can be seen in terms of gender, minorities and poverty (Sheller and Urry 2000). These critiques further pushed the agenda of demotorisation and alternative transportation into the circles of urban development and lifestyle.

4. Demotorisation as 'the postmodern hero'?

In the context of the various critiques levelled against the automobile, demotorisation (specifically cycling and pedestrianisation) has become a viable model of alternative sustainable forms of transport, and rightly so.

A vast array of literature exists concerning the benefits of demotorisation. Cycling and walking have been noted to be the most egalitarian and sustainable modes of urban transport with a few fossil fuel implications (Kenworthy, 2007). The bicycle especially has attracted a lot of literature indicating its role as:

> *'a cultural signifier that begins to unite people across economic and racial strata. It signals a sensibility that stands against oil wars and the environmental devastation wrought by the oil and chemical industries, the urban decay imposed by cars and highways, the endless monocultural sprawl spreading outward across exurban zones. This new bicycling subculture stands for localism, a more human pace, more face-to-face interaction, hands-on technological self-sufficiency, reuse and recycling, and a healthy urban environment that is friendly to self-propulsion, pleasant smells and signs, and human conviviality'*
>
> (Chris Carlsson, 2007, p. 86)

Thus in this quote, it is noted that cycling (and by extension, walking) is unpacked to be the solution to issues related to the environment, industrial exploitation, sprawl, to promote localism and self sufficiency. For critics of post-war societies, the bicycle has become an ideal alternative to socially and environmentally destructive mass automobility which resonates with the themes of autonomy and self-sufficiency and with environmental, social and economic sustainability that are the hallmarks of alternative development models and societal equity (Horton, 2006; Horton *et al*, 2007).

5. How Demotorisation is connected to Equity

It is fitting within this literature trajectory to highlight the link between demotorisation and equity; especially with the critique of the automobile for its role in enhancing inequalities.

In the emerging mobility studies, the bicycle itself (and walking) are seen as a source of equity; it has attained a global status as a humble and proletarian mode of transportation accessible (and indispensable) to the urban poor (Gibson, 2013; Daly, 2014). Walking and cycling are also seen as affordable,basic transport that (physically, economically and socially) disadvantaged people can rely on; thus pushing for such modes of transport is akin to pushing for social equity, a fair distribution of public resources and economic opportunity objectives (Litman, 2014).

The use of demotorisation (especially cycling) as a symbol of a political movement has also been well documented by authors like David Horton (2006) who argue that social movements like Anarchism (1960s to date) used the bicycle to protest the dominance of the car, marginalisation of the bicycle and also to criticise consumer capitalism in general. This ideological critique of the automobile ensured that, alongside walking, cycling formed part of both anarchist and ecological visions that prioritises local communities and the face-to-face social relations which sustain them. In effect, the bicycle became part of a broader project, variously committed to greater rights for women, the working class, an authentic life free from commodification, and the planet itself; it also embodied a critique of the speed, spread and rhythm of post-war affluent lifestyles (Horton, 2006, p. 11). Organisations like *Critical Mass* can also be subtly connected to such anti-automobile ideologies.

6. Demotorisation and Urban Regeneration

> *Economists and geographers have always accepted that economic growth is regional—that it is driven by, and spreads from, specific regions, cities, or even neighbourhoods. The traditional view, however, is that places grow either because they are located on transportation routes or because they have endowments of natural resources that encourage firms to locate there. According to this conventional view, the economic importance of a place is tied to the efficiency with which one can make things and do business. Governments employ this theory when they use tax breaks and highway construction to attract business. But these cost-related factors are no longer crucial to success. The proponents of the human capital theory argue that the key to regional growth lies not in reducing the costs of doing business, but in endowments of highly educated and productive people.*
>
> (Richard Florida, 2005, p.32)

This quote by Richard Florida sums up the evolution of the post - modern city. Although Florida is noted for his Creative Class theory (which will be addressed later in this argument), the aim of this quote is to point to the '*gone with the old, in with the new*' conception of cities; that the preference for automobile roads is no longer attractive to city dwellers. Florida goes on argue for new kinds of strategies for cities; including 'community quality of life' which involves demotorisation among other things (Richard Florida, 2002).

Cities have become aware of the decline of city centres and downtowns since the start of deindustrialisation and hence consumption-related activities have become the new forms of opportunities. Therefore 'place-promotion' and the creation of an attractive urban imagery have emerged as some of the tools designed to push the competitive position of cities as 'place products' whose high urban quality standards can be marketed and sold to residents, investors and tourists (Whitehead, Simmonds, and Preston. 2006).

Pedestrianisation especially is a major tool for urban regeneration; Pedestrianised spaces (for instance shopping streets) have shown to improve economic activity at intervention sites (Wooller *et al*, 2012). This has become especially vital in contemporary post-industrial cities where white-collar service occupations supersede blue-collar productive jobs thus emphasizing on consumption and amenity, not work. Thus patterns of consumption come to dictate patterns of production and the values of consumption rather than production guide central city land use decisions (Smith, 1979). The crave for walkable (and bike friendly) downtowns therefore falls into this line of thinking because such places have a mix of restaurants, offices and housing which is deemed to compete better in the new knowledge-driven and service-oriented economy; in order to promote interaction which is vital for an economy that thrives on accessiblity, networking and creativity (Local Government Commission's Center for Livable Communities, 2000)

It is therefore important to also note whether cycling and walking (as regularised spatial practices) are 'entering the circuits of capital that produce urban space as a commodity' (Stehlin, 2013).

