
A DEMOCRATIC CITY? THE IMPACT OF TRANSPORT NETWORKS ON SOCIAL COHESION

Absalom Makhubu

University of Johannesburg

Urbanity is political. Thus, urbanists have to engage with political issues and systems in order to address injustices of the past, and create a more equitable present. Especially in the context of South African cities, which are still dominated by apartheid morphologies. 2016 marks South Africa's 22nd year into democracy, but what are the achievements and advancements in transforming the spatial legacy the 'new' country inherited from the Apartheid dispensation? Moreover, what are the characteristics of a post-apartheid, democratic city and society? The City of Johannesburg, the local authority of the Johannesburg Metropolitan regions, believes that transport networks must play a role to support the creation of social cohesion in a highly segregated city to address the spatial legacy of apartheid. It has therefore implemented a number of transport oriented development plans throughout the city including the *Corridors of Freedom* development plan. This paper unpacks theory around the concept of social cohesion, in order to understand why this is relevant to planning trajectories in South Africa. Furthermore, it discusses social, economic and spatial legacies to which planning needs to respond. It examines the *Corridors of Freedom*, a 'Transit Orientated Development' framework proposed by the City of Johannesburg aimed at "stitching" the city together. It critically analyses the plan's objectives and how it addresses issues of social cohesion to highlight some of the strengths and shortcomings of the proposed 'Corridors'.

Keywords

social cohesion, apartheid, Group Areas Act, Corridors of Freedom, Johannesburg

How to Cite

Makhubu, Absalom. "A democratic city? The impact of transport networks on social cohesion". In Carola Hein (ed.) *International Planning History Society Proceedings*, 17th IPHS Conference, History-Urbanism-Resilience, TU Delft 17-21 July 2016, V.03 p.223, TU Delft Open, 2016.

DOI: <http://dx.doi.org/10.7480/iphs.2016.3.1263>

INTRODUCTION

The use of buffer zones through the implementation of Group Areas Act of 1950 in South Africa, transformed the spatial morphology of the country and its people, resulting in an exclusive and fragmented society. Decentralisation and urban sprawl in Johannesburg further added to the city's fragmented morphology which Martin Murray calls a 'geographically disfigured metropolitan region of enormous economic and social contrast'.¹ Apartheid has a clear spatial layout that is still a reality in cities such as Johannesburg even 22 years post-apartheid. These are principles that contradict democracy. Thus plans are being proposed and implemented to address apartheid spatial legacy supporting CHAPTER 8 of the National Development Plan Vision 2030. SA cities are interpreting this in various programmes and projects one of these is the Corridor of Freedom (COF), a Transit Oriented Development (TOD) framework, adopted from cities such as Bogota and Curitiba. The Johannesburg metro sees this as a strategic plan that will "stitch" the city together economically, socially and spatially.

The Louis Botha Avenue Development Corridor is one of these COFs and runs North-South of the city of Johannesburg. Louis Botha Avenue was once the main connection to Pretoria from Johannesburg, before the construction of the M1 motor highway in the 1960's. Today, Louis Botha Avenue divides communities it runs through such as Orange Groove, Highlands North, Balfour, Sandton and Alexandra. It stretches approximately 16kms through a diverse mix of disconnected communities.

The research paper addresses the inequality of unjust spatial planning that is still evident in post-apartheid SA by considering its origin and its implementation. It looks at a specific area in an attempt to understand broader national problems which may or may not apply to other cities or countries. The paper also employs a qualitative methodology to address the research question, this done in several sections which cover the following research questions; what is the spatial layout of a democratic city in a post-apartheid legacy? What impacts do transport networks have on social cohesion? What challenges and opportunities are presented by the Louis Botha avenue COF? It begins by unpacking the historical background from which apartheid planning policies were conceived and enforced. It then attempts to articulate and contextualise social cohesion in South Africa, more especially Johannesburg, and concludes by interrogating the proposed COF based on principles of social cohesion.

HISTORICAL BACKGROUND

1948 was a defining year in the landscape of South Africa, politically, socially and economically. The rise of apartheid saw the country undergoing drastic and fragmented planning policies aimed at enforcing white superiority and black inferiority. The following section attempts to unpack this defining phenomena that occurred decades ago in the quest to understand why there is a current need for planning to restructure urbanity. What is important to note about the era prior to this time is that South Africa was colonised by Britain/Anglo and the Dutch/Afrikaner.

