Airports on the move? The policy mobilities of Singapore Changi Airport at home and abroad

Rachel Bok
National University of Singapore, Singapore

Abstract

Understanding airports as both objects and agents of policymaking, this paper critically examines the policy mobilities of Singapore Changi Airport by exploring its constructions, travels, and consumptions as a 'model airport' within and beyond Singapore. The argument presented is twofold. First, a historical approach to policy mobility usefully highlights how contemporary policy flows cannot be understood in isolation from earlier historical travels or reduced to movements triggered primarily by processes of urban neoliberalism. Second, such sensibilities are especially vital when approaching Asian cities where modes of regulation are not straightforwardly neoliberal, but are also underpinned by diverse nationalist imperatives that filter into policymaking motivations. This paper also emphasises the complex path-dependent relationship shared by travelling models and their cities of origin, illustrating how such territorial linkages function to both enable and constrain policy travels, but are nevertheless difficult to detach from travelling models.

Introduction

As an airport that has achieved a degree of prominence and singularity amongst international audiences to the point that it is frequently invoked and emulated as a 'model', Singapore's Changi Airport seems almost ubiquitous across various landscapes, albeit in vastly different forms. Today, Changi stands both as a shorthand for Singapore's world-renowned aviation facilities and management operations, and a signifier of a particular brand of Singaporean efficiency and reliability.

Present-day Changi, however, is a far cry from the earlier rundown and congested landscapes of Kallang and Paya Lebar, where Singapore's aviation operations first commenced in the 1930s. In 1955, when it became evident that neither Kallang nor Paya Lebar was suitable for long-term aviation operations, the Singapore state decided

Corresponding author:
Rachel Bok, National University of Singapore, Geography, AS2 #03-01, 1 Arts Link, Kent Ridge, Singapore 117570, Singapore.
Email: rgb@nus.edu.sg

to construct an airport in the east of Singapore at Changi. Whilst the site at Changi was undergoing construction, state actors visited major airports in the US and Europe on study trips to learn how to develop and manage a major international airport. Changi was officially opened in 1981. 1988 marked Changi's entrance into the 'big leagues' when it topped international airport rankings for the first time to win the highly coveted 'Best Airport Award' by renowned publication *Business Traveller*. Two years later, Changi began its policy-making operations as an airport management firm, branding itself as a model of airport management to provide consultancy and policymaking services to other airports. With the aim of expanding its services as an international airport firm, Changi was corporatised – but continues to be fully owned by the Singaporean state – in 2006 to form Changi Airport Group (CAG).

Several things are evident here. First, that Changi remains an explicitly government-owned entity speaks to its national and political significance, especially considering how global city-state Singapore's operations have come to hinge on Changi both as a monument crucial to nation-building and a critical link to the global economy. Second, and reflective of wider trends of airport globalisation, Changi's policymaking identity emerged only after it had been internationally 'certified' as a 'Best Airport'. Third, the existence of earlier aviation landscapes and the ongoing study trips to various international airports indicate that Changi did not begin its operations on a blank slate; it is the ongoing translocal product of various historical travels within and without Singapore. Not merely a form of functionalist transportation infrastructure, Changi has travelled through, and in the process remade, global circuits of aviation knowledge, both as a model to be aspired to and a firm purposefully shaping international aviation landscapes.

This paper aims to critically examine the policy mobilities of Changi by following its constructions, travels, and consumptions as a 'model airport' in Singapore and beyond to fulfil two key objectives. First, it argues that a historical sensibility needs to be maintained when approaching policy mobilities, for doing so allows an understanding of how that which moves across space as a seemingly coherent set of policy ideas is itself an ever-shifting product of diverse historical travels and (re)assemblings. Second, it explores the policy mobilities of a prominent Asian urban model without falling back on the neoliberalised modes of explanation prevailing through much of extant scholarship, for equating policy transformations with 'the neoliberal moment' forecloses alternative policymaking motivations and possibilities.

Collectively, this paper emphasises the salience of territory and the complexities of the path-dependent relationship shared by travelling policy models and their cities of origin. The territorial associations between Changi and Singapore have permeated Changi's policy mobilities over time to become central to its identity as an airport management firm and a place model, functioning to both enable and constrain its travels abroad. Despite such contradictions, these place-bound associations that shape the nature, scale, and intensity of policy mobilities have proved difficult to discard, as Changi has found, pointing to the conflicted relationship between policy models and their cities of origin. Although some have leaned away from pinning models to particular, fixed 'origins', preferring instead to think of policies being pieced together from diverse places (e.g. Cochrane and Ward, 2012; Robinson, 2011), Changi's experiences suggest instead that certain territorial 'origins' leave stronger imprints than others, raising questions concerning the transformative potential of variegated sociopolitical contexts within which policies and places are

(re)assembled and from which they potentially emerge as models. It is possible to consider multiple, overlapping urban policy circuits – though the scope is of course dependent on one's position – even whilst remaining keenly aware of how some cities come to inform certain policy mobilities more than others.