7. Demotorisation and the creative class

Within the context of Demotorisation and urban regeneration can be situated Richard Florida's 'influential but analytically suspect Creative Class Theory' (Stehlin, 2013, p.16). Based on the idea of moving from regional development to human capital theory, Florida goes on to propose the Creative class theory to describe relatively young professionals working in the creative industries (knowledge workers, artists, musicians etc) driving the knowledge based economy (Richard Florida, 2002). He proposes that the future success of post industrial cities depends on the location and relocation (where to *live, work and play)* of the Creative class group.

Cities (especially inner cities) are therefore shifting focus from attracting the big businesses (big sports arenas, strip malls) towards Florida's doctrine of improving the places for the creative class which will subsequently attract and create the businesses (Florida, 2002; Hoffman, 2013). There is therefore a focus on liveability and lifestyle including bicycle and pedestrian-oriented ways of interacting with the built environment (perpetuated by the liveability and quality of life rankings).

Aside cycling as a lifestyle necessity, Florida also stresses cycling for sport as a favourite pastime of the creative class. Cycling, according to Florida, highlights the creative class preference for more individualised sports which allows them to set their own pace and create their own rules. So pervasive is the creatives' love for cycling that it has become a 'de riguer social skill' in yuppie circles and as an avid cyclist himself, Florida has been known to wax eloquent about 'the moral significance of rapidly moving your legs in circles' (Gibson, 2013, p. 8).

Interestingly, Florida found significant data that proves a relationship between the creative class and bike commuting (Florida, 2011). Specifically, he found that cities with greater rates of bike commuting also are home to greater concentrations of affluent and more educated workers, particularly in the occupations that Florida labels as 'creative' (Gibson, 2011).

In 1998, Collaborative Economics, a Silicon Valley think-tank, profiled the connections between the physical design of places and dynamic elements of the new knowledge-driven economy. They found out that these smaller decentralised firms that characterize the contemporary economy, have a preference for mixed land use patterns and more walkable communities that enhances interaction (Local Government Commission's Center for Livable Communities, 2001). Thus the 'new middle classes' (creative class) seems to be staying away from the tastes and the values associated with old middle and working classes (Ilkucan, 2005).

This focus on quality of place for the 'creative class' has stimulated commercial areas for tourism, middle class consumption and the production of spectacle; hip, trendy places (Stehlin, 2013). These include certain forms of recreation in cities (cafes, galleries, small music venues, and the like). It also includes areas for outdoor exercise to blend into a busy schedule, areas for running and areas for biking to work among other things (Horton *et al*, 2007).

8. Demotorisation and Gentrification

More crucially, Florida's concept of the 'Creative Class' (which strongly employs demotorisation as one of its tools) has been highly criticised for celebrating gentrification (Peck, 2010; Stehlin, 2013). This perception of demotorisation (especially cycling) as a tool for gentrification has been debated even outside the creative class arguments; cycling has been noted as something of a gentrifying folk hero in certain urban policy circles and perceived to be a signifier of gentrification (Erin, 2014; Hoffman 2013). Rose (1984) refers to cyclists as 'marginal gentrifiers, unevenly endowed with social power, for whom a central urban location confers social, economic and cultural advantages, but who cannot simply be collapsed into the role of agents of capital'.

This notion of cyclists as gentrifiers has been widely documented in the city of Portland in USA where bicycle infrastructure is seen as an emerging tool for gentrification of neighbourhoods (Hoffman 2013; Gibson, 2013). This tool, utilized by city governments, bicycle advocates, and business developers, paints a new image of a street while silently working to erase any culture or community that does not relate to the bicycling community (Hoffman, 2013, p. 123)

Davis (2011) argues that improvements such as bike lanes increase the perceived 'liveability' of a neighbourhood, serving as a sign to developers and housing speculators that a neighbourhood is open for business. In this way, bike lanes play at least an indirect role in making neighbourhoods too expensive for low income residents. Ilkucan (2005) retorts that 'as gentrifiers seek distinctiveness through consumption, gentrification's consumption markers are explicitly identified with a specific type and use of space'.

Hence it has become evident that the various actors involved in gentrification interpret opportunities to act on rent gaps not through bloodless economic data but heuristics such as the appearance of art galleries, cafes, community gardens, and bike shops in certain places (Stehlin, 2013, p. 4).

Additionally, the focus of these targeted reworkings of space that give a greater share of the street to cyclists and pedestrians, emphasizes to a certain degree, how business owners and commercial districts as a whole benefit from the convivial atmosphere created (Stehlin, 2013, p.3); even though certain retailers might also be priced out as a result (Wooller *et al*, 2012).

In effect, demotorisation has been rewired through the prevailing grid of intelligibility of capitalist urbanism in which space is produced to facilitate efficiency and profit, the primary metrics by which social life is judged (Stehlin, 2013, p.2). Liveability thus only becomes intelligible and actualisable in the context of an urban growth politics dependent on the commodification of space and demotorisation has been caught in the midst of this fluidity of capital. This selective inclusion of the demotorisation into contemporary profit-driven cities, however, may produce spaces that technically satisfy advocates' hopes without fundamentally challenging the systemic dominance of the car (Stehlin, 2013).

