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Africa! Arrive Alive: Road Safety in Kenya and South Africa

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Abstract:

This article is one of the first historical considerations of road safety in Africa. It argues that race and class, as colonial dualisms, analytically frame two defining moments in the development of African automobility and its related infrastructure in two countries—Kenyan 'Africanization' in the first decade of Kenya's political independence from Britain, 1963-1975, and democratization and economic opportunity in post-apartheid (post-1994) South Africa. Through comparative analyses of state and non-state approaches to road danger in these African countries, the authors examine the ways in which road safety has entered into the public sphere and the public imagination. We argue that recent road safety interventions in both countries exemplify an 'epidemiological turn' influenced by public health constructions of the HIV/AIDS epidemic. African states' framing of road safety in largely behaviorist terms has obscured larger debates around redressing the historical legacies of racialized access to roads and road transport and the techno-politics of African automobility, including historical indebtedness to the IFIs, an under-capitalized transport and haulage industry characterized by repair and second-hand vehicles, and an exploitation of speed to combat the extremely high costs of automotive transport on the continent. Civic involvement in road safety initiatives has tended to be limited, although the spectre of road carnage has entered into the public imagination, largely through the death of high profile Africans. However, some African road users continue to pursue alternative, and often culturally embedded, strategies to mitigate the dangers posed by life 'on the road'.

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INTRODUCTION

In November 1959, African vigilantes in Kenya's capital, Nairobi, set upon and assaulted Asian drivers they came across at random in the city streets. Such incidents were fired by a widely felt sentiment of anger and injustice directed at the colonial legal system that failed to prosecute Asian and European drivers who had been charged with running-over and killing African pedestrians.¹ 'Mob justice' at the scene of fatal road accidents, particularly those involving pedestrians and especially children, is no mere footnote to the histories of road safety in this East African country, as spontaneous acts of vigilantism in the wake of serious road accidents continue to be reported in the nation's newspapers and television reports.² What was remarkable about this rash of beatings in 1959, none of which were fatal, was its longevity in the memory of African Kenyans throughout the first decade of political independence from Britain (1963 to c.1975).³ For a decade of Kenyan legislative history, these events were remembered whenever the question of 'road safety' was brought to the attention of legislators and tied to other pressing controversies over infrastructure in the context of decolonization.

In exploring the topic of road safety in Africa, it is necessary to acknowledge the long shadow cast by the question of race and class in the development of automobility and its infrastructure. Like the colonial rail system, road networks and allied automotive industries in much of Africa were largely designed to cater to the needs and aspirations of minority settler societies. Transforming this colonial legacy

¹ *East African Standard*, 27 November 1959, 11.

² See Capital FM TV for 14 March 2012 when Nairobi Technical Training Institute students rioted after a third colleague was killed by a bus. They demanded 'speed bumps' or pedestrian 'fly-overs' <http://www.capitalfm.co.ke/tv/video/JQQC4di5x-0/ntti-students-riot-over-colleague-hit-by-matatu.html>, accessed on 30 March 2012.

³ Kenya National Assembly Hansard (KNAH), Motion – Approval of Report, 26 October 1972.

and broadening access to the benefits of the ‘automotive age’ to the majority African population was and remains a key challenge for cash-strapped post-colonial governments. But, as the above example shows, this shift is not without its perils. Even as a growing percentage of African road-users embrace automobility as part and parcel of a necessary march towards ‘development’, an attendant increase in road accidents and fatalities have also resulted in deeply emotive and problematic interpretations of ‘road danger’ in the popular imagination. These are fueled by changing perceptions of road safety interventions, and by Africans’ own response to their place in a shifting and as yet unequal technological landscape.

In this paper, which is among the first historical considerations of road safety in sub-Saharan Africa, we compare the development of road safety in two African countries, Kenya and South Africa, as a way of examining both state and popular responses to the problem of road danger in the 20th and 21st centuries. Rather than offering a comprehensive analysis of road safety on the continent, this selective approach allows us to consider the particular trajectories presented by these two countries, as well as providing useful points of comparison based on continuing empirical and ethnographic research in these two areas.⁴ Historical affinities between the two countries further justify such a selection— the early presence in both countries of a significant white settler population, which drove initial outlays on road infrastructure and shaped highly racialized access to this expanding road network, have continued to define the manner in which the state and its citizenry perceive of and respond to the issue of road danger. Furthermore, the Transport Ministries of both Kenya and South Africa have publicly embraced the recently declared United Nations Decade of Action for Global Road Safety, 2011-20, and as such this paper provides

⁴ See Mark Lamont, “An epidemic on wheels?”; Lamont, “Accidents Have No Cure!”; Rebekah Lee, “Death in Slow Motion”.

an important historical context through which these two regional powerhouses' participation in a more globalized road safety agenda can be understood.⁵

The history of road safety in Africa has been relatively unexplored, especially when compared to the rich historiography on the topic in the developed world, to which several articles in this Special Issue aim to contribute.⁶ However, this study draws from a wider body of Africanist scholarship which has, in the last two decades, contributed to our understanding of African 'road cultures' and the complex ways in which Africans utilize, and relate to, both roads and motor vehicles. This literature in part focuses on the diverse livelihoods Africans have crafted 'on the road', as can be seen in Kenyan and South African participation in the unstable yet lucrative minibus taxi and *miraa* transport business.⁷ Historical and ethnographic studies of emergent car cultures in Africa also reveal a vigorous local appropriation of automobile technologies as a form of ritual knowledge and a potent source of rumour, and show how passengers themselves actively seek to engage with the spiritual potentialities, and risks, of motorized transport.⁸ The road itself in these studies emerges as a central, and highly ambivalent, figure in African moral imaginaries, linked to deeply historicized processes of signifying Africa's uneven and often exploitative encounter with modernity.⁹

⁵ For examples of this public commitment, see websites: <http://www.decadeofaction-kenya.co.ke/> and <http://www.arrivealive.co.za/pages.aspx?i=2959>, accessed 13 March 2012.

⁶ This literature is too vast to cite extensively here. Ralph Nader, *Unsafe at Any Speed*; Peter Norton, *Fighting Traffic*; Packer, *Mobility without Mayhem: Safety, Cars, and Citizenship* (Chapel Hill, NC, 2008); Bill Luckin and David Sheen, "Defining early modern automobility"; Muhammed M. Ishaque and Robert B. Noland, "Making roads safe for pedestrians or keeping them out of the way?"

⁷ Kenda Mutongi, "Thugs or Entrepreneurs?"; Meshack Khosa, "Routes, ranks and rebels"; Neil Carrier, "The Hilux and the 'Body Thrower'"; Lamont, "Accidents Have No Cure!"

⁸ Birgit Meyer and Jorada Verrips, "Kwaku's Car"; Luise White, "Cars Out of Place"; Gabriel Klaeger, "Religion on the Road"; Lee, "Death in Slow Motion".

⁹ Adeline Masquelier, "Road Mythographies". Rosalind Shaw, *Memories of the Slave Trade*; Peter Chilson, *Riding the Demon*. Other non-Western treatments of automobility and road culture have informed this study. See Lewis H. Siegelbaum, "On the Side"; Richard Schweid, *Che's Chevrolet, Fidel's Oldsmobile*; Dmitris Dalakoglou, "The Road".