Several qualitative methods were used to 'follow' Changi's travels. Given the growing exploratory enchantment with the use of 'mobile' ethnographic methods – namely, following and interacting with policymakers on study tours (Cochrane and Ward, 2012; McCann and Ward, 2012; Peck and Theodore, 2010a, 2012) – I was initially prepared to follow Changi's policymakers to unpack the ways whereby the 'Changi model' has been territorially and relationally (re)made on a translocal basis. However, this attempt exposed the difficulties and power politics of accessing and interacting with policy elites, and how these structure the parameters of research (Kuus, 2013). Clearly, the complexities of interacting *meaningfully* with corporate elites, subject to the positionality of the researcher and the context within which the research was undertaken, are important in shaping the boundaries of knowledge production, but have been largely eluded in policy mobility scholarship thus far.

Eventually I managed to secure a single interview with two senior policymakers from CAG's international policymaking arm, Changi Airports International (CAI). Although these policymakers were forthcoming enough about Changi's 'best practice' operations in Singapore, questions regarding its operations *abroad* were either evaded through ambiguous policy double-speak or flatly rejected on the basis of commercial sensitivity. Coupled with practical limitations related to the amount of time and funding required to 'follow' policymakers, such challenges of 'studying up'

make it apparent that few researchers are actually capable of travelling through policy networks in ethnographic vehicles. If only high-flying academics are able to undertake such ethnographic fieldwork, policy mobility scholarship risks perpetuating a particular brand of methodological elitism.

As such, alternative policy mobility research methods were used, specifically the undertaking of content and discourse analyses of various Changi-related documents. This range, spanning a time period from 1980 to the present, included: 20 policy brochures published by Changi; 10 government debates on the significance of air transport for Singapore sourced from Singapore's parliamentary report database *Hansard*; and 150 articles from local and foreign newspapers and magazines sourced through the international database *Factiva*. The documents originating from Singapore were important in understanding Changi's self-constructions as a 'successful airport' both domestically and internationally. The references in foreign newspapers and magazines beyond the celebratory, tightly-policed spaces of Changi's policy documents and Singapore's local media enabled a more critical understanding of how international audiences *received* these self-constructions, especially when several of Changi's overseas failures were surfaced. Considering these multi-sited, cross-scalar perspectives was an alternative way to comprehend the progression of the 'Changi model', for models do not achieve hegemonic status without the consent of global audiences (Peck and Theodore, 2010a).

Henceforth this paper is split into four main sections. The first critically reviews the policy mobility literature. The second contextualises Changi's historical and national significance for global city-state Singapore, explaining its constructions as a 'model airport' that was, and continues to be, part of a state capitalist project. The third follows

Changi's travels beyond Singapore as both a model and a policymaker, illustrating how Changi leverages on Singapore's international reputation to lubricate its travels. The fourth tracks the spatial limits of these travels to explore how the 'Changi model' has actually been consumed in various sites, explaining how Changi's explicit territorial associations with Singapore have also served to impede its travels. The paper concludes with several reflections on how Changi's policy mobilities have provided some insights into the conflicted relationship between travelling models and their cities of origin.

Urban policy mobility: Assembling cities, travelling cities

Cities are increasingly informing each other's developments through processes of interurban policy travels and learning – a phenomenon central to the recent work on urban policy mobilities, which explores how 'best practice' forms of urban knowledge are mobilised within and across cities, by whom, and with what consequences (McCann, 2011; McCann and Ward, 2011; Peck and Theodore, 2010a; Ward, 2006). Whilst the borrowing of ideas from different places is nothing new, there is an emerging consensus on how contemporary policymaking is qualitatively different in terms of speed and intensity, compelling policymakers to 'scan' globally for models that can be expected to yield success. Given the growing prevalence of urban policymaking, policy travels are implicated not just in wider policy landscapes, but also in conceptualisations of the nature and logics of 'the urban' itself. In remaining attentive to how places should be territorially unpacked and studied through the relationships that bind them together and pull them apart, this focus on the socio-spatial reformulation of policies between and within geographically-specific institutional contexts of localities foregrounds

valuable opportunities for contemplating the translocal dimensions of space (McCann and Ward, 2010). This socioconstructivist inflection addresses a crucial gap by exploring how 'those involved in urban politics and policymaking act beyond their own cities to practice or perform urban globalness and articulate their cities to the world' (McCann and Ward, 2011: xvii).

Whilst promising in such possibilities, there remain several pertinent questions within policy mobility research that need to be addressed. There appears to be a degree of ambiguity within the literature when it comes to understanding what actually travels when we speak of urban policies on the move, as well as how different modes of travel are reflective of the range of actors, ideologies, and processes involved. In other words, tackling questions concerning the object(s) and form(s) of policy travels is a first step towards drawing some ontological distinctions between diverse policy mobilities amidst a blur of movements. Such differentiations relate to matters concerning the nature, scale, and intensity of policy mobilities.