This therefore raises issues about whether the incorporation of cycling (and walking) into the growth mandate of urban politics driven by gentrification can sustain the democratic and egalitarian aspirations of its advocates (Stehlin, 2013).

9. The volatile Image of Demotorisation?

Here, it is appropriate to extend Hoffman's (2013) concept of the bicycle as a 'rolling signifier' to cover 'demotorisation as a rolling signifier' whose signification changes as it rolls through different socioeconomic, cultural spaces, as well as other historical moments. Hoffman's (2013) notion of the bicycle as a 'rolling signifier' that changes through time starts off with the bike as an upper class commodity when it first emerged in the 18th Century until it was popularised in the 20th Century whiles it is now being seen as a tool to attract contemporary elites into city centres. Applied to demotorisation, the 'rolling signifier' can be used to denote cycling and walking as 'leisure, anti-authoritarianism, environmental-friendliness, exercise, transportation, and poverty' all at the same time (Hoffman's, 2013, p.9). This means that cycling and walking have been tagged with certain images and perceptions through their evolution to date.

Horton *et al* (2007) also add interesting inputs to this concept by stating that both the bicycle and the act of riding a bicycle unavoidably convey status which is never fixed and varies according to time and place and depends on attitudes held by both the rider and observers. Sometimes cycling conveys high status; sometimes it is stigmatised (Horton *et al*, 2007). To some, a bicycle lane communicates that a neighbourhood is friendly to bicyclists whiles to others, a bicycle lane communicates gentrification (Hoffman's, 2013, p.11). To some a pedestrianised street communicates 'a human scale' city (Gehl, 2011), to others it communicates a new space of conspicuous consumption (Veblen, 1899) and gentrification.

10. The nexus of Demotorisation and Consumer Culture: Available empirical arguments

Various forms of research have been undertaken (especially from the 1970s) to now, which deals with various aspects of demotorisation on a street.

10.1 General aims of Demotorisation

Some researches extols the values and aims of demotorisation. Forkenbrock and Weisbrod in their 2001 report titled *Guidebook for Assessing the social and economic aspects of transportation projects* assert that "Transportation system changes, and the construction related to them, are often prompted by efforts to revitalize an area, provide better access to it, or to alleviate congestion". Thus this generalises the motivations for changes in the design of streets.

In detail, Drennen (2003) makes the point that demotorisation (specifically traffic calming) is motivated by the need to create attractive environments, reduce speed of cars, increase the safety for pedestrians, cyclists as well as other users of the street and it is also good for businesses on the street. Local patronage of a shopping street is also thought to be improved as the traffic calming encourages residents to buy in their own neighbourhoods as well as people from areas further outside the streets' immediate range (Drennen, 2003).

Litman (2014) also highlights the vital role of non-motorised modes of transport in an efficient transport system by stating that 10-20% of all trips involve non-motorised modes; be it going to take a parked car or accessing public transit. Litman (2014) further nails this point by referring to a 2003 survey done by the U.K Department for Transport (DfT, 2003) which shows that walking represents 2.8% of total mileage, 17.7% of travel time and 24.7% of trips. This therefore shows that walking seems insiginificant if measured in terms of distance but the picture changes dramatically if (walking is) evaluated in terms of trips, travel time or exposure to street environments (Litman, 2014). The article (Litman, 2014) therefore makes a compelling argument that improving non-motorised transport is one effective way of improving other forms of transport. Thus in order to achieve land use planning objectives that involves urban redevelopment and more compact smart growth development (including the reduction of parking and traffic congestion as well as energy consumption and pollution emissions), non-motorised transport is the vital trump card (Litman 2014).

Improvement in the quality of life of a place is also a theme that has risen to prominence over the past few decades. Pedestrian environments are once again seen as the right path in creating an environment where activities such as socialising, waiting, shopping and eating can thrive. This helps in recreational activities thereby providing enjoyment and health benefits to users and spiral into a positive impetus for its related industries such as retail, recreation and tourism (Litman 2014; Gehl, 2011)

In terms of transport costs, improvement in walkability is noted as a way for people to save on vehicle expenses. For instance, an assessment of the impact of sprawl on household transportation expenses in various US cities, concludes that households in automobile-dependent communities devote 50% more money to transportation (over $8500 yearly) than households in communities with more accessible land use and multi-modal transportation systems; i.e less than $5500 per year (McCann 2000 cited by Litman 2014). In this sense, accessibility to many activities, destinations and services (by walking, biking or transit) is a vital by-product of

life in a dense, mixed land-use areas (Hess and Ong. 2003). In an empirical study of the likely effects of land use patterns on auto ownership for 'traditional neighbourhoods'[1] in Portland (Oregon), Hess and Ong (2003) contend that "Lower auto ownership in higher density areas is likely the result of greater attractiveness of alternatives (walking, public transit) and greater motor vehicle costs". The research also goes on to state that people who live in these diverse and compact traditional neighbourhoods would have found it difficult to express their choice to *not* own autos without the prevailing traditional environment (Hess and Ong, 2003).

Other researches also point out the policing function of demotorisation projects (Lockwood and Stillings. 1998); where a before and after study of such a project (in West Palm Beach, Florida) reveals that crime levels reduced after the project's completion.

