

– MULTIPLE TEMPORALITIES OF POLICY CIRCULATION: Gradual, Repetitive and Delayed Processes of BRT Adoption in South African Cities

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Abstract

In 2006, bus rapid transit (BRT) swept across South African cities. Within three years of learning of the Bogotá model of BRT, Johannesburg's Rea Vaya opened, followed shortly by Cape Town's MyCiTi, while several other cities are at various stages of planning and implementation. This article traces the circulation of BRT across the South African urban context to expose the multiple and varied temporalities through which BRT came to appear as the only available solution. These earlier encounters, which include the first published discussion of BRT in South Africa in a 1973 conference report, study visits to Curitiba in the 1990s and a failed attempt to implement a Bogotá-style BRT system in Cape Town in 2003, were instrumental in creating a fertile ground for later adoption practices. While it may appear as if circulated policies shorten the gestation time from policy introduction to policy adoption, these repeated attempts to implement circulated innovations ensure that the turnover only seems accelerated. This article unravels the story of BRT adoption, departing from the theoretical discussions of the policy circulation process as a rapid phenomenon, instead demonstrating that it is gradual, repetitive and at times delayed.

A historical understanding of bus rapid transit

From Curitiba and Bogotá to Istanbul and Ottawa, bus rapid transit (BRT) has proven to be a quick, cost-effective and efficient method of urban transport that combines the speed and quality of rail transport with the flexibility of a bus system. Because of its ostensible success elsewhere, BRT was pursued in multiple cities across South Africa, with systems in Johannesburg and Cape Town becoming operational in 2009 and 2011. While this rapid and complete transformation of the South African urban transport network may appear fast, with a number of local implementers pointing to its speedy implementation as one of its most attractive features, further interrogation reveals a lengthy and protracted policy circulation process riddled with experimentation and failure. This article investigates South African urban transport history to consider how prior experiences with similar types of urban transport—trams, trolleybuses and exclusive busways—inform ongoing decisions to adopt BRT. When the Bogotá model of BRT arrived in 2006, 'it wasn't the first time that South Africans had heard of BRT', said one engineer in Tshwane, 'it was just one of those things that never really stuck' (interview, 3 May 2012). These arguments depart from the prevailing logic in the policy mobilities literature, which understands the policy world to be comprised of 'fast policies', instead displaying a learning process that is lengthy and drawn-out, incremental and at times delayed.

This account of multiple temporalities builds upon the burgeoning literature on urban policy mobilities, which interprets the frantic and fast institutional re-engineering of off-the-shelf prefabricated best-practice policies to shorten policy-making cycles (McCann and Ward, 2001; Peck, 2011a; Theodore and Peck, 2011). The case of BRT adoption in South Africa offers an occasion to consider the process of

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policy circulation as constant, gradual, creeping, at times sluggish and sticky, and at other times loitering instead of prompt and hurried. This article advocates a reappraisal of the circulation process to survey the pertinent experiences advancing local development. By tracing the chain of BRT adoption from its initial forays and through its subsequent failures in South Africa, this research adds a chronological approach to the implementation of BRT, thus shedding light on the process of transnational policy flows and policy adoption. Slow policy circulation has been overlooked in previous research, mostly because it is difficult to locate evidence of incomplete or miscarried mobility. The example of BRT adoption across South Africa supports my claim that policy changes take far longer than usually assumed and that exchanges from bygone years can be fundamental in shaping ongoing mobilities. The learning process, as interpreted here, is prolonged and sequential, and a number of encounters are necessary before it takes root. Consideration for the history of policy ideas reveals that policy circulation is in fact stubbornly dependent on the local context, rather than simply a process of rapid reproduction. When best-practice replication is thought through, we might recognize that cities themselves create their models; policy models are neither concrete nor definite but shaped and reshaped by the ephemeral political objectives of city leaders. It is therefore important to recognize and honour the evolution of policy models and their history to understand how and why certain policy models are circulated and adopted as best practice, while others are ignored.

A more critical perspective on BRT adoption also introduces new evidence to explain BRT replication to supplant perspectives that attribute its propagation to the operational, experiential and financial viability of BRT (Gilbert, 2008; Deng and Nelson, 2011). In South Africa, researchers have considered the influence of BRT on transport planning (Kane and del Mistro, 2003) and personal travel behaviour (Behrens and del Mistro, 2010) amidst concerns for formalizing the affected transit operators (Schalekamp and Behrens, 2013) and the viability of the system (Salazar Ferro *et al.*, 2013). Further research into South African policy experimentation and its influence on BRT adoption might lead to a greater understanding of the delays in realizing other massive infrastructure investment in South Africa, namely the Gautrain Rapid Rail network (a high-speed railway connecting Johannesburg and Pretoria) and the Gauteng Freeway Improvement Programme (a series of upgrades to the region's main roadways, with a notably long history).