We begin the paper with a consideration of two defining historical moments in the development of African automobility and its related infrastructure in these two countries—Kenyan ‘Africanization’ in the first decade of Kenya’s political independence from Britain, 1963-1975, and democratization and economic liberalisation in post-apartheid (post-1994) South Africa. Although these are not parallel developments, we focus on these two moments as emblematic of how larger contexts of ‘infrastructural overload’ and the historical legacies of colonialism’s legal and actuarial institutions have shaped African automobility, which have in turn defined the politics of road safety intervention up to the present day. This discussion also yields important points of contrast, for example, the extent to which South Africa has developed an extensive domestic automotive industry, whereas Kenya has only succeeded to do so on a very rudimentary scale, remaining dependent on the importation of (often second-hand) spare parts and motor-vehicles, encouraging a transport system very much characterized by repair.¹⁰

We then turn to discuss recent and salient patterns in road safety intervention in both countries, while reflecting on their antecedents within colonial and apartheid-era dynamics. We argue that key developments in current road safety policies in both South Africa and Kenya have been influenced by the World Health Organization’s (WHO) ‘epidemiological turn’ with respect to accident and violence prevention made in the name of global public health, specifically modeled on approaches to HIV/AIDS. Both the South African and Kenyan states seem oriented to a behaviorist approach to changing people’s conduct with respect to automotive mobility. State campaigns against speeding, overloading, and drink driving are pervasive, but

¹⁰ A similar argument is put forward by Siegelbaum with respect to the Soviet Union in the latter half of the twentieth century. Siegelbaum, “On the Side”. Richard Schweid also explores the repair cultures of Cuba’s aging American vehicles and conversions using Soviet-era parts in *Che’s Chevrolet, Fidel’s Oldsmobile*.

conspicuously absent from discussion in the public sphere are broader questions of socio-economic inequalities rooted in earlier histories that have exacerbated many of the ‘dangerous’ practices in and around motor vehicles, or along roads and highways. Public transport, where regulated by licensing and policing authorities in both countries, is highly competitive and hence exploitative of both passengers and transport workers, such as drivers and conductors. In addition, the licensing of public transport and commercial haulage is a highly politicized issue, reflecting the emergence of cartels whose lion’s share of licenses is linked to the institutionalized corruption of licensing authorities. As such, a road safety approach targeting people’s behavior in both of these nation-states is challenged by the pressures individuals endure in making a living in economies characterized by extreme differences in wealth and opportunity.

The final section of the paper turns to popular approaches in road safety. Although the relative reach and efficacy of governmental initiatives remains questionable, the topic of road safety itself has entered into the public sphere and the public imagination in surprising ways. Whilst some advocacy lobbies such as South Africa’s “Arrive Alive” seek to harness civic awareness and activism through website blogs and an interactive web platform, it is local media attention paid to the accidental deaths of high-profile politicians and entertainers which most significantly shape public debates around road safety. Furthermore, it is evident that in some parts of Africa, adaptations in ritual practice, particularly around road accident sites and en route to funerals, can be seen as another important, albeit more culturally mediated, form of road safety intervention.

KENYA: THE PEUGEOT AND AFRICANIZATION

Kenya's political independence from Britain in 1963 marks the real beginnings of mass automobility in this East African country. It is within the context of Kenya's Africanization policy in the first decade of post-colonial rule that 'road safety' emerged as a legislative and institutional challenge to the fledgling republic.

Choosing to situate Kenya's history of 'road carnage' through an examination of this republic's first decade of political independence from Britain is not haphazardly chosen. As prefaced in the introduction above, the question of class and race in any attempts to mitigate road danger in Kenya through safety interventions and regulations represents a continuity through the country's half-century of postcolonial sovereignty. The 1960s and 1970s represent a watershed in Kenya's infrastructural politics in which mass automobility, road construction, economic development, and safety (mis)management were intertwined. One recent historiography of postcolonial Kenya even indicates that the number of fatalities and serious injuries tripled from 1963 to 1973¹¹, presumably exacerbated by the deregulated public transport industry known colloquially as *matatu*, Kenya's ubiquitous mini-buses that ferry passengers in town and country.

In this context, the policies and institutions that made up Africanization, a policy of building a national economy dominated by Africans, came to have significant effects on the further development of road safety and its current transformations. Africanization greatly expanded the transport sector in Kenya, encouraging above all African investment in public transport and commercial haulage, but also provoking highly ambitious attempts to regulate the economic activities of multinational corporations in the transportation sector. One outcome of this was heavy borrowing by individuals to purchase vehicles while the newly

¹¹ Charles Hornsby, *Kenya*.

independent government secured massive loans to build a transport infrastructure based on the automobile rather than the railways. Another outcome was a heavy infrastructural overload on Kenya's colonial-era road networks and an equally heavy cost in the number of road traffic accident fatalities and injuries.

Africanization thus led to two inter-related processes that continue to impinge on the development of Kenyan automobility and, by extension, road safety policies and perceptions of road danger. Firstly, this period of borrowing led to an ongoing politics of indebtedness to the International Financial Institutes (IFIs), such as the World Bank, which precipitated later fiscal crises and structural adjustment in the 1980s, a period when Kenya's road infrastructure crumbled and road danger escalated. Secondly, in the interest of securing economic opportunities for all Africans in the transport sector, those with capital and those without, the Kenyan government was, since the 1960s, always torn between its policies encouraging competition and those that would favor regulation. It is these two tensions, the politics of indebtedness and the external and global governance of the IFIs, and economic policies split between 'free-market' competition and 'state-centrist' regulation that best explain why reflecting on this period of Kenya's history informs further understandings of the current conditions and perceptions of road danger, on the one hand, and the implementation of road safety initiatives and policies on the other.

In this context, the Peugeot 404 became a material symbol of the promises of Africanization and political independence. These were the vehicles of choice among the aspiring African politicians, emergent civil servants, and entrepreneurs who were among the first African Kenyan citizens to take on senior positions in government and business under the auspices of Africanization policies.¹² Africanization was a political

¹¹ Hornsby, *Kenya*.

process of building institutions that could open up Africans to lines of credit and jobs allowing them, for the first time, to invest in the development of Kenya's economy. By reversing the racial discrimination of colonialism in the public and private sectors, these policies set into motion a politics of recognition and, for a minority elite, a system of redistribution aimed at redressing colonial inequities. Through such policies, the careerist, educational, and entrepreneurial aspirations of a nascent African middle-class were partially realized, one of its tangible proofs seen publicly in the soaring rates of car ownership, but greater numbers of private cars competing on the competitive and exhausted colonial roads led to an unprecedented number of roadside fatalities and injuries.¹³

Besides private car ownership, entry into both commercial and public transport were viewed as areas of opened possibility for this 'subsidized elite', especially since the government encouraged investment in transportation by providing, firstly, the licenses to permit African transporters to enter the business and, secondly, but critically, by opening up credit facilities to allow Africans to take on loans on guarantee from parastatal lenders. Personally enabled by the rewritten Hire Purchase Act of 1970, these Kenyan citizens could access previously unattainable credit to purchase shiny, new automobiles manufactured in France, the United Kingdom, the United States, and Japan¹⁴.

The Peugeot 404 in the mid-1960s was the car to beat, not only in the parking lots of dance clubs, but also in the famed *East African Safari Rally*. Peugeot capitalized upon the successes of rally drivers through exotic advertising campaigns showing Peugeot 404s ripping past savannah animals and indigenous bystanders. The man who brought such a car back to his family, friends, clients and political

¹³ Kenya National Assembly Hansard (KNAH), Number of motor-vehicles in Kenya, 14 July 1970.

¹⁴ KNAH, Implementation of Hire Purchase Act, 7 May 1970

supporters – sometimes with the factory specified plastic sheeting still covering the upholstery – was an image not only of success, but also of a newfound sovereignty: the ‘otherwise’ colonial subject turned modern postcolonial citizen.¹⁵ Until the mid-1990s, many of these cars were still on Kenyan roads, many converted into taxis, but with economic liberalization policies during this decade and the proliferation of second-hand car imports from the Middle East and Japan, they have largely been replaced by newer, albeit previously-owned vehicles. They still remain, however, somewhat nostalgic symbols of a period when Kenya was ‘on the move’ and the ‘fruits of Independence’ still fresh.