From these different forms of research, demotorisation has been proven to provide a lot of benefits; and many cities around the world have embarked on this agenda in earnest. Engwicht (1999) cited by Hinkelman (2001) proposes a 5 part plan (called the five Rs of traffic reduction) aimed at cutting traffic by half on a street. These 5 principles are; replace car trips with alternative transportation modes (pedestrian, bicycle or public transport), remove unnecessary trips, reduce trip lengths, reuse saved space, and reciprocate or share transportation (car sharing, car pooling etc). Demotorised street design has been implemented in many parts of the world, but most of them are normally faced with a lot of resistance in its early stages. Various groups and stakeholders try to negotiate the terms of the redesign in order to hold on to their interests.

10.2 Negotiating Demotorisation

> *The answers (*to the question of the impact of pedestrianisation and traffic calming on retailing*) which are usually offered fall into a pattern. The local retailers are sceptical, the representatives of national chain stores are neutral or optimistic, pedestrians are normally enthusiastic, and the local authority is convinced that pedestrianization will bring about the total and long dreamed-of transformation of the town-centre investment*. Hass-Klau, 1993.

At the risk of over-generalising, this assertion (by Hass-Klau, 1993 in a research on the impact of demotorisation with case studies from Germany and UK) is a near-perfect summary of the different interests that are brought to the table in terms of the initial 'negotiation' stages of demotorisation projects. Small business owners represent the most vocal opponents of traffic calming projects because of the fear of losing revenue as a result of such demotorisation projects; and this can also hinder the assertiveness of politicians and government officials because of the political risks involved (Drennen, 2003). Thus small businesses' support is a vital cog in the approval or disapproval of such projects. An even bigger stakeholder (which is sometimes underrated) is the residents living near such streets. Ewing (1999) cited by Kumar (2006) suggests that for a pedestrianisation or traffic calming project to have initial approval, it needs about 50%-70% of the residents in the area of implementation to approve it: otherwise public opposition can stifle the project completely. In terms of the interest of the city in a demotorisation project, it is mostly dependent on the policies and plans of the city; it could be aimed at reducing speed, increasing access to space for other modes, revitalisation or aesthetics among others (Lockwood and Stillings. 1998).

Hass-Klau (1993) goes on to outline the determinants of the success or failure of demotorisation which includes; trends in the national and local economies; the overall town-centre strategy pursued by the local authorities; the degree of accessibility by public and motor-vehicle transport; the detailed design of the scheme and the population density within walking distance of the pedestrian area (Hass-Klau, 1993). These determinants that have been outlined therefore create a workable scientific benchmark on what should motivate such demotorisation projects; it therefore provides a fundamental disconnect between the reason for demotorisation on a street and the (sometimes) emotional opposition that it faces from businesses. This is because "in all business conditions, it is normal for some businesses to be expanding and others contracting, and the managers of the ones that are contracting always tend to blame whatever local or national policy is most in the news at the time" (Hass-Klau, 1993). On the other hand it can be unfair to ignore shop owners point of view; some of these objections might be justifiable since "no design method is without problems" (Roberts, 1981 cited by Kumar 2006).

In the general scheme of things, a lot of research has gone into the positive effects of pedestrianisation and traffic calming on the turnover of businesses (Hass-Klau, 1993; Gehl and Gemzoe, 2009;Kumar 2006; Whitehead et al, 2006; Wooller, 2010, Drennen, 2003 to name a few). What has been found to be an interesting area of contention is the initial phase of the project. Pedestrianised and traffic calmed areas generally have a higher success rate for shops than areas that are not traffic calmed; on the other hand, a reduction in retail is expected during the first 1-

[1] According to Burden (2001), traditional streets can be old or new, while most of them built in the pre-modern (classic, pre-street car or streetcar) era. These streets and neighbourhoods are now being tagged with names as “livable,” “traditional,” “new urbanist,” “transit-oriented development,” “urban villages,” and “pedestrian pockets. (Burden, 2001)

2 (transition) years of the construction (Hass-Klau, 1993). This can be attributed to the temporal inconveniences of the actual construction; which depends on the size of the project.

10.3 The actual construction process

The management of the entire demotorisation scheme is very necessary to ensure that shops do not incur sustained losses during this period (Hass-Klau, 1993). This therefore includes how the actual construction process is managed in terms of temporal road signage and management. This is especially crucial if such transportation system changes involves major construction projects; because business owners may lose their customers as access to their businesses becomes limited and the customers may find alternative businesses during the construction phase and may not neccessarily come back when construction is completed (Forkenbrock and Weisbrod, 2001). This temporary "down time" (Drennen, 2003) may also not be the ideal timeframe to conduct an 'after' survey on the impact of the project on retail (Hass-Klau, 2003). Research within this 'down-time' may mean that a high proportion of retailers would report a decline in revenue due to the traffic disruptions (Hass-Klau, 1993) or even disruptions to parking.

10.4 Parking

With respect to opposition by shop owners to demotorisation projects, parking represents one of the major aspects since these businesses 'may lose the parking areas and not be able to serve as many customers' (Forkenbrock and Weisbrod, 2001); although these concerns are disproved by many studies on pedestrianisation and cycling (Drennen, 2003). To be fair, the lack of parking spaces (especially after the demotorisation project is completed) can have an effect on the sometimes small residential streets nearby; especially if the demotorisation project was not as wide or holistic enough to include adjacent streets. This is because drivers are forced to park their cars elsewhere and the adjacent streets nearby become the only option, thus creating inconveniences for the residents (Nederveen et al, 1999 cited by Kumar 2006).