This article draws evidence from nearly one hundred interviews with South African and global policy actors involved in BRT implementation, as well as reviews of relevant learning events, materials and observations. All interviews were expert interviews. The arguments presented here emerged inductively through discussions with the actors regarding elements of BRT construction, design, financing and implementation as well as their learning experiences on study tours, and through interacting with international policy mobilizers. Interviews were selected as the primary research method to understand *how* people learn rather than *what* people learn. By following the respondents' learning process, I was able to trace the chronology of events and experiences from within the process. However, interviews were not the only methodology used. I also reviewed more than a hundred important planning and policy documents found in the archives at both municipal and private planning offices.

The section that follows theorizes practices of learning across cities, criticizing the literature for its presentism, and suggesting that an historical approach might bring to light the local dynamics guiding practices of adoption. This leads to an exploration of South Africa's history of urban public transport, concentrating on the introduction and removal of horse-drawn trams, electric trams and trolleybuses. The narrative then looks at the adoption of BRT in several South African cities. From there, it turns to evidence of BRT in Cape Town and Johannesburg, as well as to the exchanges between these cities and their Western counterparts. Attention is paid to transport developments in the

post-apartheid era to reflect on the learning taking place between South African cities and Curitiba, then the exemplar of transit-oriented development. The section also shines a spotlight on a failed attempt to implement a Bogotá-style BRT system in Cape Town. The concluding section sums up the various arguments, emphasizing the value of slow policy circulation by highlighting the local dynamics that inform the mutation and localization of circulated best practice.

Theorizing practices of learning across cities

The widespread adoption of BRT in South Africa denotes a process of policy circulation in which localities adopt successful global innovations under the assumption that it will be similarly effective locally. A growing body of recent literature in geography and urban studies is dedicated to reconceptualizing the form and function of this mobility (McCann, 2011a; McCann and Ward, 2011; McFarlane, 2011; Peck, 2011a). Previous research has considered the replication of similar forms of art and creativity (Peck, 2011b), harm reduction (McCann, 2011b), planning and design (Guggenheim and Söderström, 2010; Robinson, 2011), sustainability (Temenos and McCann, 2012), urban governance (Cook, 2010; Ward, 2010; 2011; Didier *et al.*, 2012; Peyroux *et al.*, 2012) and welfare (Theodore and Peck, 2000; Peck and Theodore, 2001; 2010a). These studies propose that practices of circulation have become a regular and routine aspect of contemporary policy creation. This literature concentrates on the processes and mechanisms through which ideas become mobile, as well as on their mutation across divergent contexts (Peck and Theodore, 2010b; Peck, 2011a). Studies also attend to the figures, including policy mobilizers, consultants, non-governmental agents and organizations copying, mobilizing and emulating best-practice policy models (Stone, 2004; McCann, 2011a, Wood, 2014b). Absent from these investigations is a focus on temporality, which is necessary for a thorough understanding of the local dynamics and contexts informing decisions to adopt policies from elsewhere.

Arguments supporting a crisis-driven approach towards policymaking through the hurried acquisition of international policy models are rooted in these policy-mobilities arguments. Such claims of 'fast policy' (Peck, 2002; 2003; 2011a) perceive a rapid, anti-political circulation process, which seems to be reducing the gestation period between introduction and application. Measures of success in policy circulation tend to be linked to its speed and temporality, with scholars reasoning that the speed of learning is critical to the likelihood of implementation. Policy actors reinforce these arguments as an excuse for the hasty and unbridled manner in which they adopt circulated policies and practices. Perhaps Offe (1996) was the first to argue that 'the pragmatic copying ... tries to bypass, or at any rate shorten [the] period of gestation', which Peck has since characterized as fast policy to describe the 'unstoppable processes of fast-policy conversion' (2011a: 12). Much of the fast-policy discourse rests on the prevalence of policy circulation between the United Kingdom and the United States in the 1980s and 1990s (Dolowitz, 2000). Certain literature proposes that explosive tactics create momentum to drive through systematic transformation, contending that a more incremental approach would not sustain implementation procedures (Peck and Theodore, 2010a; 2010b). In so doing, they take for granted these processes as hectic and hurried, arguing that ideas and innovations are circulated and adopted because of their prevailing success elsewhere, which make them easy to implement within local policy-making cycles.