In the late 1960s, however, the Peugeot symbolized promotion through the ranks and for a fleeting moment in Kenya’s history offered the shallow illusion of equal opportunity. Everywhere the sobriquet ‘-nization’ was a self-evident nod at Africanization as explanation for the success of these cadres and in 1970s Nairobi slang, a new term – *kupujoo* – was coined to qualify the rapid promotion of an individual through access to government loans and jobs.¹⁶ Although such vehicles were sold for exorbitantly inflated prices from foreign firms, with credit created from nationalized debt, this new and young African milieu confidently bought into the kinematic world of automobility.

Part commitment to work schedules that could find one in Kisumu in the morning and Kampala in neighbouring Uganda by the late afternoon, and part cosmopolitan status symbol that confounded colonial racism in the car parks of Nairobi, privately owned saloon cars proliferated in the late 1960s upon an infrastructure designed and built for Kenya’s European minority and its crisis-ridden agricultural economy. The Peugeot 404, in particular, was viewed primarily as a

¹⁵ Brenda Chalfin, *Neoliberal Frontiers*; see also Mahmood Mamdani, *Citizen and Subject*.

¹⁶ John Lonsdale (personal communication with Mark Lamont).

‘tarmac-only’ car, quite unsuitable to the conditions of the national road network at the time.¹⁷ While tarmac roads did exist, they were often in a perilous state of disrepair, sporting hazards like washed out culverts, concrete roadside pillars, and gaping potholes.¹⁸ Writing about the exhausted colonial infrastructure, particularly the tarmac roads, Colin Leys noted that the first major task facing the independent Kenyan government was massive road building projects beyond the limit of the so-called White Highlands, reaching further into rural Kenya whose agricultural potential African entrepreneurs were keen to exploit.¹⁹ The existing tarmac roads were largely concentrated around the settler highlands, the huge swathes of Kenya’s most fertile land in the possession of the very few colonials, whose roads were hardly designed with the sovereign aspirations of *Uhuru* (Freedom) in mind. Outside of this relatively expansive enclave, the most heavily traveled roads largely consisted of long gravel graded trunk roads, such as that which linked the coastal port of Mombasa to Nairobi, the nation’s bustling interior capital city, a 330 mile distance bumpily and dustily traveled at stop and go speeds. It was along such routes that the Peugeot earned its ambivalent reputation as both dream machine and killer car.

From a design point of view, the Peugeot 404 saloon was desirable in multiple ways: its sleek and robust exterior made it aesthetically modern and tough; the luxurious interior made cross-country travel on gravel roads comfortable; and the speeds it could reach made long-distance road trips quicker. It was, however, most desirable for the ways in which ownership of one of these vehicles, especially if it were a personal car, melded into ideals of African modernity in the newly independent country. Seen in relation to its owners, such cars symbolized the speed of Africanization that could remake the colonized subject in the new imaginary of the

¹⁷ KNAH, Traffic (Amendment of Laws) Bill, 1 December 1970.

¹⁸ KNAH, Measures to curb traffic accidents and road deaths, 21 May 1970.

¹⁹ Colin Leys, *Underdevelopment in Kenya*.

sovereign African state. Embedded in the complex technical and infrastructural relations of machine and person, however, these Peugeots were also blamed for rising ‘road carnage’ through a specific aspect of its design: they were too fast for Kenya’s worn out, dangerously engineered, or under-developed road infrastructure.²⁰

As a moment in the history of road safety in Kenya, and a defining one at that, Africanization institutionalized certain practices and policies that have shaped traffic law and transport regulation since. Public shock at horrific petrol-tanker explosions led to debates about the safety of Kenya’s haulage fleets, leading to proposals – still pending action today – about safer alternatives for petrol transportation through building national networks of pipelines. A succession of parliamentary debates reflecting the place of road safety in national politics included, but were not limited to, the lack of infrastructural maintenance, the irregularity of police patrolling, the rampant corruption in regulatory bodies, speed limits and the installations of tachometers and speed governors, the quality of driving schools, the inefficiency of insurance companies to award compensation for the dead or wounded, the scarcity and poor quality of spare-parts, and how to regulate and restrict the importation of second-hand vehicles. In 2013, these debates and concerns remain the objects of policy formation in Kenya’s transport sector and have been pivotal in shaping not only road safety interventions, but also a certain tolerance towards road danger among all road users.

The years 1963 to 1975 were marked by a major extension of paved trunk roads and gravel transit corridors between the neighboring states of Uganda, Tanzania and Ethiopia financed, largely, through the World Bank. The massive spending during this decade-long experiment with automobility contributed to later fiscal crises in the

²⁰ KNAH, The State Reinsurance Corporation Bill, 15 October 1970.

1980s linked to indebtedness to the international financial institutes (IFIs) and the subsequent deterioration of the postcolonial infrastructure as one of the effects of structural adjustment programs. Until recent reconstruction efforts in the neo-liberal 2000s, under the aegis of Chinese investment, much of Kenya's existing transport infrastructure dated back to this period of spending in the 1970s, a road network devastated by years of motor-vehicle overload and underfinanced or poorly managed public works maintenance.

The expansion of Africans into road haulage during the 1960s had at least two effects that have bearing on the politics of indebtedness and the divergence of state-centrist and free market economic policies over this time period. The first effect was that increased infrastructural development— primarily, the building of roads and bridges in rural areas outside the enclaves developed in the interests of the colonial economy— demanded an institutional nexus that could adequately regulate an industry that was, for the most part, being actively facilitated by state-centrist policy but frustrated, at the same time, by multinational and foreign interests. Again, for road transport, the second main effect of Africanization was that while the challenges made to the monopolistic and concessionary character of transport policy under colonial governments led to more Africans taking to the roads and, hence, increases in road fatalities and injuries, the Africanization of transportation actually fostered a situation where Kenya – as a national economy – became almost completely dependent on the import of motor vehicles and a severe undercapitalization in the development of an automotive industry of any noteworthy impact. One unplanned effect for the present has been the overwhelming number of 'second hand' vehicles present in the country, resulting in something of a 'repair' infrastructure that has borne consequences for

how road safety policy is put into practice.²¹ For the period concerned, these two effects twisted into one another as an increased surveillance of road death and injury, on the one hand, but a ‘real-terms’ increase in the actual numbers of dead and injured on the other.²²

SOUTH AFRICA: AUTOMOBILITY AND APARTHEID

By 1960, with the publication of *A Century of Transport: A Record of Achievement of the Ministry of Transport of the Union of South Africa*, the Ministry of Transport could, perhaps justifiably, reflect on its accomplishments: over 5,000 miles of bitumen-surfaced national highways had been created, linked up to by an extensive system of provincial roads, many of them macademised.²³ This formed the basis of an impressive mid-century expansion of the national road network, which was accompanied by a rapid increase in road users (with registered vehicles nearly doubling from 565,000 in 1950 to 1.1 million in 1960) and the consolidation of a domestic automobile manufacturing industry.²⁴ However, this shining “record of achievement” evident in the historical trajectory of South African automobility has its own glaring blind spot. When the Ministry of Transport boasted that the Union was by 1960 “one of the most highly motorized countries in the world”, with its ratio of nearly one vehicle to three persons (this can be compared to the then United States’ ratio of 2.67), it was of course referring only to the minority white population in its figures. Indeed, of the 1.1 million registered motor vehicles on record in 1960, only

²¹ See Abdou Maliq Simone, *For the City Yet to Come*; Brian Larkin, *Signal and Noise*.