This potential inconvenience for the residents (due to the parking situation) is in contrast to the potential opportunities that retailers can gain when parking spaces are converted for bicycle parking. For instance, Tolley (2011) cited by Litman (2014), in an analysis of bicycle and automobile parking space requirements in Australia concluded that bicycle parking can produce much higher level of retail spend than the same space devoted to car parking. The report also concluded that large proportion of retail expenditure comes from local residents and workers, with a majority of them walking or cycling, in contrast to car-owning customers who are likely to be "drive-through" shoppers.

Nonetheless, the quality and quantity of customer car-parking and access for delivery trucks is very crucial for many businesses (Drennen, 2003). On the extreme end, it is a disincentive for parking spaces to be provided at no or (subsidized) cost because it is an inefficient use of space. Very few cars can use such parking spaces at a time especially in the case of parallel parking without any controls on parking time (Drennen, 2003). In the end parking expansion programmes create more demand than can be supplied (Drennen, 2003). This can therefore limit the opportunity for other modes of transport on the street and can potentially affect the shops on the street.

10.5 Types of Shops

Various researchers have categorised shops and shopping services into different types; depending on the context of their research. A few of the classifications have been sampled here.

Benjamin, Boyle and Sirmans (1990) posit that different types of 'merchants' are typically found in shopping centres (*which can be applied to shopping streets*[1]). The article explains that national (or international) chain stores such as supermarkets or a drugstore acts as an 'anchor tenant' for many neighbourhoods and community shopping centres by providing stability and customer drawing power. The other type of tenant is the local chain store; which specialises for instance, in apparels for ladies and has fairly moderate and stable sales. The third type is the single location or independent store with uncertain sales and finances (Benjamin, Boyle and Sirmans, 1990). This therefore draws attention to the different types of shops required to ensure the sustenance of a shopping centre (and by extension, a shopping street).

Again, Benjamin, Boyle and Sirmans (1990), by adapting a classificatory method of the Urban Land institute (1987) broaden the scope of their classification from the 'types of merchant' to the 'types of shopping centres'. According to the research there are four types of shopping centres; neighbourhood, community, regional and super-regional centres. Shopping centres that cater to daily needs by providing for the sale of convenience goods and personal services are neighbourhood shopping centres; for example grocery shops and dry-cleaners. Community shopping centres go beyond this reach of convenience goods and personal services by also supplying in addition, a broader selection of soft lines (e.g apparel) and hardware. Regional and super-regional centres are what is classically termed as malls (Benjamin, Boyle and Sirmans, 1990).

Closely related to the classification done by Benjamin, Boyle and Sirmans (1990) on the types of shopping centres, is the further classification undertaken by Krizek (2001). In a research on *Neighborhood Services, Trip Purpose, and Tour-Based Travel*, Krizek (citing Handy, 1992) classifies the types of shopping services into

[1] the Italised phrase is added by extension; for the purposes of this research which focuses its case studies on shopping streets

three. First is *convenience shopping*, akin to buying bread or milk from a local corner-shop, which requires neighbourhood accessibility designs (for pedestrians and cyclists). The second type is *comparison goods shopping* which involves buying furniture, appliances or clothing for instance. Comparison goods shopping services are increasingly being provided by "big box", "super-stores" or out-of-town malls on sizeable land and ample parking for cars; and they are perceived to be the antithesis of walking and cycling friendly areas. *Specialty goods shopping* is the third type of shopping service, which involves niche markets and boutiques and usually blends well with pedestrian and cycling friendly areas (Krizek, 2001).

These classifications of shops, shopping centres and services outlined above help to shed light on the (possible) impact of demotorisation on the types of shops that might go out of business and the new ones that might migrate or start up on a shopping street.

An interesting case in point is an ethnographic study undertaken by Ilkucan (2005) on a neighborhood (called Cihangir) in Istanbul; this study was aimed at assessing the relationship between gentrification and consumption. The research revealed that there was a drastic change in the retailscape of Cihangir to "an abundance of real estate agencies, food related businesses including groceries, convenience stores, butchers, cafes, restaurants, gourmet food sellers, pet shops and veterinary clinics, hair dresses and beauty salons, as well as banks, pharmacies and hardware stores" (Ilkucan 2005). The research goes on to stress that many informants pointed out that, in the neighbourhood, there has been a very rapid increase of cafes and restaurants especially (Ilkucan 2005). In all fairness, demotorisation does not necessarily mean neighbourhood revitalisation (or gentrification) but the motivations for demotorisation could be varied (depending on the local situation); and thus could include "revitalisation" (Lockwood and Stillings. 1998). Hence, the main point being made here (with regard to the influence of demotorisation on change of shops) is that, although the construction process for such projects has been rightly discussed as a reason for the 'temporal' drop in retail revenue (Hass-Klau, 1993; Forkenbrock and Weisbrod, 2001; Drennen, 2003); the change in shops is sometimes not given much attention. Some shops might go out of business because the locational characteristics (of the newly demotorised street) alters the target market for their products whiles other shops also open up on the street because the location is much favourable to them now. Whitehead, Simmonds, and Preston (2006) contend that businesses could be affected by urban quality in 3 ways; impact of the locational preferences of their (actual or potential) customers; impact on the work locational choices of their employees; and on their willingness to locate at a place in relation to their perception of the businesses (Whitehead, Simmonds, and Preston 2006)