Louw writes, 'Apartheid grew out of Afrikaner's painful encounter with modernisation and British imperialism'.² He elaborates that this forced Afrikaners move into the cities. This resettlement resulted with confrontations with other cultural and racial groups which were largely Anglo colonies with large black labour market. The Afrikaner felt this was unfair to them, thus a new policy to right this wrong needed to be established. This was years before the institution of apartheid in 1948. According to Louw, apartheid was proposed by the Afrikaner's National Party (NP) as a better policy compared to the opposition party Anglo's United Party (UN) proposed segregation policy which separated people base only on race. DF Malan, then leader of the NP argued that their party's apartheid (apartness) policy was the better option because it went further than just separating based on races (horizontal separation), but on ethnicity as well (vertical separation), which they argued it 'freed' blacks to politico cultural

identity. This was obviously not true, the principle was to divide and conquer. Malan went on to argue that this would ensure white supremacy which was not evident in the UP's segregation/white domination policy; this was subsequently put into action when the NP won the 1948 national elections.

To ensure a smooth transition of white people into the city and more economically powerful position, Verwoerd, minister of Bantu Affairs in 1950, proposed an act that restricted non-whites from movement in and out of the city. Thus a redesign of South African cities became necessary, which required ethnic groups to be forcefully removed, resettled and separated from one another (group areas act). Added to this, it was believed that there needed to be separation of ethnic groups outside work areas and outlawing any interracial sexual relations. This separation was spatially achieved through buffer zones (green belts, industrial belts, railway lines, motorways and topography) in-between different ethnic groups ³, see figure 1 which illustrates what would constitute an ideal apartheid city.

Years that followed after the implementation of apartheid policies, South Africa underwent very bleak times fuelled with political and socio economic uproar and struggle against this plan. These included, forced relocations especially of non-white population, women's march in 1956 (9 August) to the union building to protest the doom pass legislation, Sharpeville massacre in 1960 (21 March) where in 69 pass protesters were brutally killed by the police and the Soweto Uprising which saw pupils take to the streets in 1976 (16 June) to march against the enforcement of Afrikaans as medium of instruction in schools.⁴

Post 1994, South Africa is undergoing a process of transition. A very exciting and challenging process of addressing the wrongs of apartheid in a non-violent and inclusive manner, one that recognises the importance of the social fabric produced by apartheid spatial planning and how this needs to be interrogated. Hopefully to reflect a more socially cohesive society. A question that arises is why social cohesion as a design principle?

SOCIAL COHESION?

Social cohesion is a concept that is widely researched but is not conclusively defined.⁵ Jenson argues that the 'meaning is dependent on the problem being addressed and who is speaking'.⁶ However, literature on the subject does coincide. Jenson draws on theories from "major social scientists" who have had an interest in the concept, including Emile Durkheim in the 1880s and Talcott Parsons later in the 1900s who according to Jenson developed theories on the concept from considering interdependence, shared loyalties and solidarities as key components of social cohesion.

Bruhn and Jenson both found that it is difficult to study/map social cohesion at macro scale, for a number of reasons such as lack of participation and fragmentation. Thus, Bruhn focused his study on "the group" addressing some of Jenson's gaps in research. His conclusions are that depending on the social ties and network connections, different degrees of cohesiveness can be achieved irrespective of group size.⁷ According to Schmitt citing McCracken, social cohesion is viewed as a 'characteristic of society dealing with connections and relations between societal units such as individuals, groups, associations as well as territorial units'.⁸ It is also 'a set of social processes that help instil in individuals the sense of belonging to the same community and the feeling that they are recognised as members of that community'.⁹

This paper echoes the same definition that so many have articulated in that: social cohesion is a democratic process that recognises all the different members of the society and their role (especially economic) in shaping shared values of the society at large. This articulation is based on the five Dimensions of Social Cohesion that Jenson derived, namely;¹⁰

- *Belonging- Isolation* which talks about identity and a sense of being part of community,
- *Inclusion- Exclusion*, talks about the degree of inclusion/exclusion in the economic market,
- *Participation- Non-involvement* refers to working together of different bodies within a community,
- *Recognition- Rejection* addresses the differences that exist within the community and stresses the importance for the community not to undermine but nurture these differences, and finally,
- *Legitimacy- Illegitimacy* refers to the recognition of the legitimacy of bodies that act as mediators within the community.