In contrast to the prevailing presentism, there are a number of historical illustrations of municipal interactions influencing local decisions regarding health, hygiene and infrastructure systems in the early part of the twentieth century (Saunier, 2002). Studies of European municipal collaboration prior to the first world war (Dogliani, 2002; Gaspari, 2002; Saunier, 2002) and town twinning after the second world war

(Vion, 2002; Clarke, 2010; 2011) rely on historical examples as the groundwork for more modern social and political innovation (see also Healey and Upton, 2010). Religious and scholarly interchanges took place between cities in the Greek, Roman and Mongol empires (Sutcliffe, 1981; Saunier and Ewen, 2008). Herodotus mentioned diffusion as a phenomenon as early as 500 years before the modern era; in the second century, Palmyra adapted Roman concepts of urbanity; and in the 1700s, Peter the Great implemented European architectural models in St Petersburg (Healey, 2013). Thus, policy circulation cannot be understood only as a recent phenomenon. In a symposium in this journal, Harris and Moore (2013) focus on planning history and practice by highlighting the rich tradition of policy circulation (Healey, 2013; Huxley, 2013). In spite of this recent interest, contemporary discourse still avoids utilizing a temporal approach to understanding contemporary policy circulation processes.

The arguments that follow bridge this lacuna between historical and policy circulation studies by illustrating the gradual, protracted and idiomatic manner through which transnational best practice proceeds gradually, in contrast to the spontaneous and hasty processes documented in scholarly literature. Regardless of the speed at which best practice circulates, policy implementation remains cumbersome because policy is inherently political, involving people and personalities as well as regulations and restrictions, and therefore it takes time to localize it. Unlike Kingdon's 'policy window' (1995), which assumes a random confluence of people, choices, problems and solutions that come together to enable learning, the arguments here suggest that ideas acted upon within dynamic and relational space enable policy decisions to be made. There are peaks—periods of circulation facilitated by either need or opportunity, and valleys—periods during which circulation is minimal. These arguments, which conjure the notion of rhythm—'repeated moments of movement and rest' (Cresswell, 2010: 23)—are useful in order to advance arguments that policy circulation is recursive. Thus best practice only appears to arrive more quickly. Policies from elsewhere are not adopted simply because they are presented, no matter how appealing the suggestion, but rather deliberated upon slowly, perhaps by a number of different actors who have faith in their experiences elsewhere, or possibly through entrenched financial interests.

This article also offers an opportunity to evaluate the notion of failure or misappropriation within the policy circulation process. In more recent discussions of fast policy, Peck substantiates his claims to rapid circulation, explaining that policies spread 'not by succeeding but by failure, as the underperformance of first-round reform efforts became the rationale for more stringent measures' (2011a: 10). This article substantiates these arguments within circulations of transport solutions into South African cities, demonstrating that policy adopters might have several encounters with circulated notions prior to their adoption. Such unsuccessful outcomes are the 'seeds' that are necessary to prepare a 'fertile ground' for future policy circulation endeavours. When BRT finally arrived in 2006, it landed on fertile soil, wet from policy experimentation. Thus these arguments offer a new approach to policy circulation, demonstrating—theoretically and empirically—the importance of temporality in understanding practices of policy circulation.

Tracing transport innovation in South Africa

South African transport history is composed of various instances of adoption of latest transport technology before sudden and complete replacement by more modern innovations. Architects and urbanists frequently pursued antidotes to local urban challenges in British town planning models, which diffused through the global hegemony of Western imperialism and were implemented with relative ease (King, 1980; Lemon, 1991). The nascent mining outposts and port villages of South Africa followed the example of their European counterparts by separating the worker from his place of

work and the factories from the inner city, all of which necessitated the development of a viable means of public transport. In the 1920s, the British garden city model, which called for efficient, decentralized residential areas to replace the dirty and crowded cities of industrialized England, was easily replicated in Pinelands (Cape Town), later leading to the development of segregated townships in Langa (Cape Town), Lamontville (Durban) and McNamee (Port Elizabeth) (Maylam, 1995). At times, governance drove technological transformation, while in other instances, profit facilitated the localization of best practice. It is within this context of mobility that we can demonstrate how new and recycled ideas relating to transport were introduced, circulated, replicated and replaced across South African cities.

In Johannesburg, the tale of transport begins with horse-drawn streetcars in April 1889, when the government granted the Johannesburg City and Suburban Tramways Company a concession to construct and operate the city's first tramways. Services began operating in February 1891 between Jeppestown and Fordsburg, to transport the white working-class miners residing there (Norwich, 1986; van Onselen, 2001). Similar services opened in Cape Town in 1863 (Gill, 1961), Durban in 1880 (Jackson, 2003), Port Elizabeth in 1881 (Harradine, 1997) and Pretoria in 1897 (Joyce, 1981). The sensation of streetcars was short-lived for a number of reasons—notably the maintenance of the animals, which proved to be relentless.