10.6 Location choices

Security, Convenience, Efficiency, Association, Comfort and Welcome: these are the six basic needs that shoppers require according to marketing professionals, and walkable streets are the places where shoppers find all of these basic needs met (according to Burden, 2001). Location is deemed to be a major determinant and is critical for the success of shopping centres, and rents are highest in accessible locations where population is dense, where there is a high potential for growth and where income is high (Sirmans & Guidry, 1993; Chau, Pretorius & Yu, 2000). Thus any retail property is inherently of economic importance based on its physical location such as general accessibility as well as a micro location within a shopping centre or street; and this can be favourable or unfavourable to pedestrian and/or transport flows, information flows, transport nodes and to other retail outlets (Chau, Pretorius & Yu, 2000). Areas with poor cycling, pedestrian and transit conditions are deemed to be harmful to businesses due to the potential loss of worker prodcutivity and time to gridlock; whiles the converse situation provides more convenience for employees (Drennen, , 2003). Also such successful shopping centres are located on major streets and thoroughfares and thus traffic counts (*including cycling and footfall*) serve as a major determinant of rental rates. This means that there is a direct relationship between expected retail performance at a location, rent bids and the sales price of properties; therefore locations where the best sales performance can be achieved usually attracts the highest rent and property value of retail units (Chau, Pretorius & Yu, 2000).

An interesting aspect about (micro) locational choices is the street-corner. Such a location exhibits both location and physical characteristics because it has two sides of shop frontage, and thus provides a higher perimeter of exposure for shoppers than immediately adjacent sites. It is rated quite highly for commercial uses because of its frontage and access on two sides (Chau, Pretorius & Yu, 2000).

A research done on *The Effect of Urban Quality Improvements on Economic Activity* in Manchester (by Whitehead 2002, cited by Whitehead et al, 2006) suggests that although increased public accessibility can positively afffect business location, urban quality improvements (like demotorisation) also figure very highly; the research shows that (according to respondents) urban quality improvements alone may have the potential over time to enhance the attractiveness of an area and put a premium on its location. Such urban quality improvements are deemed to create the necessary critical mass and affective response to the ambience of the environment and consequently influence the location behaviour of customers and retailers. The overall results of the research concludes (very cautiously) that the positive impacts of urban quality changes may be on a scale far more significant than the potentially negative impacts (Whitehead, Simmonds, and Preston 2006).

A similar research was done by Drennen (2003) on the effects of a traffic calming project on retailers of Valencia street in San Francisco. The results showed that 66% of the merchants believe that the bike lanes have had a generally positive impact on their business and/or sales, and the same percentage would support more traffic calming on the street (Drennen, 2003).

Chau, Pretorius & Yu (2000) argue that for small scale retailers, their location choices may depend on the physical design of their properties or in relation to other shops and pedestrian traffic/flow; as this represents a crucial marketing advantage for these retailers. In a research aimed at analysing the determinants of prices for street level retail properties in (the Mong Kok district of) Hong Kong, the researchers (Chau, Pretorius & Yu 2000) conclude that pedestrian-flow is the key factor affecting retail unit prices and that retailers are willing to pay high implicit prices for locational characteristices that are associated with high levels of pedestrian flows (Chau, Pretorius & Yu 2000). This is an interesting point because retailers are willing to pay such 'high implicit costs' because of the prospects of high turnover on such streets.

10.7 Impact on Turnover

It is thought that motorised transportation constitutes one of the biggest aspects of household expenditure after housing (Urry and Sheller, 2000; McCann 2000 cited by Litman 2014) and thus in the same vein, demotorisation can help reduce people's dependence on the car and increase the amount of discretionary income they can spend on other things (Drennen, 2003). A case in point is a study done by a marketing firm on consumer expenditures in downtown shopping districts in the UK which shows that customers who walk spend more (£91) per week than those who drive (£64), and transit (bus £63/train or tube £46) and car travelers spend similar amounts. Taxis and bicycles spent £56 (Litman, 2014).

Aside this there has also been a plethora of researches done at various territorial scales on the impact of demotorisation on retail turnover. For instance, in 1978 the Organisation for Economic Co-operation and Development (OECD) conducted a survey of more than 100 pedestrianised cities worldwide. The results of the study concluded that 49% of the city centres had an increase in turnover after pedestrianisation, 25% had stable levels of turnover whiles 18% reported reduced levels of turnover (OECD, 1978 cited by Kumar 2006). In particular the study noted that cities in Austria, Germany and Scandinavia experienced a turnover increase of more than 60% during this time (OECD, 1978 cited by Kumar 2006).

A similar comparative research undertaken by Hass-Klau (1993) in Germany and UK revealed that commercial benefits had increased by 20%-40% in cities that had pedestrianised their downtowns (Hass-Klau, 1993). There was also a reported increase of 10% - 25% in retail turnover in these cities whiles retail footfall increased by about 32.3%[1]. In the case of Vienna, Austria, a study carried out during 1973-1984 in four pedestrianised and four non-pedestrianised streets concluded that pedestrian flow increased by 48% in the pedestrianised streets and dropped by 2.6% in the non-pedestrianised streets (TEST, 1987 cited by Hass-Klau, 1993). On the other hand, it must be noted that a demotorised street does not only focus on non-motorised mode users. Drennen (2003) suggests that retail businesses on a street need slower speeds so that drivers are able to see inside the storefronts and pull over safely if they choose to go shopping (Drennen, 2003).