HOW DOES ALL OF THIS RELATE TO THE CONTEXT OF THIS RESEARCH?

The second and very significant dimension of social cohesion as mentioned above is inclusion-exclusion. Social exclusion played a significant role in shaping South Africa's socio political and spatial landscape. Despite the wide spread of racism due to colonisations in many parts of the world, it is interesting to note that whilst parts of Western Europe and Canada were beginning to move towards 'versions of social democracy, Christian democracy and positive liberalism'.¹¹ Post 1945, South Africa on the other end of the globe was moving towards apartheid in 1948 which was later strengthened by the implementation of the Group Areas Act in 1950. This does not mean there was no racism in these parts.

Schmitt describes social exclusion; as 'the denial of citizenship rights (civil, political and social) which major societal institutions should guarantee'.¹² South Africa has seen first-hand what the impacts of social exclusion with the implementation of the Group Areas Act during the apartheid regime. A brief scan of the spatial morphology of the City of Johannesburg reveals the impacts of social exclusion with the high level of informality in and around the city in areas such as Ivory Park, Alexandra, Diepsloot, Orange Farm and the likes. Another substantial part of social cohesion is social capital.

Social capital encompasses the other four dimensions of social cohesion that Jenson describes. Schmitt describes social capital as 'the sum of institutions and the quality of relationships which binds a society'.¹³ Moreover, it includes civic responsibility, democracy and governance. He elaborates that social capital is directly proportional to the economic well-being of a society, furthermore investigations show that a more cohesive society has improved dimensions of welfare. What does this mean for South Africa?

In 2009, the Gauteng City Region Observation (GCRO) was commissioned by the Gauteng Provincial Department of Economic Development to research the impacts of the 2008-2009 economic recession within the province and in their report the researchers describe Gauteng as an economic engine of South Africa and the Sub Saharan Africa adding that it is also part of the globalised world economy. With this being said, Gauteng province still shows strong traces of apartheid policies, with very polarised and highly fragmented distribution of people and economy.¹⁴

Figure 2 and 3 illustrate how apartheid at least on a spatial level, is still prevalent in the province, as notable on the race to area map, fragmentation still exists. This is further entrenched by the economic activity which according to these figures is largely still concentrated on previously white only zones of the province. As a microcosm for many cities within South Africa, the disparity between Alexandra and Sandton, north of Johannesburg CBD, bring to the fore the severity of apartheid spatial legacy and the challenges to overcome them.