When we broadly refer to 'policy mobilities', what exactly is the 'policy' travelling? As the literature indicates, the objects of travel may range from images to ideas to policies to models of various sorts, all of which are disaggregated and mobilised in various permutations on the move. Recognising how 'policies' exist in and circulate through different forms, several have raised the idea of 'assemblage' as a descriptor to denote how what travels as a 'policy' is a variously-assembled, ever-shifting bundle of materials and resources (Chua, 2011; McCann and Ward, 2012). What is assembled to form the 'Changi model' similarly, ranges from images of the airport's unique design to various airport management policies founded on a particular business model that claims to offer clients 'the Changi Experience' (CAI, 2009a). Mobilisations of

the 'Changi model' typically speak to Changi's hybrid status as both a place that has achieved a degree of international singularity *and* an airport management company that has strategically leveraged upon this prominence. The underlying point here is that what moves as a 'model' cannot be reduced to a singular element; the very mobilisation of a model hinges on the *combination* of disparate elements, though the exact mix of what travels depends on who mobilises this model, and for what purposes.

Evidently, 'policies' – whatever they might entail – do not move in a singular mode but do so in variegated forms, raising questions concerning the vocabularies of policy travels and their ontological implications for patterns of movement and knowledge production. Peck (2011) charts the shifts from transfer-diffusionist to mobility-mutation models of policy travels, noting that whilst the former is typically associated with ideals of rational-choice theorising and core-periphery spatialities, the latter speaks to the socioconstructivist, *transformative* nature of policy movement across multiple locales that is crucial to understanding dynamic policy flows. Jacobs (2012) observes that diffusionist narratives frequently connote a stability of movement that obscures the mutations policies undergo as they move across space, arguing for a Latourian conception of translation that highlights the multiplicity of actors, labours, and add-ons crucial to the construction and movement of policy itself. This range of vocabularies highlights the range of actors, resources, and ideological motivations that may converge or diverge in ways that are crucial not only to setting policies in motion across shifting landscapes, but to the very *making* of policy itself.

Although it is acknowledged that policy exchanges and interurban learning are not to be fetishised as radically new occurrences, the preoccupation (primarily excepting Clarke, 2012; Cook et al., 2014; Peck and

Theodore, 2010b) with contemporary policy mobilities reveals a particular 'presentism' that overshadows earlier forms of policy mobility (McFarlane, 2011). Policy mobilities date back to early colonial exchanges, for instance, or urban planning histories that were once prolific in the transnational mobilisations of urban ideas but have been neglected in most extant policy mobility research (Harris and Moore, 2013). Planners have long looked elsewhere for ideas and the city has always been an *ongoing* historical and relational product of diverse engagements with various other cities, in that the ways whereby cities are planned, governed, and used are very much influenced by their interurban relations.

In drawing, if inadvertently, too sharp a divide between present-day flows of policy knowledge and policy exchanges of the not-so-distant past, the risks arising from this artificial disconnect are twofold. First, it overlooks how contemporary policy mobilities are ongoing products of earlier historical travels that never quite ended, forgoing an evolutionary understanding of policy mobility that is capable of grasping the dynamism of policy and urban landscapes. Second, retaining a sense of historical continuity maintains an awareness of policy mobilities that 'predate both the ascendance of neoliberalism in the making of policy and its emergence as an object of sustained academic inquiry' (Cook et al., 2014: 806). This avoids somewhat reflexive recourses to neoliberalised modes of explanation, leaving alternative and more socially progressive urban futures open to our imaginations (Bunnell, 2013).

This sense that a great deal of policy mobility research tends to view neoliberal urbanism as a primary stimulation for policymaking – even whilst acknowledging neoliberalism's contested and unstable nature – stems from how conceptualisations of policy mobility were devised partly to

unpack the 'black box' of neoliberalism (McCann and Ward, 2011; Ward, 2006; but primarily excepting McCann, 2008 and Söderström and Geertman, 2013). Even as neoliberalisation has been recognised to be intensely hybridised, where might, as Robinson and Parnell (2012: 522) wonder in contemplating its discontinuous geographies, 'an insistent focus on the multifaceted applications and outcomes of neoliberalism mask outwardly similar but structurally unrelated processes of change?' Pertinent here is the pressing need to broaden the empirical horizons of policy mobility scholarship from almost exclusively western contexts, in order to acknowledge diverse policymaking motivations apart from neoliberalised ones. In this regard it is worthwhile turning our attention to nonwestern settings, where neoliberalism's utility as a principal, coherent analytic is far less robust.