Other forms of research that were undertaken with respect to demotorisation and turnover includes the 1979 report published by the German Industry and Commerce Association (*Deutscher Industrie und Handelstag)* which was titled 'Einkaufsmagnet Fußgängerzone' ('shopping magnet pedestrianized area'). The results of the study showed that 153 pedestrianised streets had an increase in footfall whiles 27 streets remained stable and 4 streets declined. Consequently rents had increased in 110 of the pedestrian areas, were stable in 30 and declined in 2 areas; 76 areas were not conclusive in their answers (DIHT, 1979 cited by Hass-Klau 1993).

By following the trajectory of retail footfall and rental pricing on a much smaller territorial scale, a 1987 study undertaken by TEST proved that 60% of retailers on a traffic-calmed street in Covent garden (London) reported that turnover had increased; whiles local real estate agents also revealed that there had been an increase in rents and property values as a result of the 'probable' leap in pedestrian flows (TEST, 1987 cited by Hass-Klau, 1993).

It is worthy to point out that in some cases not all the increased retail revenue (as a result of the increase in footfall) goes to the retailers (Hass-Klau, 1993). For instance if profits increase but by less than the increase in turnover, this may be due to the fact that the increased profits is being absorbed in the higher rental values that are associated with demotorised areas. The benefit therefore goes to the landlord in this case, rather than the retailer (Hass-Klau, 1993). Hence, it is very important to analyse rental and property values when analysing demotorised streets.

10.8 Impact on Property Values and Rent

[1] Newby, 1992; Hass-Klau, 1993, T& E, cited by Social enterprise research group (SERG)of the University of Northampton, 2014

The impact of demotorisation on properties values and rent is one of the most divisive aspects of demotorisation projects. This can be partly attributed to the fact that this issue falls somehow into the larger orbit of the even more controversial gentrification debate.

Forkenbrock and Weisbrod (2001) claim that transportation system changes may increase property values especially due to the improved accessibility as a result of the change; and that such projects serves as the 'catalyst for comprehensive urban reinvestment projects with the expectation that they will increase property values' (Forkenbrock and Weisbrod, 2001). According to a 1998 research done by ERE Yarmouth and Real Estate Research Cooperation, real estate values over the next 25 years will rise fastest in "smart communities" which are characterised by a mixed land-use and a 'pedestrian-friendly configuration' (Local Government Commission's Center for Livable Communities, 2001).

It is therefore fair to question whether mixed-use and pedestrian friendly neighbourhoods and streets provide a sure bet for commercial success and rental increase or there are other factors involved. Shopping centre rents (according to Sirmans & Guidry, 1993) depends on; its customer drawing power (related to the total size and age of the shop as well as the type of anchor tenant). It also depends on the architectural design, location and general economic conditions of the area; economic conditions are proxied by vacant space, time trend variables, population and per capita income (Sirmans & Guidry, 1993). Thus smart communities with the mixed land uses and pedestrian friendly configurations might be the places where all these factors come together; since 'reduced vehicle traffic can increase adjacent property values, in part, because it improves walking safety and comfort' (Bagby, 1980 cited by Litman 2014) . Demotorisation projects have been deemed to typically raise land value from 70%-300% (SERG, 2014) A comparison of demotorised streets versus automobile dependent areas showed that pedestrian friendly, new urbanist community designed areas tends to increase property values (Eppli & Tu, 2000 cited by Litman, 2014); whiles sidewalks may have little effect on adjacent property values in an automobile dependent area (Litman, 2014). Likewise, Caton (1990 cited by SERG, 2014) shows that rents in pedestrian streets were 45% higher than in vehicular streets in 1987, and 80% in 1989; this is attributed to the attraction of such areas and a greater propensity for pedestrians to spend money.

In light of all this, it is logical to enquire about how the rent system generally works out. In a very simplistic way (and at the risk of oversimplification), the explanation by Benjamin, Boyle and Sirmans (1990) offers a more lay-man's view of the complexities of the rental system. Retail leases generally contains two types of payment; a base rent and an "overage rent" that is based on the retailer's gross sales above a certain threshold. The overage rent therefore allows the tenant to pay higher rent when sales are good and lower rent when sales are poor (Benjamin, Boyle and Sirmans (1990); even though it must be stressed that landlords are more interested in receiving higher rents and not lower rents. Thus leases may contain an option granting the landlord the right to cancel the lease especially if the retailer's sales does not reach some predetermined amount. This therefore reduces the landlord's risk (Benjamin, Boyle and Sirmans, 1990), whiles the retailer bears the risk of being priced out of business. All in all, a demotorised street is deemed to increase footfall, turnover and sometimes rental values; so the question of who benefits more in the landlord-retailer arrangement might be a matter of local context and legal framework.

As with various aspects of demotorisation, its impact on rental levels and property values have received much empirical attention. A study by Hack (2013; cited by Litman 2014) notes that pedestrian friendly shopping areas are often economically successful and they tend to increase commercial and residential land values because there is a high demand from people to live (*or work*) there. Thus such pedestrian- friendly commercial districts can be important for urban revitalisation (Litman, 2014).