²² KNAH, Deaths through road accidents, 1971/1972, 26 April 1972. Statistics on the number of fatalities and injuries during this period are based on the scanty evidence collected by police reports and it is widely acknowledged that such incidents are under reported.

²³ *A Century of Transport*, 61, 139, 144.

²⁴ “Number of Registered Vehicles at the End of the Month”, http://www.arrivealive.co.za/document/Nov_PDFS/Nov2006_RegVehs_LicPrDP_Fuel_Dist.pdf, accessed 4 December 2011; *A Century of Transport*, 156.

100,000 were owned by non-whites.²⁵ In 1970, that ratio remained roughly the same, with whites owning 90 per cent of registered vehicles.²⁶ For the vast majority of South Africans during the apartheid period (1948-1994), then, automobility was a far more circumscribed experience.

The mobility, more generally speaking, of the black African population was for much of the apartheid period highly regulated by the state. A host of legislation enacted in the 1950s—the Group Areas Act, the Native Urban Areas Amendment Act, the Population Registration Act and the Natives Abolition of Passes and Coordination of Documents Act—lay the framework for a coercive system of control over African movement, particularly with regards to their entry into and residence in urban areas. Under this legislation, Africans were seen as “temporary” residents of the city, their presence in mining towns and manufacturing centers justifiable only as units of labor. Night-time police raids and invasive spot checks on city streets for identity cards, as well as negotiating the labyrinthine bureaucracy that pervaded urban apartheid administration, thus became part of the daily rhythms of urban African life.²⁷ Within this complex apparatus, personal mobility came to be seen as both an ideological and literal threat to the apartheid state and to white privilege, not dissimilar to what Zylstra has thoughtfully observed in mid-nineteenth century segregationist Philadelphia.²⁸

Not coincidentally, the design and placement of roads helped to consolidate state structures of surveillance and control over African movement. African townships built during the apartheid period were not only located at a considerable distance from

²⁵ *A Century of Transport*, 152

²⁶ By in large, however, the Ministry of Transport’s figures on road users and vehicular registration are not disaggregated by race, making it difficult to accurately assess, for example, the rate of increase in vehicle ownership by the black African population in the late apartheid and post-apartheid period. Rosalind C. Morris, “Accidental Histories, Post-Historical Practice?”, 597.

²⁷ Rebekah Lee, *African Women and Apartheid*, 19, 35.

²⁸ Geoff D. Zylstra, “Whiteness, Freedom, and Technology”.

the city center, they also tended to be separated from other racially zoned residential areas through “buffer strips” made up of stretches of parks, cemeteries, undeveloped land and, indeed, roads and railways themselves. The apartheid cityscape thus came to resemble a “patchwork quilt” of separate, racially zoned residential areas with a limited number of transport corridors leading into them.²⁹ In addition, the strategic placement of broad access roads leading into and within African townships were a central feature of ‘modernist’ apartheid urban planning, designed to allow quick and easy vehicular access for state security forces in the event of any unrest, and to reduce the possibilities for effective crowd mobilization.³⁰ Within this calculus, the needs of urban African pedestrians in these residential areas were, for the most part, simply ignored. Limited public transport options servicing these outlying areas further emphasized the travails of the urban African working class, although as Pirie has shown, such inferior services provided flashpoints of protest.³¹

With the dismantling of apartheid legislation that began in the late 1980s and culminated in the transition to a democratic government in 1994, African mobility came to embody an altogether different sensibility—freedom. Young Africans, whose primary memory of daily life under apartheid was that “we were not allowed to just go around” celebrated the democratic elections with spirited bus-runs, in which they rode public buses “up and down” the city, simply “for fun” and because they could.³² They also marked their newfound physical freedoms through participating in public rituals of consumption. Indeed, the emergence in the post-apartheid South African landscape of “mega malls” accessible only by motorized transport has typified how

²⁹ Andre P. Czegledy, “Getting Around Town”, 66.

³⁰ Derek Japha and Marie Huchzermeyer, “The history of the development of townships in Cape Town”, 16–19.

³¹ Gordon H. Pirie, “Travelling Under Apartheid”, 177.

³² Matumo Madikane, interview 10 January 2001; Nandipha Ntswana, interview 26 June 2000. Names of interviewees have been changed to protect the identities of respondents.

increased mobility has become an important enabler of the growing consumerism of the African population.³³ Unsurprisingly, this more individuated sense of mobility was also expressed through the purchase of motor vehicles. The number of registered motor vehicles, which had increased modestly from 4.8 million in 1993 to 4.9 million in 1994, took a dramatic leap in the year after the ending of apartheid, to 5.7 million in 1995. That upward trajectory continued in striking fashion through the 1990s. By 2000, 6.8 million vehicles were registered, while recent figures available show that in 2006, 7.7 million vehicles were registered, out of a total population of 47.4 million South Africans.³⁴

Domestic automotive production, which had gone through a serious slump in the 1980s when international political pressure forced many multi-national companies to pull out or significantly reduce their capacity, experienced its own resurgence in the post-apartheid period. In the 1990s, Alfa Romeo, Renault and Chevrolet re-invested in the country. As of 2008, the major players in South Africa's automobile manufacturing industry include Ford, General Motors, Mercedes-Benz, Toyota and Volkswagen.³⁵ Domestic automobile production more than doubled between 1990 (approximately 210,000 vehicles produced) to 2004 (482,000), steadily increasing to 569,000 in 2005 and 630,000 in 2008.³⁶ South Africa has become a significant player in the global automotive industry, with exports heading to Japan, Germany, Australia,

³³ Lee, *African Women and Apartheid*, 177; Jo Beall, Owen Crankshaw and Susan Parnell, *Uniting a Divided City*, 56.

³⁴ Road Traffic Management Corporation, Interim Road Traffic and Fatal Crash Report 2006; Statistics South Africa, "Mid-year population estimates 2006", 1.

³⁵ <http://www.southafrica.info/business/economy/sectors/automotive-overview.htm>, accessed 26 July 2013.

³⁶ Ann M. Oberhauser, "Semiperipheral Industrialization in the Global Economy", 103.

the United States and the UK. It is a major exporter to the African continent, supplying most notably Zimbabwe, Nigeria, Ghana and Algeria.³⁷

Attending to the burgeoning needs of this increasingly mobile population has posed significant challenges for the Ministry of Transport. Although the South African government has undertaken some infrastructural investments in the post-apartheid period, most notably in the recent upgrading of roads and public transport networks in the lead-up to the hosting of the 2010 World Cup, the state has by-and-large relied on its existing stock of roads and transport links inherited from the apartheid regime. The shortcomings of this approach are clear to the many commuters on now highly congested metropolitan roadways, which were built without anticipating the ending of apartheid and its attendant exponential increase in road users since the 1990s. Another significant challenge is overcoming the legacy of the ‘axial’ nature of public transport infrastructure, especially in cities such as Johannesburg where the demands for cross-suburban transport links to new business hubs in the Northern suburbs have replaced older suburban-to-city centre transport routes. Like the spokes of a wheel, apartheid-era public transport routes, and the roads and railways which underpinned them, were principally envisioned to deliver workers from disparate satellite residential townships to the city centre, at the expense of viable transport connections *between* urban and suburban neighborhoods.³⁸ The demand for such routes has increased in the post-apartheid period.

Finally, significant shifts in mobility patterns have become evident in the post apartheid period, as increased inter-urban movement as well as the in-migration of significant numbers of Zimbabweans, Congolese, and Somalis have further altered

³⁷ <http://www.southafrica.info/business/economy/sectors/automotive-overview.htm>, accessed 26 July 2013.