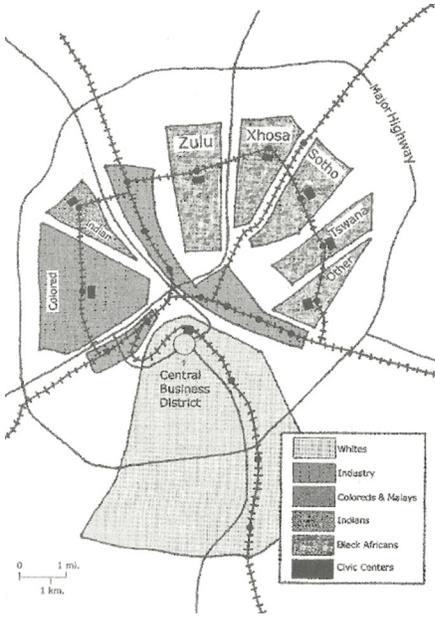


FIGURE 1 Illustration of Ideal Plan of an Apartheid City

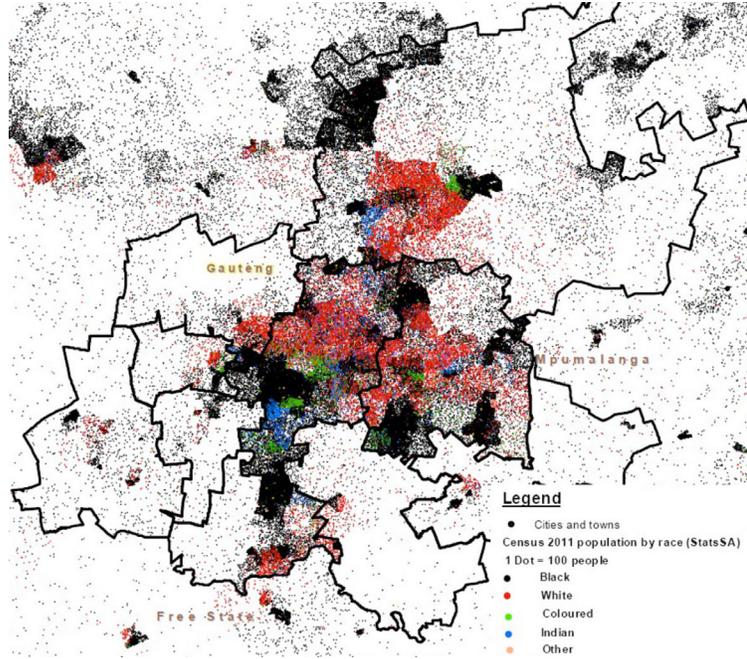


FIGURE 2 Population by Race 2011 Census in Gauteng Province

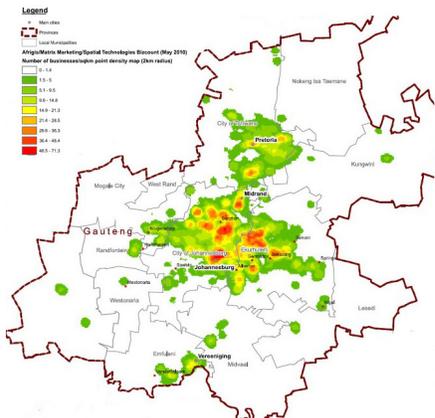


FIGURE 3 Economic Activity across Gauteng 2010



FIGURE 4 Population explosion- Alexandra in 1947



FIGURE 5 Map of Alexandra/Sandton.

Alexandra or Alex as it is widely known is a freehold township on the edge of Johannesburg City Centre established in 1912 to house Africans and coloureds working in nearby farms. The farm on which the township was established “belonged” to farmer and attorney Herbert B Papenfus. He had planned to sell the stands to white buyers, but the response was underwhelming thus was then sold to Africans and coloureds. It is apparently named after Papenfus’ wife Alexandra because of her “love” for Africans.

By the late 1930s, Alex’s population grew explosively, largely due to new arrivals that were accommodated through rentals by stand owners, rents would range from 10 shillings to £1 a month with one stand being able to house up to 15 rental rooms. The explosive growth in density was viewed a threat by the then ruling party (NP), and in 1948 the Alexandra Health Committee was established to manage the township, however this was with no government funding. Thus the growth was poorly managed, with untarred roads, no rain water drainage systems, sewage removal, street lighting and was characterised with haphazard shack settlement.¹⁵

As the years went by and strengthened by the institutionalisation of the Group Areas Act of 1950 Alex, as with many other areas in the country, experienced violent forced removals and policing of movement of people. There were a number of dislocations of people from Alex to surrounding black townships such as Soweto in the south and Tembisa in the north, to make way for grand master plans to radically transform the morphology of the township. These plans included the bulldozing and complete erasure the townships layout and social capital to make way for the construction of 25 hostels each housing 2500 black people that lived in surrounding white suburbs. However, only 3 hostels were eventually built amidst much contestation.¹⁶

During this time, Alex was also ground to heightened political activity, due to its diverse and rich political and cultural energy. 1944 saw the formation of the ANC Youth League in Alex, under the leadership of Anton Lembebe, AP Mda, Nelson Mandela, Oliver Tambo and Walter, Some very influential figures in the history of South Africa on its road to democracy. This highlights the significance of Alex's cultural and political role in the country's development.

Alex is also one of the country's poorest urban areas. With harsh edges that prevent any further development of the township. These edges include the motorways (M1 to the west and N3 to the East) and industrial buffer zones surrounding it. Making it very difficult for the township to gain access to potential economic development through the emerging economic hub west of the township, Sandton, an area that is the polar end compared to Alex. This is negligent of the fact that these two polarised areas exist less than 5 kilometres apart.