For Ong (2006), neoliberalism's spatial restrictions are observed in how it functions more as the exception to rule in Asia than an overarching system of political–economic regulation. Several have observed how the present state-sponsored production of urban space in Asia reveals a political urgency tied to national legitimisation that eclipses urban developments elsewhere, largely due to postcolonial legacies in the region (Bunnell, 2004; Roy and Ong, 2011). Significantly, this points to the (extra)territorial importance of large-scale national projects such as major international airports, which are central to their nation-states in terms of nation-building strategies and political symbolism (Adey, 2006, 2010; Bowen and Cidell, 2011; McNeill, 2011). It has been argued that the deepening entrenchment of airport development in urban policy – the pinnacle perhaps being the 'aerotropolis' (Kasarda and Lindsay, 2011) – is reflective of increasingly boosterist agendas at play. The extensive privatisation of contemporary airport development surfaces questions of ownership, accountability, and

(dis)organisation (McNeill, 2010), and is perceived by some to be emblematic of neoliberal development as the changing ownership of airports means that they are no longer fully accountable or answerable to their national territories (Freestone, 2011; Freestone et al., 2006).

In Changi's case, though, state and nation-building concerns have always been upheld over purely market-driven ones due to the historical legacies that have embedded the airport in Singapore's history as a national icon – which might also explain why the Singapore state has repeatedly refused to privatise Changi. As Koch (2013) notes in the case of Astana, such narratives are congruent with forms of state capitalism, rather than neoliberal capitalism, and the continuing need for political legitimacy. Contrary to how Doganis (1992) views the 'loosen[ing] of the close ties between governments and airports' as an inevitable outcome of increasing airport entrepreneurialism, the Changi case demonstrates how airport entrepreneurialism can instead be deployed by home nation-states as a territorial extension of national pride, but also that this path-dependent relationship is hardly without its complications.

Given the increasing recognition of nonwestern cities such as Singapore as global exporters of policy knowledge and models to be sought after (Bunnell et al., 2012; Roy and Ong, 2011), the rapid circulations of Asian urban models and the situated ways whereby urban aspirations unfold in globalising Asian cities are becoming prominent agendas for policy mobility research. Acknowledging such empirical realities would not only encourage the decentring of conventional urban models, but would also invoke a receptiveness to multiple policymaking motivations. The need for the latter is especially germane given how most accounts of urban models tend to view their formations as resultant of postindustrial

moments of crisis that are inescapably manifested through processes of urban regeneration and cutthroat intercity competition (e.g. Monclús, 2003). It is within the diverse conditions for model constructions that the empirical foundations of this paper are situated.

The constructions of Changi Airport

Long recognised as nationally significant monuments of civic pride, airports occupy a special place in the hearts and minds of their countries and citizens. More so than most airport–country relationships, the fates of Changi and Singapore have been intertwined from the very beginning, the primary reason for this being Singapore's city-state status. When Singapore was expelled from Malaysia in 1965, its spatially-limited scale and lack of national hinterland ensured that it was thrust into wider flows and extralocal terrains that constituted early developmental opportunities, if it could foster the global outlook and 'reach' necessary to seize them in a strategic fashion (Olds and Yeung, 2004). To jumpstart Singapore's global integration, the construction of a modern international airport was viewed as vital, and thus Changi emerged as a vehicle intended 'to carry Singapore comfortably into the 21st century' (Changi Airport, 1980: 4). Viewed not just as Singapore's gateway to the world, but also the world's gateway to Singapore, Changi's potential to leave strong first impressions of Singapore on visitors was harnessed to convey images of an efficient and modern nation-state, as a Canadian journalist observes:

> It was three years since I was last here and arriving at the sparkling new Changi Airport was like coming to a different city ... the story of its construction on reclaimed land is typical of this dynamic city-state. (Holloway, 1981: 3)

The state's ambitions for Changi were not restricted to the airport's economic potential alone; Changi soon emerged as a central platform for the state's use of civil aviation to build and project a sense of nationality to unite Singaporeans (Raguraman, 1997). Changi's accomplishments on the world stage were emphatically construed as *Singaporean* achievements, illustrated by the scores of celebratory articles in local newspapers and the attention received in National Day speeches. Continually positioned as a benchmark of progress and a reminder to stay competitive, Changi began to take root in the everyday aspirations of Singaporeans. But symbols of nationhood are rarely, if ever, restricted to a one-way dictation; for a place to be accepted as such requires it to engage in an ongoing dialogue with citizens. Singaporeans are continually encouraged to visit sites in Changi such as its aviation galleries, in order to understand the role of aviation in Singapore's development.

Through such reminders, the Singaporean state mobilises its citizens through what Adey (2006) terms 'air-mindedness', wielding the possibilities of airborne mobility to remind Singaporeans of the historical role Changi played in Singapore's early days of development. Considering how Changi has been infused with national symbolism and is continually upheld as a representation of progress that is tightly welded to a Singaporean sense of identity, it is unsurprising that Changi continues to be fully owned by the Singapore state, despite the difficulties this ownership has created in the course of Changi's international ventures.