³⁸ Czegledy, “Getting Around Town”, 67.

already fluid migratory dynamics. The increased traffic between urban centres and rural areas is another key post-apartheid development, as African families which have over time become stretched across great distances reunite during holidays and at important events such as funerals. This has been buttressed by a resurgence of ethnic nationalism in the new dispensation, which has further emphasized the cultivation of urban Africans' 'traditional' heritage through dutiful participation in often rurally-based ritual events.³⁹

The above patterns have become manifest in the South African roadscape through dramatically increased accident rates and fatalities in the post-apartheid period. While the number of road fatalities hovered around the 10,000 per year mark for most of the 1980s and 1990s, the new millennium has seen that number climb rapidly to 12,800 in 2004 and a high of 15,500 in 2007.⁴⁰ Furthermore, in 2008 roughly 58 per cent of fatal crashes occurred on a Friday, Saturday or Sunday, and while this may be partially explained by a higher rate of drunk driving in that period, one may also posit that increased long-distance travel during the weekends (to participate in funerals, for example) may be another contributing factor.

ROAD SAFETY IN KENYA AND SOUTH AFRICA: FROM ABOVE AND BELOW

As Rosalind Morris indicates in her conceptual meditation on the "accidental age" in South Africa, although the road safety campaign Arrive Alive began with a two-pronged strategy that purported to focus both on strong governmental enforcement of road safety regulations and influencing road user behavior, it is the latter that came to dominate its agenda. The perils of speed, she argues, was the

³⁹ Deborah James, "Burial Sites, Informal Rights and Lost Kingdoms"; Leslie Bank, *Home Spaces, Street Styles*; Lee, "Death 'On the Move'".

⁴⁰ Road Traffic Report March 2008, <http://www.arrivealive.co.za/pages.aspx?i=2826>, accessed on 5 December 2011; Interim Road Traffic and Fatal Crash Report 2006; Report of Road Accident Fund Commission 2002, <http://www.transport.gov.za/library/docs/raf/index.htm>, accessed on 5 December 2011, 83.

“primary explanatory factor” for road accidents, and the Ministry responded through largely behaviorist interventions which sought to curb (rather unsuccessfully) the inclination to speed.⁴¹

By 1997, when the South African Department of Transport launched its Arrive Alive Road Safety Campaign, the alarming rise in road fatalities throughout the transitional period had clearly signaled the need for an urgent and coordinated response to road safety concerns on the part of the fledgling democracy. In 1998, the Annual Traffic Safety Audit prepared by the Automobile Association of South Africa showed South Africa’s road fatality rates far surpassed those of the developed world, with South Africa registering a damning 181.83 fatalities per 100,000 vehicles, as compared to other developed countries with similar geographies: 21.62 in Australia and 21.53 in the United States.⁴² It comes as no surprise, then, that the Ministry of Transport has framed road safety as a principle tenet in (and challenge to) South Africa’s march towards development.⁴³ Crucially, it has explicitly linked the problem of road deaths to the country’s other great public health challenge—that of HIV/AIDS. As Transport Minister Sibusiso Ndebele stated at the 2011 launch of the Decade for Action for Road Safety, ‘By all accounts the death of some 14,000 people every year, the death of at least 1,000 people every month, the death of no less than 40 people every day on South Africa’s roads must be described as an epidemic.’ In the same speech, he uses the strong civic engagement of grassroots organizations in affecting real change with regards to HIV/AIDS treatment and prevention as a model on which locally based road safety movements could draw: ‘There is a movement against crime, a movement against HIV and AIDS; we now need a movement against

⁴¹ Morris, “Accidental Histories, Post-Historical Practice?”, 601.

⁴² Road Traffic Safety Foundation, Annual Traffic Safety Audit 1998.

⁴³ Morris, “Accidental Histories, Post-Historical Practice?”, 600.

road deaths.’⁴⁴ Recent public service pronouncements encouraging seatbelt usage have similarly borrowed from the language of popular ‘condomize’ campaigns, the message being, as one radio spot asserted, that if you truly ‘loved’ your partner, you would ask him to buckle up (read ‘condomize’).

This framing of road safety as a public health challenge has proved useful from the point of view of the Transport Ministry in impressing upon the wider public the urgency of the issue, as well as providing a familiar language within which ordinary road users can engage with strategies of accident prevention. To their credit, the Ministry have also tried to use the Arrive Alive website as a participatory forum to engage in a dialogue with the general public on issues relevant to road safety and awareness. On the website is a ‘road safety blog’ to which disgruntled road users can contribute photos and on-the-scene reports of traffic jams, unsafe roads and negligent driving. However, the stress on behavioral change in road safety campaigns has obscured a broader debate on more systemic factors—including poor road conditions particularly in rural areas, lack of safe and adequate public transport options in urban areas, and wider structural inequality which have consigned the poor to utilizing unlicensed or unroadworthy second-hand vehicles— which have also contributed to South Africa’s high accident and fatality rates.

Until the liberalization of Kenya’s communications and broadcast industries in the late 1990s, road safety was characterized by a state-centrist approach, monitored by a loose coalition of ‘stake-holders’ drawn from the police, transport unions, the Transport Licensing Board, and the Association of Kenya Insurers. By 2003, with the introduction of the so-called ‘Michuki Rules’, named after the incumbent Transport Minister, the Kenyan government moved to regulate the public transport sector,

⁴⁴ Address by Sibusiso Ndebele at the launch of the ‘Decade for Action for Road Safety 2011-2020’, Boksburg, Gauteng, <http://www.info.gov.za/speech/DynamicAction?pageid=461&sid=18244&tid=33077>, accessed 02 June 2011.

especially the fleets of privately owned mini-buses known as *matatu*, in a bid to improve road safety and restore order to what the media sensationally claimed was a collective insanity on the country's roads. Michuki Rules were a laundry list of requirements: all *matatu* had to be installed with 'speed governors' restricting speed to a maximum of 80 k.p.h.; passengers were required to wear seat belts; drivers and conductors of the mini-buses had to wear a uniform and openly display identification cards. In contrast, the South African government has shown a decided reluctance to intervene unilaterally in the largely unregulated minibus taxi industry, which has been historically dominated by powerful cartel-like taxi associations. Instead, its emphasis has been to cash incentivize the purchase of new vehicles which pass certain safety requirements through a 'recapitalisation' programme.⁴⁵ Although these robust initiatives would come to be largely ignored in a matter of two years, the Michuki Rules are largely considered Kenya's most popular and successful attempt to reign in 'road carnage' since Independence. Historically, such 'crack-downs' highlight the complex regulatory framework through which transportation is governed and, hence, the challenging conflicts that erupt in the wake of centralized state intervention in the sector.

Kenya's road safety lobby has gathered momentum under the neoliberal development policies of President Mwai Kibaki whose overhaul of urban transportation and the building of new port facilities and transit corridors sets this country firmly on the path of an exponentially growing motorization. Where they can be relied upon, statistics gathered by the Kenya Police for the year 2007 showed that there were 2893 fatal accidents compared with 12 470 reports of non-fatal injuries⁴⁶. Statistics vary wildly according to different sources, but credible statistics from the

⁴⁵ See Arrive Alive website, Taxi Recapitalization: <http://www.arrivealive.co.za/pages.aspx?i=2407>, accessed 26 July 2013.

⁴⁶ World Health Organization, *Global Status Report on Road Safety*.