Electric trams soon replaced their horse-drawn counterparts, with Cape Town being the first to introduce a local service between Adderley Street and Mowbray Hill in 1896 (Joyce, 1981). Their success in Cape Town led to their installation across South African cities: in 1897, Port Elizabeth opened its electric tram; Durban opened in 1902 moving people from town up Florida Road to the Berea (Jackson, 2003); Johannesburg electrified its previously horse-drawn service in February 1906 (Van Onselen, 2001; Sey, 2012); and Pretoria electrified its tram system in 1910 (Joyce, 1981). For the most part, private entrepreneurs built these services and, once profitable, the city acquired the system. Electric tram services were the global model of excellence around the world and therefore the presumed remedy for overcrowding and congestion in South African cities.

The triumph of the electric trams was also fleeting. By the 1920s, tram patronage declined significantly as private car ownership increased, and trolley buses captured the sprawling suburban market (Rosen, 1962). The once beloved trams were now noisy, uncomfortable and slow (Joyce, 1981); whereas they once facilitated the rapid expansion of the city, they were now impeding its growth. The Spencer Commission, sponsored by Johannesburg to investigate the long-term viability of the tram network, reported that the density per acre was substantially lower in the city's northern suburbs than that of British cities of comparable size and that, as a result, public transport links were unlikely to be enduring (Beavon, 2004). The commission's findings led to the subsequent closing of all trams services across the country with the same eagerness with which they were first implemented. Both Cape Town and Pretoria terminated services in 1939, Port Elizabeth in 1948 (Patton, 2002), Durban in 1949 (Jackson, 2003), while Johannesburg, the last city to lay tracks (in 1948), was also the last city to terminate this service in 1961 (Hart, 1984).

These patterns repeated for trolleybuses, implemented as the 'trackless tram' in South African cities during the 1930s, which were similarly replaced—in Cape Town in 1964, Durban in 1968 and Johannesburg in 1986—by diesel buses. Like the tramcars, the trolleybuses were also imported from Europe. Not surprisingly, in the 1980s, trams briefly re-emerged as the transport solution of the future, with calls to reinstall municipal tram networks (*The Economist*, 1989). However, diesel buses dominated the urban landscape until the expansion of the minibus taxi industry that, when deregulated in 1986, demonstrated the failings of buses to service the extraordinary demands of the low-density urban form.

One transport planner instrumental in the implementation of Cape Town's MyCiTi BRT system interprets these various cycles as part of a long history of transport recycling in which local South Africans introduce the latest transport innovation only to replace it when a more modern solution arrives. 'They look different and we give them different names. Light rapid transit is the old tramway system with new technology', he explains. 'So, how does learning happen? It is through evolving ideas—understanding those ideas and then interpreting them for application in a different socioeconomic, climatic condition' (interview, 3 April 2012). The introduction and removal of each of these services reflects the socio-spatial context in which transport is provided and used, and speaks to the wider scope of this article: how does South African experimentation with transport innovation inform ongoing BRT adoption? And, more theoretically, how does previous experience with a similar innovation inform local adoption practices? These considerations will be used to analyse the multiple temporalities through which BRT circulated.

BRT adoption in South African cities

BRT first arrived in its current form in South Africa in July 2006 at a special session of the Southern African Transport Conference, the largest transport convention in the region and a critical platform for dialogue on issues ranging from finance to public transport. Lloyd Wright, a global expert on BRT, was invited by the National Department of Transport to host a day-long workshop on the principles, attributes and engineering specifications of BRT. This learning was reinforced in August of the same year through a series of workshops for Cape Town, eThekweni, Johannesburg and Tshwane, targeting both politicians and transport planners. Inspired by these presentations, Johannesburg planners and politicians travelled to Bogotá (Colombia) and Guayaquil (Ecuador) in August to see these systems in operation (see Wood, 2014a and 2014b for details). Three years later, in August 2009, Rea Vaya opened in Johannesburg as the first full-feature BRT on the African continent, promising to herald a new era in South African public transport. The initial phase moves 45,000 passengers each weekday on 143 buses along the 25.5-kilometre route between Soweto and Johannesburg's city centre. In October 2013, Rea Vaya Phase 1B began operating a second route, becoming one of only a handful of systems worldwide to introduce a subsequent line. Based on its success elsewhere, Johannesburg officials anticipated high ridership on an unsubsidized system operated by incorporating existing transit operators.

In May 2011, Cape Town launched Phase 1A of its MyCiTi Integrated Rapid Transit service to Table View. The 16-kilometre route moves 30,000 patrons on 267 buses each weekday, and is managed by two former minibus taxi companies. Services include trunk services, feeder services, trunk extensions and supporting pedestrian and bicycle facilities, with stations every 800 metres. In November 2013, Cape Town also expanded the MyCiTi system, demonstrating that BRT is an affordable, convenient and efficient transport solution that offers a high-quality, competitively priced service to riders and profit to BRT operators, while simultaneously addressing issues of poverty, employment and inequality in a democratic, prosperous and united city.