It must be noted that residential areas are not excluded from this. An interesting study in the USA by the Urban Land Institute showed that prospective home buyers were willing to pay about $20,000 premium for homes in pedestrian friendly areas compared to similar houses in car-friendly areas (Local Government Commission's Centre for Liveable Communities, 2001).

Another study done (by Cortright, 2009; cited by Litman 2014) analysed 94,000 residential real estate transactions to assess how various factors influence sale values. The study revealed that a one-point increase in walk score (i.e ranking of area by walkability) is associated with a $700-$3000 increase in house value, depending on the market.

In another case study of 27 retailers in Mission District of San Francisco, an assessment was made on the impact of a demotorisation project on the street businesses. It was concluded (5 years after the demotorisation) that commercial vacancy rates had dropped from 70% to 20%, while commercial rents increased from $6/sq. ft. to $30/sq. ft. The project had also attracted $350 million in private investments and all these were achieved while maintaining same motor vehicle volumes (Drennen, 2003).

Likewise, a before and after survey done (between 1993 and 1998) in West Palm Beach, Florida showed that prior to the demotorisation project (1993), vacancy rate on the street was 30%; property values ranged between $10/sq.ft. and $40/sq.ft.; and commercial space rented for $6/sq.ft. After the demotorisation project (1998), property values more than doubled ($50/sq.ft.- $100/sq.ft.) and commercial space rented for $30/sq.ft. Also, the

average sale prices for houses in the neighbourhoods increased from $65,000 to $106,000 (Lockwood and Stillings, 1998).

Such interesting case studies do not only show that pedestrians flock to demotorised areas because of the ability to exercise their different non-motorised preferencess (cycling, walking etc), but it has also been proven that reductions in traffic noise, traffic speeds and vehicle-generating air pollution can create an attractive place for people and in turn increase property values (Local Government Commission's Center for Livable Communities, 2001). A case in point is a study (roughly estimating) that "each reduction of 100 vehicles per day below 2,000 provides a 1% increase in adjacent residential property values"; another research (in Melbourne) showed that a 5-10 mph reduction in car speed can increase adjacent property values by 2% (Litman, 1999).

There seems to be a thin line between *the positive* economic impacts of demotorisation with its associated effect of increasing turnover, increasing revenue plus property values as well as attracting a wealthier classs of retailers and residents (Sermons and Seredich, 2001) vis-a-vis *the negative* aspect of the effects of higher rental pricing on the existing residential/retail tenants and the potential of such revitalisation for gentrification (Engwicht, 1999; Drennen, 2003).

11. Summary of Literature Argument

It is important to trace through this literature review to highlight the argument being made on Demotorisation.

Since the inception of leisure into modern and post - modern Western consumer culture (Stearns, 2006), its evolution has also witnessed the emergence of consumption as the driver of production (Smith, 1979).

Thus the new post - modern focus on quality of place (as proposed by Richard Florida) draws from an evolution where leisure has become a vital aspect of life and consumption becomes the preoccupation of leisure. People therefore seek new forms of identities through their consumption practices (Arnould & Thompson, 2005).

Florida's creative class group (new middle class) -with higher incomes, higher levels of education and cultural capital (Bourdieu, 1984) - distance themselves from the sprawl of the suburbs, the petroleum exploitation and pollution; all associated with automobility. They therefore opt for alternative transportation (walking - distance and especially bicycle friendly cities) as a new form of consumer identity in the new knowledge economy.

City Governments on the other hand in trying to attract these new middle classes, have to play by the new rules of walkable and bicycle friendly streets (with the assortments of new expensive shops, cafes, bars, galleries etc) and new forms of street culture and entertainment that this new middle class enjoys (Horton *et al*, 2007). Through demotorisation, this might lead to increases in rents (and produce gentrification and new areas of conspicuous consumption); phenomena that were heavily criticised and connected to automobility.

As a result, it has become evident that criticisms such as "asphalt's magic circle" (Scott, 2013; Furness, 2010) and the 'machinic complex' (Sheller and Urry's, 2000) that were levelled against links between automobility and new retailing and leisure complexes, hotels and motels, advertising and marketing among others can now be seen with the demotorisation of streets.

New shopping streets and cycling- friendly streets are becoming the new centres of conspicuous consumption and driving increases in rents; influenced by advertisements and marketing of *liveable* and *bike - friendly cities* to attract a new set of urban dwellers. Thus demotorisation might be also been used as a tool to deepen the chasms of inequality in inner city areas just like the car was blamed for during the era of bicycle-motivated anarchism against automobile consumer capitalism.

Thus this research hypothesises that *the postmodern identity of cycling and walking as anti-consumerist models have been used as a tool by city authorities to re-invent and revitalise cities.* The aim is not to link demotorisation with the excesses of capitalist gentrification and conspicuous consumption but to find out to what extent these anti-consumerist symbols of mobility might be caught up in the fluidity of capital. This is an emerging dynamic that requires more attention and research in terms of the extent to which demotorisation has been appropriated into urban regeneration and conspicuous consumption.

Lastly, it is fitting to summarise this literature argument with this quote by Hoffman (2013, p.57);

> *The bicycle* (and pedestrian)... *and related amenities are assumedly off limits for critique because of the way that* (they are) *framed in the media, by advocates, and some city governments as a positive, progressive, and good thing for all people* (but) *technology is never neutral, space is never empty, and mobility is never disconnected from power*.

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