Agglomeration of commercial offices to the periphery grew, due to factors such as flexible employment, telecommunication and data processing which did not depend on the CBD anymore. Thus places like Sandton, which are on the periphery of Johannesburg CBD, developed (early 1970's) and continue to at accelerated rates attracting increased concentrations of capital investments, with companies moving their headquarters in the area, thus further adding to the already fragmented and polarised city morphology.¹⁷

According to the World Bank, in 2012 South Africa recorded a GINI coefficient of 0.63, an increase from 0.59 twenty years earlier, furthermore 60% of black South Africans live below the poverty line while the 9% white population of the country earns 8 times more than the black.¹⁸ This raises questions about the country's levels of cohesion with such disparity. More so, are these questions adequately addressed in the spatial plans aimed at improving democratic cities such as Johannesburg?

A DEMOCRATIC CITY?

Democratic urban space is the physical expression of 'general democracy'.¹⁹ To design democratic urban spaces Burdett argues for a new approach, one that shifts focus of analysis away from 'blunt instruments of top-down versus bottom up', an approach that highlights the designer as facilitator rather than creator. Therefore, the urban frameworks, visions, or master plans must do more than respond to short term needs of the market, land speculation and 'weak' metropolitan governments concerned with the deadlines imposed by a mayoral election cycle than with long term sustainability.²⁰

Professionals in the urban design and planning fields are still using out-dated methods of engaging with the city. Furthermore, they do not recognise the rate and scale at which cities are changing outside the formal structures managing city developments. 'In fact, the planning and urban design professions seem to have lost the ability to conceptualise and implement robust spatial models that are capable of adaptation and change at a time when city dynamics are both volatile and uncertain. Choosing instead to opt for anachronistic, one-dimensional, and rigid urban models that fail to live up to the social and environmental exigencies of twenty-first urbanization.'²¹ What does this mean for plans such as the COF?

CORRIDORS OF FREEDOM

The Executive Mayor of Johannesburg, Councillor Mpho Franklyn Parks Tau released a report that outlines the Growth and Development Strategy (GDS) of Johannesburg called “Joburg 2040” in October 2011. In the foreword, the Mayor describes the city’s morphology as ‘the city of stark contrast... divided and bearing spatial scars of the unjust and immoral apartheid system’. He elaborates further and highlights that a different story about the city needs to be told, which he lays out in that report.

One of the stories detailed in the report is about a new way of connecting the city, through transport infrastructural developments, because this ‘is central to the city’s economy’. It highlights how previous spatial planning contributed to urban sprawl, traffic congestion, and increased cost of transportation. It highlights that the future of public transport in Johannesburg lies in a change in mind-sets and the ‘creation of new cultures’ around transportation.²²

The Louis Botha development corridor is one of number of corridors proposed to “help integrate Joburg residents”.²³ Maseng quotes Tau to describe the characteristics transit oriented developments, that of nodal, mixed use and pedestrian friendly environments connected to social facilities (such as universities, schools, hospitals and shopping centres). These various corridors will be phased in over the next couple of years (until 2016).²⁴ This paper briefly analyses the final report of the strategic area framework of Louis Botha Avenue Development Corridor (LBDC) published on 21 November 2014 to assess how it addresses social cohesion.

The framework gives quite a detailed overview of the different spatial considerations such as historical morphological evolution of urban areas around Louis Botha Avenue, and the predominant communities along the corridor. It maps key informants such as existing social facilities, nodes, networks and connections. As with many frameworks, it also provides guidelines for development along the corridor, dividing it up into eight precincts or ‘local areas’ which are further analysed and to which conceptual ‘new urbanism’ type drawings are presented to depict what each precinct is envisioned being. The framework adequately presents various housing typologies and how the mixed use will be achieved through time, but what is not clearly articulated is how the social functions will develop (such as educational facilities and health care facilities). Are there any new services proposed? If so where? In addition, has social cohesion through these services been considered? Unlike the original BRT system in Curitiba, which was more of a strategic spatial development that aimed at changing the development pattern of the city, the Louis Botha Corridor is implemented on an existing transport network. Therefore, one may argue that it at most enhances existing developmental patterns, which may not necessarily address apartheid’s spatial legacy.