World Health Organization (WHO) in 2009 states that there were 34.4 roadside fatalities for every 100,000 vehicles. Although the accuracy of the data collected is called into question by many observers, epidemiological appraisals demonstrate a 578% increase in road deaths for the period 1962 to 1992. Like South Africa's epidemiological turn, the Kenyan government has framed road deaths and injuries as an emergent public health problem. This re-branding of road safety as a problem of violence and injury prevention is likely to gain further momentum as the regional economy of East Africa (now including Rwanda and Burundi) recovers from the fiscal austerity and armed conflict of the 1980s and 1990s, largely through development policies rooted in infrastructural growth, especially investment in building additional motorways to accommodate the mass increase in registered, often second-hand vehicles. This has led to a further 'infrastructural overload', witnessed during 2010 by a scarcity of available license plates issued to new imports by the Kenya Revenue Authority.

Such behaviorist agendas have a longer, troubled history, at least in the South African context. A sample of apartheid-era publicity posters produced in the 1950s by the National Road Safety Organisation, a mid-twentieth century forerunner to the Arrive Alive campaign, exemplifies this pattern:

[IMAGE ONE: ROAD SAFETY POSTER HERE]

What is striking in these images is the juxtaposition of a strikingly 'tamed' Africa (and African) with more conventional road safety propaganda. In this imagined world of smiling African mothers and dapperly dressed African men in sharp suits, we are told that obedience begets safety. In the space bounded by those zebra stripes, even vulnerable springbok, as the anthropomorphized poster suggests, are safe from the

predations of wild and aggressive drivers (queue the lion).⁴⁷ Such idealized snapshots emphasized the benign but ever-watchful gaze of the state, and at the same time trivialized the very real dangers African pedestrians faced, and still face, in South Africa's automobile-orientated roadscape.⁴⁸

Since 2003 in Kenya, aggressive 'top down' approaches to regulating the public transport sector has met with limited success in mitigating road danger, attributed to poor police enforcement over speeding, drink driving, overloading, and seat-belt or helmet compliance, but signals an otherwise renewed institutional focus on road safety, especially as it is increasingly being framed as a problem for public health interventions. Many of these are organized outside of Kenya and represent a new turn in the shaping of road safety policy and propaganda.

One such intervention, dubbed 'Heckle and Chide', was organized by Georgetown University researchers working in collaboration with local youth activists and representatives from the insurance industry.⁴⁹ This intervention consisted of plying public transport mini-buses (*matatu*) with stickers encouraging passengers to speak up against speeding drivers and assert their rights to arrive safely at their destinations. Couched in a language of 'empowerment', the decals contained graphic even gory imagery of severed limbs, some still clad in clothing or shoes, and exhorted passengers to apply pressure on drivers to obey the Highway Code with the question, "Will YOU Survive the Matatu Ride? Speak Up, Stand Up." It aimed to draw upon a new language and ethos of civic rights to combat a feeling of helplessness among passengers who, since the 1970s, felt they could not influence the recklessness of *matatu* drivers, despite their extremely exploitative relations with the vehicles'

⁴⁷ *A Century of Transport*, 163.

⁴⁸ Currently, roughly 40 per cent of all road traffic fatalities in South Africa are pedestrians; <http://www.arrivealive.co.za/pages.aspx?i=2993>, accessed 08 January 2014 .

⁴⁹ James Habyarimana and William Jack, "Heckle and Chide"; Wilson Odera, "Road traffic accidents in Kenya".

owners and their employers.⁵⁰ Popular satirical illustrator, ‘Maddo’ (Paul Kalemba), regularly features road safety in his weekly montage cartoons, including one that depicts a driver’s response to such ‘empowerment’ by slowing his Mombasa to Nairobi bus to a crawl, infuriating passengers intent on arriving at their destinations.⁵¹

Organized grassroots initiatives to tackle road safety issues have been relatively absent in South Africa as compared to other contemporary developed motorized nations, although an important recent exception to this is the formation of South Africans Against Drunk Driving (SADD), which was registered in 2006 by Caro Smit after her 23 year old son was killed by a drunk driver.⁵² Indeed, the Transport Ministry’s call to form local “road safety councils”, to follow in the mold of earlier safety associations which appeared in the provinces of Natal, the Transvaal and the Cape in the late 1920s and 30s, has been for the most part left unheeded.⁵³

That said, the topic of road safety has entered into the popular imagination in several interesting ways, far from the reach of organized associations or state sponsored initiatives. The first is through media coverage, particularly of the accidental deaths of high profile figures, such as the musician Lebo Mathosa in 2006, the television actress Ashley Callie in 2008 and the more recent death of Nelson Mandela’s granddaughter on the eve of South Africa’s hosting of the World Cup in 2010. Spectacular and gruesome accidents involving large numbers of victims are also a regular staple of the country’s vibrant tabloid press.⁵⁴

Kenya’s highest profile accidents tend to be those involving politicians, such as Mwai Kibaki’s crash with a *matatu* during the 2002 General Election Campaigns, or the deaths of prominent popular musicians, such as rapper E-Sir (Issah Mmari)

⁵⁰ Musalia Mudavadi, Kenya National Assembly Hansard, 1174, (2002).

⁵¹ Paul Kalemba, “It’s a Madd, Madd World”, *The Standard*, 3 March 2012.

⁵² <http://www.sadd.org.za/who-are-sadd>, accessed 8 January 2014.

⁵³ *A Century of Transport*, 162.

⁵⁴ Lee, “Death in Slow Motion”.

killed in 2003 on the notoriously competitive and dangerous Nakuru-Nairobi highway while returning from a concert. Some surviving celebrities of road accidents, such as marathon-runner, Paul Tergat, have been spurred into action by their experiences, dedicating part of their public life to road safety activism. Popular musicians have also contributed to non-state road safety messages, witnessed by Collo Feat & Ulopa's 'No More', a song commemorating the loss of Kenyan hip-hop artists E-Sir, Wicky Mosh, and Lady S, focusing explicitly on drink driving and over-speeding.⁵⁵ Such songs condemning Kenya's poor record of safety have a longer history, as featured in Fundi Konde's 1950 *Ajali Haikingiki* (Accidents Can't be Prevented), a song about a ferry disaster at Likoni, Mombasa. In mourning the loss of prominent people, however, the deaths of the many anonymous others killed in routine accidents, such as when pedestrians are struck by vehicles crossing the road, has led to a certain toleration of such high levels of road deaths, in turn trivializing the trauma experienced by the permanently injured.

In other contexts, how has road danger been perceived in African public culture and imagination? One can also observe the development in the post-apartheid period of a complex set of cultural practices designed to offset perceived notions of road danger. As Gabriel Klaeger notes in the Ghanaian context, praying "on the road" and specific 'pacification rites' at identified high-accident sites were part of a repertoire of accident prevention measures that experienced Ghanaian road users employed.⁵⁶ Ordinary South Africans are confronting the perils of automobility in their own manner, most strikingly through an explicit dialogue with the (accidentally) dead. This communication may involve speaking with the spirit of the dead at the site of a fatal accident, in order to call the spirit back 'home' as well as prevent future

⁵⁵ Collo Feat & Ulopa, 'No More', <https://www.youtube.com/watch?v=dUqIfy50mNk>, accessed 9 March 2014.

⁵⁶ Klaeger, "Religion On the Road".

accidents. An episode of the popular South African televised soap opera “Isidingo” illustrated this African practice for a multi-racial viewership when members of the Mathabane family are shown bringing back the wandering spirit of Lette from the site of her fatal car accident to the safe and enclosed boundaries afforded by the family home. They announce to Lette’s spirit at the end of this ritual, ‘We are here, you are now at home with the people who love you.’ Dialoging with the dead may also involve speaking to the deceased body while it is en route to its burial—a not altogether simple task as many urban South Africans may be buried in rural homesteads many hundreds or even thousands of kilometers away—in order to ensure the safe passage of attendant mourners to the funeral and back.⁵⁷ Interestingly, as a point of comparison, there is little evidence of such spiritual communion in the Kenya case, although the recent mushrooming of Pentecostal-charismatic Christianity in Kenya has ritualized collective prayers at the start and end of most long journeys by car or bus.