BRT planning and construction is ongoing in a number of South African cities: in July 2012, both Rustenburg and Tshwane began construction on the Rustenburg Rapid Transport and A Re Yeng systems, respectively. In November 2013, eThekweni launched plans for Go Durban!, a system of nine transport corridors linked by bus, rail and taxi services, which is expected to be completed by 2027. Not all cities have had such a straightforward process of adoption. Plans for BRT were announced in Nelson Mandela Bay in 2008, but because of prolonged disagreements between the city and the affected taxi operators, construction stalled and the project remains in a state of postponement, while ownership and operational arrangements are being negotiated. In spite of such challenges, additional systems are being discussed—Ekurhuleni's rapid

public transport network is scheduled to begin operating in 2016, and both Buffalo City and Polokwane have completed an operational plan for BRT and are considering implementation—bringing the total number of potential BRT systems in South Africa to nine. It appears that BRT is firmly established as an affordable, reliable and predictable solution to South African urban transport needs.

Planting the seeds of BRT in South Africa

Previous experience with public transport led some South Africans to argue that BRT implementation has been slow, since many of them had already spent years planning for a major urban transport system. ‘I don’t think it could have happened without there being so much fertile ground in the city’, rationalizes one of the chief engineers of Rea Vaya (interview, 31 January 2012). Other respondents utilized similar vocabulary related to fertility, reasoning that that this ‘fertile ground ... prepared people at the political level to accept BRT’ (interview, 9 April 2012); another reasoned that ‘once you plant a seed, it’s tough to get that seed to grow, but very often you see replication very quickly’ (interview, 23 February 2012), referring to the process through which BRT has become universal best practice. A number of South Africans rooted their seemingly speedy support for Bogotá-style BRT within concepts of density, growth management and transit-oriented development mentioned in policy documents and reports years earlier, and later used it to inform the introduction of BRT in South Africa. Several others had seen BRT projects on government-sponsored study tours to Curitiba (Brazil). Some had even tried to implement BRT projects locally. The narratives that follow emerge from various conversations signalling that BRT has a longer, more convoluted history than ordinarily presented. The remainder of this article interrogates the role of multiple temporalities of learning—gradual, repetitive and delayed experiences with notions of BRT—in influencing ongoing adoption.

– Gradual processes of learning

The earliest written discussion of BRT is found in a 1973 conference paper, ‘Bus lanes and bus priorities’ proposed by a transport engineer working in Cape Town and presented to delegates at the South African Institution of Civil Engineers quinquennial conference in Johannesburg. In the paper, he offered a road-based solution to the problems of increasing car ownership and spatial fragmentation in South Africa—a bus running through the median of the roadway moving with the fluidity of a train—and he ascribed its potential success in South African cities to its achievements elsewhere. In particular, he references bus lanes, bus priorities, comfortable buses and carefully sited bus stops in Chicago, Los Angeles and New York in the United States as well as London, Nottingham and Southampton in the United Kingdom. Within South Africa, he directed attention towards the exclusive bus lanes in Johannesburg. These lanes were delineated from ordinary automobile traffic by solid white lines, white plastic posts and letters painted in the centre stating ‘bus only’, concepts currently in use in Cape Town’s MyCiTi and Johannesburg’s Rea Vaya systems.

The first evidence of a BRT-like intervention was in central Johannesburg, where a special bus-only lane was established to increase the flow of public transport during peak hours. At another intersection, priority was given to buses turning right because it was found that queues formed during the morning commute. Rea Vaya currently operates in both these areas. Reference is made to these schemes in the records from the 1973 conference of civil engineers, suggesting that even then South African cities were learning alongside one another. Written comments also associate these South African interventions with a new service launched in London—a network of limited-stop bus services utilizing a reserved lane, called ‘speedbus’, linking suburban areas that were not served by the Underground system. In the conversation that followed, the conference chairperson mentioned that there were experiments with exclusive bus

lanes on the freeways in Cape Town, but that the local bus company considered these to have failed because of insufficient ridership. The lanes described closely resembled the bus and minibus-taxi lanes on the N2 highway implemented in Cape Town more than a decade prior to BRT adoption.