Massive infrastructural upgrades are proposed for some bus stations such as the Wynberg station in between Alex and Sandton that will have a significant impact on existing economic and social networks that already exist on site. *TransMilenio* in Bogota, Columbia’s version of the Bus Rapid Transit (BRT) adapted from Curitiba, has gone to great lengths to protect and instil a cultural change towards its public infrastructure, limiting informal trading around the station and prohibiting eating of any kind in the facilities to maintain a ‘state of the art’ infrastructure. With quite a strong presence of informality in and around the proposed stations, the LBDC does not explain how it plans to address this issue. This is important because there are social networks formed by the informality that may be negatively affected. What is also missing on the planned proposal is an appreciation of the very intricate social fabric that already exists? Based on Jenson and Bernard principles and dimensions to measure social cohesion, one needs to ask, how socially cohesive is the proposed Louis Botha Avenue Corridor of Freedom plan?

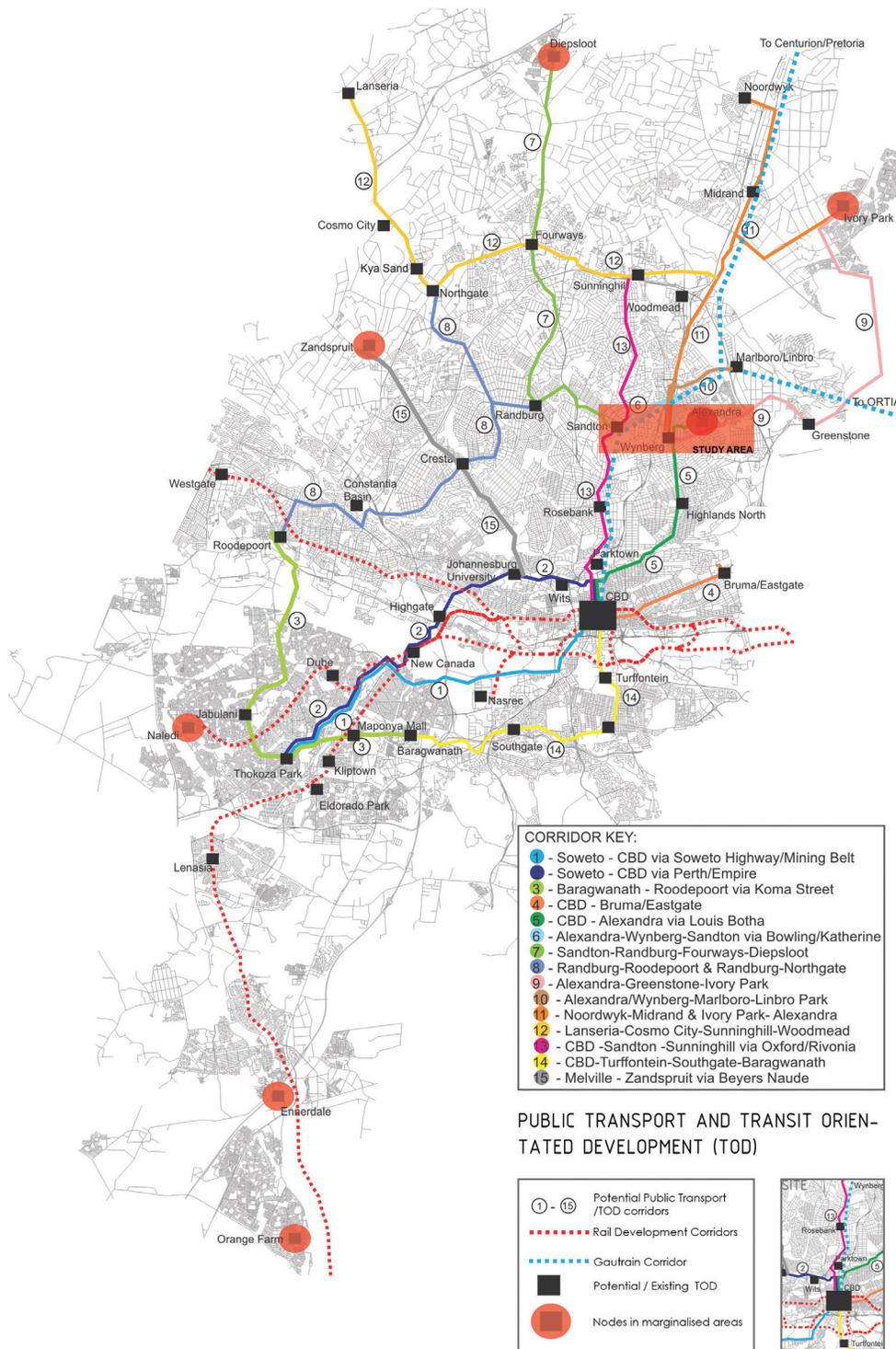


FIGURE 6 Network of Corridors of Freedom as proposed by the City of Johannesburg. Also highlighted on the map is the study area for this research paper.