In undertaking Singapore's then-largest developmental project, the role of the state in Changi's incipient emergence as a 'model' is an especially formative one that involved the early mobilisation of lessons from abroad. *Airtropolis*, a 1991 policy document, highlights the role of 'learning lessons from the rest of the world [in] building Changi'

(Rowles, 1991: 12), presaging the contingent assembling of 'best practices' from various airports. Eugene Gan, CAI's Deputy CEO explained:

> We look at other airports' good practices and see if we can implement those. Hong Kong allows passengers to check in whilst they are still travelling to the airport … Will that work for Changi? Not really, because in Singapore the downtown is so near to Changi. What is good for other airports may not be good for Changi. (Interview, July 2012)

In the early 1970s, engineers, architects, and civil aviation officers from the Singapore Public Works Department undertook study tours of major US and European airports before embarking on masterplanning for Changi (Hutton, 1981). Eventually, the state decided to model Changi after Schiphol, as Schiphol's concept of a central terminal suited Singapore's aim of functioning as a transit hub. It engaged the same Dutch consultant to collaborate in masterplanning (Lim, 2008), setting in motion the embodied travels of knowledge from Amsterdam to Singapore that were appropriated for and materialised in the built form of Changi.

Changi planners continue to visit major airports and attend international aviation conferences in search of 'best practices'. Behind these various study tours lies the idea that viewing and experiencing such forms of knowledge in situ would allow 'best practices' to be better internalised for a smoother transfer of lessons (Cook, 2008). Such early lessons distinguished Changi from its neighbours, contributing to its incipient growth as a significant regional hub in Asia. This undertaking of study tours has intensified as Changi is increasingly framed through relational comparisons with rival airports. Changi is positioned across *time* – against what others have achieved, reinforcing the urgency of continual reinvention – and *space* – against others facing similar problems,

surfacing probable solutions (Cook and Ward, 2012). To deal with runway congestion, Changi planners turned to comparable airports, visiting 'leading airports around Asia … to learn about their innovative strategies' (*Business Times Singapore*, 2012). The marked change in Changi's choice of referent points is observed in how it initially studied more advanced western airports, but increasingly looks to its *regional* rivals, highlighting the geographical unevenness of its policy circuits.

Apart from study tours, two other state strategies crucial to Changi's success are long-term planning and the development of a particular brand of service quality (Kishnani, 2002). Typically, Changi plans its terminals decades in advance (CAAS, 1989). An early description captures this sense of accelerated development:

> In 1982, although the [first] terminal showed no sign of approaching capacity, planning began on the second terminal … Although this sprawling new terminal looks empty, planners are already working on Terminal 3. (Sesser, 1992)

In that there remains a constant necessity to plan for ever-growing rates of air traffic, airports are never truly finished. But few countries have, as Singapore does, a one-party state that has been in power for almost 50 years. Without this ruling tradition, long-term planning would not have been possible, especially for investment-heavy infrastructure involving longer-than-typical time frames such as airports.

In terms of 'soft' infrastructure, Changi's success is frequently ascribed to its emphasis on service skills and a passenger-centred philosophy (CAAS, 1994), which distinguished Changi from other regional airports in the 1980s. This early focus on service efficiency was congruent with Singapore's initial productivity campaigns – which were organised during the 1980s period of economic

restructuring – where 'subsuming these characteristics under the creation of Changi made it a microcosm of Singapore's development' (Lim, 2008: 21). The focus on human capital, tactically deployed and institutionally amplified, is critical to the reproduction of the 'Changi model', being a place-particular quality not easily adopted by aspirants.

The ongoing involvement of the Singapore state in Changi's development is reflective of how models, even in their domestic territorial settings, do not remain still; they are constantly being (re)constructed to ensure their sustained appeal to multiple audiences. Changi's appeal as a 'model airport' and Singapore's success as a global city are necessarily intertwined, for reasons related to the territorial logics of Singapore's city-state identity and Changi's status as its key entry point. Functionally, the two are mutually dependent, which suggests that their path-dependent relationship is likely to deepen over time.

This mutual dependence may be observed through the way that Singapore's status as an international business hub necessarily demands a particular degree of connectivity enabled by Changi, but is also crucial to maintaining Changi's viability as an airport. Changi's role in 'strategically situating [Singapore] at the crossroads of the world's major airlines linking the East and West' (*Review*, 1989) and its extensive intra-Asian flight connections have made Singapore an ideal springboard for a prospering region. Changi's potential for Singapore's role as an international business hub was mobilised early. Meeting rooms were included in its first masterplan; these, along with the hotel that was later integrated, enable strong connectivity with departure gates and interterminal transfers, functioning as convenient meeting places for businesspeople (McNeill, 2009). Such spaces of hypermobility and exclusivity connote speed, seamlessness, and efficiency,

further enhancing Singapore's attractiveness as a business destination.