CONCLUSION

Road safety policy in both South Africa and Kenya are influenced in ways that perhaps developed motorized countries are not: by the WHO’s “epidemiological turn” towards accident and violence prevention. In a continent perceived as historically ravaged by numerous epidemics, such as HIV/AIDS, it is increasingly common for road safety activists and public health experts to speak of an “epidemic on wheels”; or, of road death and injury as a “disease of development”. What scholars need to be aware of, however, is the ideological effect of framing road safety in terms of public health, a historically emergent paradigm in its own right that disguises, especially in Africa, the infrastructural politics of automobility. Contests over the state’s

⁵⁷ Lee, “Death in Slow Motion”.

infrastructural power include the costs of Africa's historical indebtedness to the IFIs, an under-capitalized transport and haulage industry characterized by repair and second-hand vehicles, and an exploitation of speed to combat the extremely high costs of automotive transport on the continent. Global public health's highly visible presence in Africa following a quarter-century's research into HIV/AIDS, including its growth through the Internet, indicates an emergent kind of infrastructural politics in which the African body is re-imagined as an object of intervention. Road safety and the epidemiological turn is emblematic of such 'techno-politics', where road danger is presented as a problem to be resolved through legislation and medicalization, rather than an ongoing political problem rooted in historical social inequities. The epidemiological turn also tends to obscure popular understandings of road danger, and the ways in which ordinary Africans debate and respond to situations and economies of risk.

We have sought to illustrate that these nation-states are by no means mere carbon copies of a "typical" Africa, but rather foils to accentuate and make visible each other's own histories of struggles with colonialism and enclave capitalism. In these divergent but comparable histories, roads and motor vehicles turn out to be ironic vehicles of political transformation, both instruments of oppression and liberation, and striking symbols of disappointments and aspiration. While this may ring true for many postcolonial countries' experiences of colonial domination and its painful overturning, what might be a more promisingly rewarding perspective is to ask if the road safety "paradigms" espoused, say, by the UN Decade of Action for Road Safety, are grounded state effects of automotive producing countries. This is not to argue for the exceptionalism of the "developing world". Rather, it is to ask:

what kind of governance leads to lowering the burden of road death and injury and what kinds of evidence is given to explain this?

In conclusion and with reference to Peter Norton's admonition in his paper on historicizing road safety in this volume, we see this preliminary exploration of the South African and Kenyan contexts as more "a starting point and an invitation to further research" than a definitive analysis of an "African" approach to road safety.⁵⁸ Yet Norton's framework is also a goad to gather evidence that road safety actually requires something like a "paradigm" for interventions to be viewed, ideologically, at least, as successful in mitigating the social and human cost of road danger. Cast in humanitarian terms, these globalized road safety initiatives add further complexities to the situation on the road in countries like Kenya and South Africa, introducing new forms of global governance, but also replicating the form and meanings of public health activism on a continent long regarded by Westerners as dangerous and, indeed, a kind of technological and political black spot *requiring* intervention.

Underlying the framing of coherent paradigms in the African context are further complex questions regarding the allocation of responsibility for road safety in nation-states that have weak institutional capacities to regulate transport. Where such capacities and institutions exist, such as police or licensing boards, their infrastructural power is often systematically undermined by road users, many of these actors compelled to take huge risks to eke out a living.⁵⁹ While the state remains central to these processes, rarely are government institutions the dominant actors in outlining questions of responsibility over road death and injury, as we have attempted to illustrate. One trend, however, captures our attention: treating road safety as a

⁵⁸ Peter Norton, "Four Paradigms".

⁵⁹ Contrast with Jameson M. Wetmore, "Redefining Risks and Redistributing Responsibilities".

problem of public health, and, one clearly branded by a behaviorist approach focused on the individual.

In contrast to the evident burgeoning historiography of road safety in the developed world, the history of road safety on the African continent has yet to be written, let alone revised. The limited depth of primary and secondary sources at our disposal has necessitated a cautious wariness in assigning particular “paradigms” to the trajectories we have noted here. Even as we write, however, the scholarly landscape of this field is changing, just as the countries we write about are embracing “safety” as part of a new language of civic and human rights.⁶⁰

⁶⁰ See Jan-Bart Gewald et al (eds), *The Speed of Change*; see also part Special Issue on Ethnographies of the Road, *Africa*.

Bibliography

Archival Sources

Kenya National Assembly Hansard.

Oral Sources

Matumo Madikane, interview by Rebekah Lee, 10 January 2001.

Nandipha Ntisana, interview by Rebekah Lee, 26 June 2000.

Online Sources

<http://www.sadd.org.za/who-are-sadd> , accessed 08 January 2014.

<http://www.arrivealive.co.za/pages.aspx?i=2993>, accessed 08 January 2014.

<http://www.arrivealive.co.za/pages.aspx?i=2407>, accessed 26 July 2013.

[http://www.info.gov.za/speech/Dynamic Action?pageid=461&sid=18244&tid=33077](http://www.info.gov.za/speech/Dynamic%20Action?pageid=461&sid=18244&tid=33077), accessed 02 June 2011.

<https://www.youtube.com/watch?v=dUqIfy50mNk>, accessed 9 March 2014.

<http://www.southafrica.info/business/economy/sectors/automotive-overview.htm>, accessed 26 July 2013.

<http://www.capitalfm.co.ke/tv/video/JQOC4di5x-0/ntti-students-riot-over-colleague-hit-by-matatu.html>, accessed on 30 March 2012.

<http://www.decadeofaction-kenya.co.ke/>, accessed 13 March 2012.

<http://www.arrivealive.co.za/pages.aspx?i=2959>, accessed 13 March 2012.

http://www.arrivealive.co.za/document/Nov_PDFS/Nov2006_RegVehs_LicPrDP_Fuel_Dist.pdf, accessed 4 December 2011

Published Sources

A Century of Transport: A Record of Achievement of the Ministry of Transport of the Union of South Africa. Johannesburg: Da Gama Publications, 1960.

Bank, Leslie. *Home Spaces, Street Styles: Contesting Power and Identity in a South African City*. London: Pluto Press, 2011.

Beall, Jo, Owen Crankshaw and Susan Parnell. *Uniting a Divided City: Governance and Social Exclusion in Johannesburg*. London: Earthscan Publications, 2002.

Carrier, Neil. "The Hilux and the 'Body Thrower': Khat transporters in Kenya." In *The Speed of Change: Motor Vehicles and People in Africa, 1890-2000*, edited by Jan-Bart Gewald, Sabine Luning, Klaas van Walraven (Leiden: Brill, 2009): 175-190

Chalfin, Brenda. *Neoliberal Frontiers: An Ethnography of Sovereignty in West Africa*. Chicago: Chicago University Press, 2010.

Chilson, Peter. *Riding the Demon: On the Road in West Africa*. Athens, GA: University of Georgia Press, 1999.

Czegledy, Andre P. "Getting Around Town: Transportation and the Built Environment in Post-Apartheid Cape Town." *City & Society* 16 (2004): 63-92.

Dalakoglou, Dmitris. "The Road: An Ethnography of the Albanian-Greek Cross-border Motorway." *American Ethnologist* 37 (2010): 132-49.

East African Standard, 27 November 1959.