In terms of 'Belonging/Isolation'- LBDC recognises the diversity along Louis Botha, but is not explicit about how it will create/strengthen a sense of belonging within these communities, of which some have strong and protective unit ties. LBDC scores very well in the other four dimensions, through their very inclusive, public participatory initiatives that recognise all members of the community and their role in making the project a success. Spatially, the plan goes to great lengths to describe the envisioned growth and densification patterns. LBDC is part of existing corridor projects planned and implemented in the city. What are the successes and shortcomings of other corridors, such as the Empire/Beth and Inner city corridors? Have these influenced private transport usage, reduced traffic congestion, social connections, and increased densities? Are these successful because they are built, or is it too early to measure their successes? The LBDC proposal does not include answers or even discussions around these questions, which I believe are vital in the planning, implementation and success of the corridor. Based on the above, it is not clear how success, economically, socially, civically and spatially will be achieved and measured once the project is completed, especially in strategic stations such as the Wynberg station.

CONCLUSION

Apartheid as law and policy was a clear, well-articulated, implemented and enforced plan. Perhaps this clarity is necessary in plans post-apartheid that aim to address its unjust spatial legacy. The forced removal and control of movement of people especially non-white, in an around the city resulted in a fragmented city morphology with high levels of disparity.

Developmental plans such the Corridors of Freedom have the potential to address the fragmentation and redevelopment of the city of Johannesburg. However, to define the image of a democratic city, these plans need to go beyond merely addressing issues of mobility; they need to include other layers that work together with mobility, layers that actively address physical, social and economic boundaries and limits of apartheid planning. In so doing, these plans become more contextual and less generic. Democracy provides clear tools for design and production of space such as freedom of movement, accessibility, participation, diversity, innovation and citizenship. These principles are linked closely to social cohesion.

Social cohesion is not a utopian ideal that is based on forcing people to 'live together in harmony'. It is much more than that; it is about an understanding that one's wellbeing is directly influenced by the wellbeing of the other. In this paper, the argument presented is for the recognition of social cohesion in designing post-apartheid/democratic cities. An urban restructuring that recognises that to address urban morphology of apartheid planning, and thus define the image of a democratic city, it is necessary to understand the origins, objectives and, most of all, limits of apartheid planning.

'It is perhaps the role of the urban scholarship to bring these two dimensions (informal actors and professional agencies) closer together, both through a theoretical reframing of contemporary urban crisis and by the identification and explanation of projects and initiatives that are, by default or design, changing our urban world'.²⁵

Acknowledgements

University of Witwatersrand, Amira Osman, Suzette Grace, Solam Mkhabela, Dr Finzi Saidi, Tariq Toffa and the University of Johannesburg.

Disclosure Statement

No potential conflict of interest was reported by author.

Notes on contributor

Absalom Makhubu is a young, black urban designer who recently graduated with a Master of urban design degree from the University of Witwatersrand, Johannesburg. He is currently a lecturer in the department of Architecture at the University of Johannesburg, the youngest architectural school in the country. He has previously worked for Albonico Sack Metacity Architects and Urban Designers, where his skills and passion for urban design, architecture and politics was inspired. He has also consulted for a number of practices in both research and professional work such as Urban Soup architects, Zulu Architectural Designers and A2 architects.

Endnotes

- 1 Murray, *Evolving Spatial Form of Cities*, 17.
- 2 Louw, *The rise, fall and Legacy of apartheid*, 27-50
- 3 Ibid.
- 4 Morris, *Apartheid: An illustrated history*, 58-105
- 5 Bruhn, *Concept of Social Cohesion*, 31.
- 6 Jenson, *Mapping Social Cohesion*, 17.
- 7 Bruhn, *Concept of Social Cohesion*, 47.
- 8 Schmitt, *Social Cohesion as an Aspect of Quality of Societies*, 2.
- 9 Ibid.
- 10 Jenson, *Mapping Social Cohesion*, 15.
- 11 Ibid., 12.
- 12 Schmitt, *Social Cohesion as an Aspect of Quality of Societies*, 6.
- 13 Ibid.
- 14 Everatt et al, *Benchmarking cities*, 9
- 15 Bonner and Nieftagodien, *Alexandra: A history*, 17-84
- 16 Ibid.
- 17 Murray, *Evolving Spatial Form of Cities*, 17-18
- 18 CoJ, *Joburg 2040*, 52-53
- 19 Kurdistani et al, *Democratic Urban Street Design*, 71-78.
- 20 Burdett, *Designing Urban Democracy*, 350- 351.
- 21 Ibid.
- 22 CoJ, *Joburg 2040*, 67-72.
- 23 Maseng, *Corridors of Freedom*, 4.
- 24 Thakurdin and Maseng, *Its All Systems Go*, 1.
- 25 Burdett, *Designing Urban Democracy*, 365.