Frequently, plenty of the human traffic received does not move beyond the airport. Changi's role as a popular transit hub, coupled with the rising trend of transit tourism, ensures that it plays host to tourists on stopovers in Singapore. A scan of travel features in international publications reveals Changi's presence in the rich accounts of tourists and its imprints on their imaginations. In an article titled '*The World's Best Airport*', two tourists visiting Changi on a layover:

> found themselves relaxing in a rooftop hot tub. Nearby were countless restaurants and shops … they could take a bus tour, catch a movie, or meander through a tropical butterfly garden. (McCartney, 2011)

This need to satisfy various travel-unrelated demands of increasingly discerning passengers has been translated into a focus on reinventing airport spaces (Jarach, 2001). Singapore has also increasingly sought to convert transit traffic into destination traffic by promoting itself as a tourist destination. In 1989, Changi started working with tour agencies, airlines, and government organisations to take transit passengers on free tours of Singapore during stopovers (*Business Times Singapore*, 1989), encouraging them to return as tourists. These efforts have been intensified in recent years with programmes such as the Changi Recommends Initiative, where Changi sells tickets to Singapore's latest tourist attractions (Kaur, 2012). Such initiatives may be interpreted as Singapore's attempts to seize opportunities in the burgeoning regional tourism market by using Changi as an instrument to extend its 'reach'.

Changi's model status today is unquestionably the outcome of deeper historical linkages that continue to shape its policy mobilities of the present in a path-dependent

manner. It is precisely because of Singapore's scalar identity as a city-state, where the entrepreneurial tendencies of a city and the socio-political responsibilities of a nation converge, that Changi has become embedded in and fundamental to Singapore's national identity and everyday operations. Even as these territorial associations attest to Changi's status as a politically meaningful spatial entity, they also foreshadow the changing relationship between Changi and Singapore as the two travel alongside each other in the form of abstracted urban models against the backdrop of the burgeoning urban solutions industry.

The travels of Changi Airport

A visit to Changi's homepage reveals the opening phrases:

> With more than 400 accolades under its belt, Changi Airport has come a long way since its humble beginnings in 1981 … CAG has established Changi as the world's most awarded 'Best Airport'. (Changi Airport, 2013)

It seems that such accomplishments matter greatly in establishing a particular reputation and identity. As Changi raced up international airport rankings, it was increasingly circulated through foreign publications and global audiences. The tipping point came in 1988 when Changi overtook Schiphol, then the top-ranking airport, in an international poll conducted by *Business Traveller*. This triumph prompted a reassessment of 'the top airport', with a subsequent reorientation of spatial imaginations as Changi became known as *the* new airport to which other airports should aspire.

This increased proliferation of benchmarking is especially significant in the air transport industry where there is no accepted practice for assessing and improving airports (*Airline Business*, 2002). Airports position

themselves vis-à-vis top-ranking airports, abstracting 'best practices' as signposts for improvement. Changi has been highlighted for characteristics such as its anticipatory planning (Parle, 1988) and various facilities, allowing aspirants to leverage on the representational power of a legitimised model and construct a semblance of comparability in alluding to qualities they might achieve. Through such practices of inter-referencing, Changi travels as an ideal.

Comprehending the changing dynamics of Changi's travels requires a consideration of its underlying supply- and demand-side imperatives (Peck, 2003). This supply-side inventiveness is captured in Changi's emergence as an airport management firm two years after it supplanted Schiphol as the 'Best Airport', capitalising on its newly-achieved status to position itself as a provider of solutions for airport management and development. CAI's website and policy brochures reveal how Changi leverages on the representational power of its rankings and accolades to brand itself as a 'successful' airport manager.

> *Creating World Class Airports Worldwide* … for over a quarter of a century, Singapore's Changi Airport is the undisputed leader among airports globally … it has won over 300 international awards … Our airports worldwide have, like Changi, earned some of the most outstanding accolades in the industry. (CAI, 2009b)

These awards are upheld as industry certifications of having achieved certain qualities, such as efficiency and service quality, which are then strategically projected as part of Changi's identity as a 'successful' airport management firm. Unlike other airport firms, this process of constructing a policy-making identity is not restricted to leveraging on rankings and accolades; it is also one that rests on certain territorial linkages. Marketing itself as a promissory example of

'what Singapore stands for', (CAI, 2011a: 3), Changi 'frames [its] position in terms of Singapore's success … as "Singapore" is a signifier of quality and reliability' (Chua, 2011: 32). This idea(l) of 'Singapore' surfaced is one that is rooted in the 'Singapore model': an assemblage of Singapore's developmental successes distilled into a coherent form suited for travel. Through these explicit associations with its nation-state, Changi wields this form of symbolic power in allusion to wider *national* expertise to bolster its profile as a capable policymaker. Supportive of such strategies, the Singapore state encourages local firms to leverage on 'the Singaporean brand name[,] which takes [them] far when they go overseas' (Lee, 2009), positioning 'Singapore' as a form of branding that is perceived to lubricate the travels of Singaporean urban solutions.