Many of these early initiatives were developed by South African engineers and planners who were aware of best practices such as BRT taking place elsewhere, but also attentive to the local financial constraints that made it difficult to fund major capital improvements, as well as governmental limitations on construction, management and operation of formal transport systems. Several had learned of and experienced innovative transport solutions through educational or employment opportunities in Europe and North America. One transport engineer in Cape Town remembers not only reading about but also experiencing transit-oriented development while at the University of California, Berkeley, in the 1980s. 'These things have been around, but getting South Africans to believe in public transport was a major mission', he recalls (interview, 5 June 2012). Another Johannesburg-based engineer recalled his experiences working on the Jubilee Line of the London Underground when implementing Rea Vaya. These comments imply a learning process that is gradual and subtle, even sluggish, in which actors slowly warm to new ideas. Several of these South Africans remained committed to the principles of good public transport and called upon these earlier encounters when introducing BRT in 2006.

– Repetitive processes of circulation

The circulation of international urban transport solutions increased after apartheid ended in 1994. Ideas about efficient cities and moving people rather than vehicles fit well within post-apartheid transformation, which called for a reconsideration of the South African urban form. There was a lot of 'policy thinking' in this period, resulting from the unbanning of the ANC, the forthcoming elections and the writing of the new national constitution, explained one Johannesburg-based engineer involved in planning Rea Vaya. She described the South African urban context as 'a very fertile sort of place for discussing new ideas, and people were searching for ways to deal with South African city problems like taking very poor people very long distances' (interview, 31 January 2012).

During this time, Curitiba became the model for innovative land-use models, welfare programmes and urban transport. Although concepts of BRT, such as buses running in exclusive trunk median bus lanes and stations with controlled entry/exit points can be traced back to 1937, when Chicago outlined plans for express bus corridors, Curitiba's Rede Integrada de Transporte, which opened in 1974, is reported to be the first complete BRT system (Wright, 2007). Many of those currently implementing BRT in South Africa reference their learning to Curitiba and the study tours through which ideas and practices found their way to the forefront of discussions in civil society. Through these fact-finding visits, South African planners and politicians could meet with South American BRT experts, gaining explicit knowledge on constructing, financing and operating BRT systems as well as a tacit understanding of the political approaches to realizing formal public transport systems in South Africa. One transport expert described Curitiba as 'iconic here in South Africa' (interview, 31 January 2012), and another called it 'the mecca of international planning ideas long before Bogotá' (interview, 7 February 2012). Curitiba remained a common reference point, evidenced by several South African planners and politicians repeating Curitiba's slogan 'Think Rail, Do Bus' in reference to ongoing BRT adoption.

Visits to Curitiba were instrumental in helping South Africa prepare the 1996 White Paper on Transport. A professor of transport in Johannesburg organized a tour to Curitiba for those who were composing the White Paper. He remembers thinking that BRT would be an ideal solution in the South African context because it would

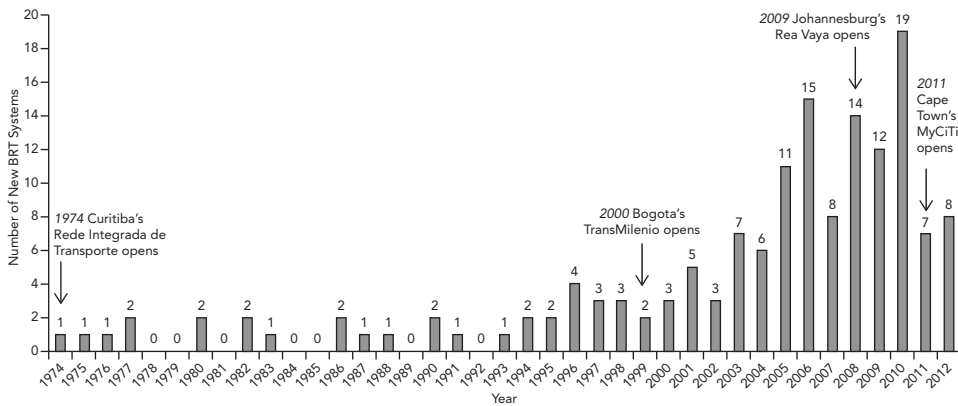
be cheaper and more flexible than light rail and could thus easily be adapted to the changing shape of the post-apartheid city. Other outcomes of this learning were evident in various planning reports including, for example, the Koeberg Road Management Strategy, a traffic and transport report published for the City of Cape Town in 2000 by the same transport engineering firm that sponsored the 1973 report mentioned earlier.

These repetitive exchanges were necessary for preparing the fertile ground needed for ongoing implementation of the Bogotá model of BRT and planted the seeds for innovation within the South African context. Lloyd Wright, a world-renowned expert in BRT, spoke of the need to present the achievements of BRT on a number of occasions in South Africa. 'I remember presenting Curitiba often in the mid-1990s and it was interesting, but the problem is that when you only have one city, then people just dismiss it and say that is just a one-off, but when there are ten or twenty of these projects then you start building up a critical mass and everyone wants to do something' (interview, 23 February 2012). This suggests that policy learning is recurrent and that through a number of temporal episodes, South Africans became familiar with the possibilities of implementing BRT. Although BRT 'didn't happen right away', as one transport expert put it, these various experiences inspired future thinking about urban development and transport planning (interview, 28 February 2012).