Bibliography

- Bonner, Philip and Nieftagodien, Noor. *Alexandra: A History*. Johannesburg: Wits University Press. 2008
- Bruhn, John G. *The Concept of Social Cohesion. The Group Effect*. Springer Science+Business Media, LLC, 2009.
- Burdett, Ricky. *Designing Urban Democracy: Mapping Scales of Urban Identity*. *Public Culture*, 25(2), pp. 349-365, 2013.
- City of Joburg (CoJ) Metropolitan Municipality. *Integrated Transport Plan 2003-2008 Executive Summary*. Johannesburg, 2003.
- City of Joburg (CoJ) Metropolitan Municipality. *Corridors of Freedom: Re-stitching Our City to Create a New Future*. Central Strategy Unit Office of Executive Mayor. Johannesburg, 2013a.
- City of Joburg (CoJ) Metropolitan Municipality. *Louis Botha Avenue: Development Corridor Strategic Area Framework*. Central Strategy Unit Office of Executive Mayor. Johannesburg, 2014.
- City of Joburg (CoJ) Metropolitan Municipality. *Joburg 2040: Growth and Development Strategy*. Central Strategy Unit Office of Executive Mayor. Johannesburg, 2011.
- Hansen, Ludwig and Kotze, Paul. Section1: Which Crisis?. *Transportation and Place-Making: The Contribution of Public Transport Initiatives to the Quality of the Urban Environment in Gauteng*: Arch SA, Volume 57 sep/oct, pp. 17-21, 2012.
- Harvey, David. *The right to the city*. *New Left Review*, 53 (Sep/Oct), 23-40, 2008.
- Jenson, Jane. *Mapping Social Cohesion: The State of Canadian Research*. Canadian Policy Research Networks, CPRN Study No. F|03. Ottawa, 1998.
- Kurdistani, Payam M et al. *Democratic Urban Street Design Guideline Codifications*. Arnanshahr Architecture & Urban Development, 4 (6), pp. 71-78, 2012.
- Louw, Eric P. *The Rise, Fall and Legacy of Apartheid*. Praeger Publishers. 2004
- Maseng, Kabelo. *Corridors of Freedom Aims To Help Integrate Joburg Residents*. *Northcliff Melville Times*, 17 May, 04, 2013
- Murray, Martin J. *The Evolving Spatial Form of Cities in a Globalising World Economy- Johannesburg and São Paulo*. HSRC Publishers, 2004.
- Morris, Michael. *Apartheid: An Illustrated History*. Jonathan Ball Publishers. 2012

Schmitt, Regina. *Social Cohesion as an Aspect of the Quality of Societies: Concept and Measurement*. EuReporting Working Paper No. 14. Centre for Survey Research and Methodology (ZUMA). Social indicators Department Mannheim, 2000.
Thakurdin, Karishma and Maseng, Kabelo. *It's All Systems Go: Rea Vaya World Class System to be Launched in October*. Northcliff Melville Times, 17 May, 01, 2013.

Image Sources

Figure 1: Western, J. 1981. *Outcast Cape Town* (Cape Town: Human & Rousseau), 91.

Figure 2: Map of the month GCRO. Available from: <http://www.gcro.ac.za/outputs/map-of-the-month/#> Accessed [10/05/2016]

Figure 3: Original Map Source: GCRO, Available from: <http://www.gcro.ac.za/outputs/map-of-the-month/#> Accessed [10/05/2016]

Figure 4: Original Source: University of Witwatersrand, Historical Papers

Figure 5: Author 2014

Figure 6: LBDC Final Document 2014