Through such methods of harnessing Singaporean proficiency, Changi extends to prospective clients not merely the possibility of attaining an airport like Changi, but also the hope of mirroring Singapore's success vis-à-vis its quick attainment of 'First World' status – an especially persuasive approach to developing countries. For several African countries yearning to be the 'Singapore of Africa', Changi is upheld as an exemplar of and metonym for *Singaporean success* (*African Business*, 2012). By moving alongside Singapore's viability as a seemingly achievable ideal, Changi's travels are lubricated, in turn serving to reinforce the prominence and reputation of the 'Singapore model' and deepen the ties between Changi and Singapore.

The consumptions of Changi Airport

Underlying the varied consumptions of the 'Changi model' is the idea that this purportedly global model works in some places but not in others, reinforcing the way model consumptions are inescapably entangled with the particularities of place, and how such im/mobilities are charged with territorial-and-relational politics. Some airports are capable of re-embedding parts of the 'Changi model' by enlisting Changi's specialised planning and management services. Such airports, however, must first be deemed 'good investments' by Changi, for Changi's clients are meant to function as 'showpieces' reflective of its policymaking capabilities (CAI, 2008, 2011b: 6). Other airports, lacking the 'right' growth potential, are unable to engage Changi's policymaking services, but materialise their aspirations by modelling themselves after Changi's design and hardware to differing degrees.

This unevenness of model consumptions highlights varying spatial capacities to embrace travelling models. All too frequently, consumptions that rest almost solely on airport design forgo the critical aspects of the 'Changi model', such as those related to human capital, which are place-specific and harder to mobilise without engaging Changi's services. Whilst Changi may be adopted in small-scale parts, larger-scale adoptions will likely fail because the geographical and historical specificities that have collectively produced the 'Changi model' cannot be replicated; in reality there is bound to be some sort of slippage from the ideal.

Other difficulties relate more to prevailing political circumstances transcending airports' capabilities. Despite the growing prevalence of airport privatisation, most Asian governments prefer to retain differing degrees of aviation ownership (Cullinane et al., 2011), for there remain reservations concerning the foreign ownership of infrastructure that was in most cases originally developed under nationalist agendas. In this regard, many of Changi's immobilities have been linked to its identity as a firm that is explicitly owned and operated by the

Singapore state, and its attendant inflexibility in having to attain approval from the state for major decisions. A Singaporean journalist recounts his interactions with a senior bureaucrat from the Indian aviation ministry:

> When I asked him about CAI's involvements in [India], he replied: 'We generally prefer private sector participation, rather than foreign government agencies' … he suggested that foreign government involvement was detrimental to national interests [and] equated CAI to the Singapore government. (Sreenivasan, 2008: 17)

Some of Changi's more foundational concerns relate to its keen awareness of how its performance abroad is directly tied to prevailing impressions of Singapore. A notable incident was its failed partnership with Indian firm Bharti Enterprises to upgrade Delhi's airport in 2006. Whilst Bharti wanted to complete the task in 50 months, Changi needed 70 months 'to do a good job and preserve its reputation' and eventually pulled out, whereupon the Singapore state rebuked Changi for losing a valuable opportunity in 'trying to protect the Singaporean brand name' (Joseph, 2006).

Such occurrences resonate strongly with nebulous notions of where Singapore stops and Changi begins. Even whilst Changi is often coveted as a model with reference to wider Singaporean success, and leverages on this to brand itself as a policymaker, its explicit territorial associations with Singapore appear to have impeded its mobilities in various ways. As the Indian bureaucrat suggests, it is generally perceived as controversial for a foreign corporation so strongly tied to its national government to manage other countries' airports, regardless of the extent of ownership. This sensitivity towards foreign ownership is especially marked in the case of Asian airports, most of which are grappling with the emergent realities of privatisation and accountability.

Whilst smaller airports are likely to be privatised, most Asian governments continue to be reluctant to relinquish full ownership over major (capital) airports – which remain powerful tools of statecraft – especially where foreign governments are involved. Additionally, Changi's consciousness of how its successes and failures cannot be cleanly separated from Singapore's international reputation also constrains its policy mobilities, as the Bharti case indicates. To some extent, Changi and Singapore appear to have suffered some conflation in terms of identity, reflecting the difficulty of detaching certain territorial imprints.

Despite these contradictions of the airport as a policymaking entity, the effects of Changi's travels are nevertheless profoundly material and deeply embedded in the production of urban space, generated through territorial complexities and networked relations. Such implications are observed in the case of Durgapur Aerotropolis – one of Changi's key investments undertaken with Indian partner Bengal Aerotropolis Private Limited (BAPL) in 2008 – which has been branded as a catalyst for urban-regional growth and a showcase project for both India and Changi. Presently, though, what the project mainly showcases are the multifaceted complexities involved in undertaking this large-scale venture. From its inception it has been beleaguered by a steady stream of pitfalls and does not seem close to completion.