– Delayed processes of adoption

In the new millennium, Bogotá surpassed Curitiba as 'the international exemplar for developing world countries', recalls one transport academic in Cape Town (interview, 7 February 2012). TransMilenio, which opened in 2000, features 388 kilometres of specially designed dedicated trunk busways and is expected to carry 80% of all transit trips in Bogotá upon its completion in 2016 (Mojica, 2011). It was the 'game-changer', as it was the first comprehensive BRT system built in a major metropolis to replace an unregulated and unruly transit industry and thus considered a more analogous example to South Africa than Curitiba. In addition to providing an example of the infrastructure of BRT—dedicated median lanes, iconic stations with high-floor platforms, off-board fare collection—TransMilenio importantly also demonstrated methods for incorporating existing transit operators, a major issue for urban transport in South Africa. Much of its current circulation can be ascribed to the dynamic and vehement promotion of the system by Bogotá's former mayor Enrique Penalosa and to his ties with the Institute for Transportation and Development Policy, who together hyped BRT as the most appropriate modern solution for localities with limited financial and institutional capacity. That was when 'we saw the second love affair happen' (interview, 7 February 2012), which included a number of visits by international transit experts with experience in building BRT and a host of government-sponsored fact-finding visits to Bogotá (see Figure 1).

By this time, South African cities were already in the process of improving their urban transport systems: Johannesburg was realizing its Strategic Public Transport Network (SPTN), a plan first approved in 2003 and aimed at introducing a more coherent, organized grid-like shape to the existing public transport network. The SPTN, which included 250 kilometres of public transport priorities on existing lanes, was designed to enhance the speed and service of existing transport systems. Cape Town was also implementing a number of public transport interventions, including a reversible lane on the R27 to Table View and the bus and minibus-taxi lanes on the N2 highway. As early as 1999, Cape Town had plans to implement a version of BRT along Symphony Way in Blue Downs similar to the Bogotá model of BRT based on learning from Grenoble (France). None of these interventions were as radical as BRT and none called for the formalization of the taxi industry nor did they address the role of the municipality in system operations. While local planners and politicians were aware of



NOTE: Notice the slow progression of the concept until Bogotá's TransMilenio opened in 2000. However, it was not until 2005 that BRT became a universal concept. The fact that 19 systems opened in 2010 but only 7 systems opened the following year suggests that there may be various peaks and valleys in the adoption of the concept.

FIGURE 1 Transnational timeline of new BRT systems adopted from 1974 to 2012, beginning with Curitiba's Rede Integrada de Transporte (graph compiled by the author, based on open-source data available from the Global BRT Data Consortium, available at <http://www.brtdata.org>)

better solutions elsewhere, planning is a lengthy, laborious process that relies on a host of local financial, institutional and political conditions.

Failure is a critical component of these delayed processes of learning. South African planners utilized their learning from Bogotá and Curitiba in 2003 in an attempt to build South Africa's first BRT route along Klipfontein Road in the south-eastern part of Cape Town. Like the TransMilenio, the Klipfontein BRT was to run along the middle of the road, with dedicated stations and prepaid boarding. The project was advertised as a 'mobility strategy' (Williams, 2003) through which a mostly desolate stretch of road could be revitalized through coffee shops and curbside cafés as well as crèches, hardware stores, newsagents and supermarkets to serve the tens of thousands of BRT users. For various financial, political and technical reasons, or perhaps because the timing was simply not right, the Klipfontein Corridor never became a reality, but although unsuccessful, the project laid the groundwork for a major intervention in 2006 by revealing what was possible in South Africa. One transport advocate stated that when BRT re-emerged in 2006, 'the fertile ground then had some fertilizer strewn on it' (interview, 7 February 2012).

The Klipfontein experience was heeded across South Africa, with a number of transport planners in Johannesburg, eThekweni and Rustenburg—in addition to those from Cape Town—mentioning it as instrumental in ongoing BRT planning. Several suggested that the Klipfontein Corridor did not so much fail as morph into contemporary plans for BRT within Cape Town and across South Africa. The urgency to capitalize on this learning was further accelerated by South Africa hosting the 2010 Soccer World Cup, which resulted in various policy frameworks and legislation inviting cities to plan for integrated transport networks. A funding scheme, the Public Transport and Infrastructure Systems Grant, was launched in March of 2005 to support investment in public transport infrastructure, including planning, construction of new systems and improvements to existing systems. However, the decision to proceed with BRT rather than an alternative scheme remained the independent decision of municipal policymakers. Those with prior experience with BRT 'kept it alive' and 'a lot of that did

carry through to some of the projects that came to fruition in 2006', urged one South African transport planner (interview, 11 April 2012). Johannesburg's SPTN became the system plan for Rea Vaya in 2006, and in Cape Town the starter route simply shifted from Klipfontein to the R27. A BRT system is set to be built along Klipfontein Road in Phase 2 of the MyCiTi system. While local decisions regarding circulated ideas can be delayed by lack of funding, postponed because of politicking, or become stuck in bureaucracy, learning is ongoing.