Gewald, Jan-Bart, Sabine Luning, Klaas van Walraven (eds). *The Speed of Change: Motor Vehicles and People in Africa, 1890-2000*. Leiden: Brill, 2009.

Habyarimana, James and William Jack. "Heckle and Chide: Results of a Randomized Road Safety Intervention." *Journal of Public Economics* 95 (December 2011): 1438-46.

Hornsby, Charles. *Kenya: A History Since Independence*. London: I.B. Tauris, 2013.

Ishaque, Muhammed M. and Robert B. Noland. "Making roads safe for pedestrians or keeping them out of the way? An historical perspective on pedestrian policies in Britain." *Journal of Transport History* 27 (March 2006): 115-37.

James, Deborah. "Burial Sites, Informal Rights and Lost Kingdoms: Contesting Land Claims in Mpumalanga, South Africa." *Africa: The Journal of the International African Institute* 79 (2009): 228-51.

Japha, Derek and Marie Huchzermeyer. "The history of the development of townships in Cape Town, 1920–1992." *The Integration and Urbanisation of Existing Townships in South Africa Working Paper no. 2*. Newcastle and Cape Town, 1995.

Kalembe, Paul. "It's a Madd, Madd World." *The Standard*, 3 March 2012.

Khosa, Meshack. "Routes, ranks and rebels: feuding in the taxi revolution." *Journal of Southern African Studies* 18 (1991): 232-51.

Klaeger, Gabriel. "Religion on the Road: The Spiritual Experience of Road Travel in Ghana." In *The Speed of Change: Motor Vehicles and People in Africa, 1890-2000*, edited by Jan-Bart Gewald, Sabine Luning, Klaas van Walraven (Leiden: Brill, 2009): 169-94.

- Lamont, Mark. "Accidents Have No Cure! Road Death as Industrial Catastrophe in Eastern Africa." *African Studies* 71 (2012): 174-94.
- Lamont, Mark. "An epidemic on wheels? Road Safety, Public Health and Injury Politics in Africa." *Anthropology Today* 26 (2011): 3-5.
- Larkin, Brian. *Signal and Noise: Media, Infrastructure, and Urban Culture in Nigeria*. Chapel Hill, NC: Duke University Press, 2008.
- Lee, Rebekah. "Death in Slow Motion: Funerals, Ritual Practice and Road Danger in South Africa." *African Studies* 71 (2012): 195-211.
- Lee, Rebekah. "Death 'On the Move': Funerals, Entrepreneurs and the Rural-Urban Nexus in South Africa." *Africa: The Journal of the International African Institute* 81 (2011): 226-47.
- Lee, Rebekah. *African Women and Apartheid: Migration and Settlement in Urban South Africa*. London: I.B. Tauris, 2009.
- Leys, Colin. *Underdevelopment in Kenya: The political economy of neo-colonialism, 1964-1971*. Berkeley: University of California Press, 1974.
- Luckin, Bill and David Sheen. "Defining early modern automobility. The road traffic accident crisis in Manchester, 1939-45." *Cultural and Social History* 6 (June 2009): 211-30.
- Oberhauser, Ann M. "Semiperipheral Industrialization in the Global Economy: Transition in the South African Automobile Industry." *Geoforum* 24 (1993): 99-114.
- Odero, Wilson. "Road traffic accidents in Kenya: an epidemiological appraisal." *East African Medical Journal* 72 (May 1995): 299-305.
- Mamdani, Mahmood. *Citizen and Subject: Contemporary Africa and the Legacy of Late Colonialism*. Princeton, NJ: Princeton University Press, 1996.
- Masquelier, Adeline. "Road Mythographies: Space, Mobility, and the Historical Imagination in Postcolonial Niger." *American Ethnologist* 29 (2002): 829-56.
- Meyer, Birgit and Jojada Verrips. "Kwaku's Car: The Struggles and Stories of a Ghanaian Long-Distance Taxi Driver." In *Car Cultures*, edited by Daniel Miller (Oxford: Berg, 2001): 153-84.
- Morris, Rosalind C. "Accidental Histories, Post-Historical Practice? Re-reading Body of Power, Spirit of Resistance in the Actuarial Age." *Anthropological Quarterly*, 83 (Summer 2010): 581-624.
- Mutongi, Kenda. "Thugs or Entrepreneurs? Perceptions of Matatu Operators in Nairobi, 1970 to the Present." *Africa: Journal of the International African Institute* 76 (2006): 549-68.

- Nader, Ralph. *Unsafe at Any Speed: The Designed-In Dangers of the American Automobile*. New York, 1965.
- Norton, Peter. "Four Paradigms: Traffic Safety in the Twentieth-Century United States." *Technology and Culture* (this volume).
- Norton, Peter. *Fighting Traffic: The Dawn of the Motor Age in the American City* (Cambridge, MA: Knightsbridge Publishing, 2008).
- Odero, Wilson. "Road traffic accidents in Kenya: an epidemiological appraisal." *East African Medical Journal* 72 (1995): 299-305.
- Packer, Jeremy. *Mobility without Mayhem: Safety, Cars, and Citizenship*. Chapel Hill, NC: Duke University Press, 2008.
- Pirie, Gordon H., "Traveling under Apartheid." In *The Apartheid City and Beyond: Urbanisation and Social Change in South Africa*, edited by David M. Smith (London: Routledge, 1992): 172-81.
- Report of Road Accident Fund Commission 2002.
<http://www.transport.gov.za/library/docs/raf/index.htm>, accessed on 5 December 2011.
- Road Traffic Management Corporation, Interim Road Traffic and Fatal Crash Report 2006.
http://www.arrivealive.co.za/documents/27Jan2007_2006_Interim_Road_Traffic_Report.pdf, accessed on 5 December 2011.
- Road Traffic Report March 2008. <http://www.arrivealive.co.za/pages.aspx?i=2826>, accessed on 5 December 2011.
- Road Traffic Safety Foundation, Annual Traffic Safety Audit 1998. Johannesburg: Automobile Association of South Africa, 1998.
- Schweid, Richard. *Che's Chevrolet, Fidel's Oldsmobile: On the Road in Cuba*. Chapel Hill, NC: Duke University Press, 2008.
- Shaw, Rosalind. *Memories of the Slave Trade: ritual and the historical imagination in Sierra Leone*. Chicago: Chicago University Press, 2002.
- Siegelbaum, Lewis H. "On the Side: Car Culture in the USSR, 1960s-1980s." *Technology and Culture* 50 (2009): 1-23.
- Simone, Abdou Maliq. *For the City Yet to Come: Changing African Life in Four Cities*. Chapel Hill, NC: Duke University Press, 2004.
- Special Issue on Ethnographies of the Road, *Africa: Journal of the International African Institute* 83 (2013).

Statistics South Africa. "Mid-year population estimates, South Africa: 2006," (Pretoria, 2006), accessed 9 March 2014, <http://www.statssa.gov.za/publications/P0302/P03022006.pdf>.

Wetmore, Jameson M. "Redefining Risks and Redistributing Responsibilities: Building Networks to Increase Automobile Safety." *Science, Technology & Human Values* 29 (2004): 377-405.

White, Luise. "Cars Out of Place: Vampires, Tehcnology and Labor in East and Central Africa." *Representations* 43 (1993): 27-50

World Health Organization. *Global Status Report on Road Safety: Time for Action*, (Geneva, 2009), accessed 9 March 2014, http://whqlibdoc.who.int/publications/2009/9789241563840_eng.pdf.

Zylstra, Geoff D. "Whiteness, Freedom, and Technology: The Racial Struggle over Philadelphia's Streetcars, 1859-1867." *Technology and Culture* 52 (2011): 678-702.