These narratives illustrate the multiple temporalities of BRT learning, framing contemporary adoption practices within the protracted and idiomatic nature of policy circulation processes. BRT did not arrive in South Africa in 2006 as an unknown entity, but rather as part of various good transport planning and transit-oriented developments that were already present and had been experimented with on several previous occasions. The existence of these seeds of BRT in South Africa substantiates the theoretical claims in this article that policy circulation is a gradual, repetitive and delayed process.

Processes of slow policy circulation

This critique attends to the varying temporalities of policy mobility by demonstrating that BRT circulation is a more convoluted and long-lasting process than ordinarily considered. This article investigates several earlier encounters, interpreted as 'gradual processes of learning', which include the process of policy learning that took place through conference proceedings in the 1970s, 'repetitive processes of circulation' during which South African regularly visited Curitiba to investigate its BRT systems, and 'delayed processes of adoption' such as protracted learning from Bogotá and a failed attempt to implement a Bogotá-style BRT system in Cape Town in 2002.

These patterns of innovation and experimentation in the story of BRT circulation illustrate the need for persistent introduction and alteration before adoption can occur. My arguments move beyond the literature of fast policy, which reason that policy circulation is a 'clumsy form of crisis displacement' (Peck, 2002: 350), reflecting instead on a process of 'slow policy' and the need for serial introductions before the innovations take root locally. In the modern era, knowledge of international policies may be exchanged more frequently through additional fact-finding trips, interpersonal contacts and the greater role of international advocacy, but acts of sharing innovation do not automatically lead to uptake and shortened policy cycles. Constant reminders normalize innovation within the policy environment, thereby making it the only available solution. While it may seem as though circulated policies shorten the gestation time from policy introduction to policy adoption, gradual and repetitive attempts to implement circulating innovations ensure that when the timing is right, turnover time appears accelerated. This more exhaustive exploration of the circulation process also offers an opportunity to depart from the theoretical discussions of policy mobility as a contemporary phenomenon of fast policymaking, instead exposing a history of protracted and idiomatic learning.

The history of policy innovations and its influence on BRT adoption add a critical layer to the scholarly literature on policy circulation. In the first place, as in the past, practices from elsewhere are adopted because of the particularities of the local policy actors and socio-political circumstances that shape each individual instance of learning. Slower processes of adoption may result from careful consideration of alternatives, financial limitations and institutional politicking—all of which are firmly grounded in local circumstances. Greater understanding of the context of mobility and the role of local conditions in the localization of international best practice adds a counter-argument to the suggestion that policy circulation is characterized by the pervasive influx of supply-side solutions, usually introduced by policy experts from outside the locality, who create, package and sell prototypes as best practice. The understanding

of multiple temporalities also suggests an important relationship unfolding between South African cities that are adopting BRT simultaneously. My historical approach diminishes the power of international experts and turns the spotlight on the local policymakers and localities in which global best practice is adopted.

The final theme that emerges from a review of public transport experimentation is the role of specific innovations and the manner in which policy ideas mutate and transform during the circulation process. In this instance, variations of BRT appeared in South Africa several times before being introduced in the urban terrain. The Bogotá model was adopted because, in addition to its technical accomplishments, it also included a mechanism for incorporating existing transit operators, an improvement over the Curitiba model. This socio-political feature made it attractive to cities around the world that were wrestling with informal systems, and it was especially necessary for attracting support in South Africa. It seems that policy ideas change as they circulate. However, such mutation happens not only across geographical space but also over time. A greater understanding of the multiple temporalities of learning explains why BRT, rather than alternative forms of urban transport, was implemented.

The patterns of innovation and experimentation outlined in the story of BRT circulation illustrate the need for persistent introduction and alteration before adoption can occur. Certainly, the circulation of global ideas can be a gruelling process, and thus time is a critical factor in policy adoption. Innovations such as BRT have spread across the globe, not through a process of fast policy, but rather by emphasizing hegemonic power that relies on repeated suggestions that ultimately led to it being endorsed as best practice to local policy implementers. The arguments in this article therefore make an important contribution to existing literature on policy circulation by considering the way in which best practice flows through a more subtle and consistent method of persuasion.

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