The project commenced in 2008 and was expected to reach completion in 2011. Early phases of construction uncovered high-tension water and sewage lines running through the site, for which the West Bengal government insisted Changi and BAPL bear the costs (Chakraborty, 2009). When the state government started expropriating larger expanses of land from villagers living proximate to the site, large-scale protests were initiated, stalling the project (*The*

Statesman, 2010, 2011). Faced with upcoming elections, the state government decided to renounce those tranches of land, forcing Changi to substantially revise its masterplan (*Realty Plus*, 2011). Amidst these protests, the Union coal minister expressed his objections to the project, claiming it would lead to a national loss of coal by infringing on coal territory (*The Telegraph*, 2012). In early 2013, it was decided that the airport would be turned into a helipad until further notice (*Hindustan Times*, 2013).

When policy models are implemented in foreign settings and expected to yield comparable results, such assumptions are persistently disrupted by 'the messy realities of policymaking on the "ground" level' (Peck and Theodore, 2010a: 170), which have fractured Changi's policymaking at various scales. At the national scale, the project's territorial encroachment on coal reserves was construed as a threat to national energy reserves; at the regional scale, Changi was made responsible for already-existing site problems; and at the local scale, Changi was perceived as a threat to villagers and continually immobilised by their protests. These multiscalar territorial negotiations and the shifting parameters of the masterplan in response to each new complication destabilise any semblances of model universality, demonstrating the fractious processes of global policymaking and the profoundly material consequences of policy mobilities. These difficulties faced by Changi drive home the critical role of territory in constituting the circumstances out of which a model is born and to which it is subjected in its bid for global success.

Despite what Changi's planners and clients may choose to believe, the universal 'Changi model' remains more mythical than actual. Policies and models may be able to move across space with greater ease than before, but their very need to be grounded necessarily subjects them to the

contingencies and power-suffused spaces of their destinations. These territorial frictions Changi encounters on the move demonstrate how travelling models are brought into sharp contact with the particularities of place – often in a less-than-ideal manner – in ways that generate new arrangements of cross-scalar spatial relations. Running counter to Changi's self-scripted policy brochures evading its failures in Durgapur, such territorialities seep back into global policy networks of knowledge to potentially influence its future mobilisations. Apart from highlighting the spatial limits of the 'Changi model', these frictions also reveal the problematics of foreign airport ownership and the conflicted relationship Changi shares with Singapore beyond its domestic settings.

Conclusions

This paper has made two central arguments. Firstly, a consciousness of underlying historical links is indispensable when exploring policy mobilities, for contemporary policy mobilities are ongoing outcomes of earlier instances of policy flows within and between cities. This awareness of policy mobilities that predate neoliberalism curbs the equation of policy mobilities to neoliberal moments of crisis and/or forms of regulation. Secondly, and crucially, such sensibilities are especially vital when approaching Asian cities where modes of governance cannot be straightforwardly reduced to neoliberal ones, for they are entrenched in diverse nationalist aspirations that cannot be extricated from policymaking motivations. This paper also highlights certain methodological challenges faced that raise questions regarding the issue of methodological elitism in policy mobility research, cautioning against a fixation on 'following' policy elites.

The way Changi travels alongside Singapore offers insights into the dynamics of the relationship between travelling policy

models and their cities of origin. Following Changi's policy mobilities has revealed how, even as Changi was assembled from various airports, it was through various path-dependent (re)constructions in Singapore that Changi actually emerged as a 'model airport' that continues to bear the territorial imprints of its nation-state whilst on the move. In its travels, Changi strategically latches onto Singapore's international reputation, in the form of the 'Singapore model', to lubricate its overseas ventures. Whilst such explicit associations with Singapore have aided Changi in securing some of its overseas projects, they have also hampered its mobilities, especially where Changi's status as an airport firm that is directly owned by and ultimately answerable to the Singapore state is concerned. These territorial linkages have proven difficult to discard, as Changi has found, particularly in cases where it feels its performance abroad is directly linked to Singapore's international reputation.

What these im/mobilities have exposed is the enduring influence of territory on travelling models as an enabling and yet constraining force, which is amplified in the case of Changi's hybrid status as both an international airport management firm and a place model. Such policymaking firms exhibit a brand of entrepreneurialism that demands certain territorial linkages to facilitate policy travels, but in so doing are also subjected to the near impossibility of detaching such territorialities when things go awry. Even as travelling models may be strategically abstracted and stylised as enviable signifiers of particular cities, they continue to move in ways very much dependent on linkages with their cities of origin, for better or for worse. The relationship between travelling models and their cities of origin, then, is complex and at times contradictory, but it is an important relationship that lays necessary emphasis on the ineluctably dialogic nature of policy mobility.

References

Adey P (2006) Airports and air-mindedness: Spacing, timing and using the Liverpool Airport, 1929–1939. *Social and Cultural Geography* 7: 343–363.

Adey P (2010) 'Ten thousand lads with shining eyes are dreaming and their dreams are wings': Affect, airmindedness and the birth of the aerial subject. *Cultural Geographies* 18: 63–89.

African Business (2012) Singapore – a modern miracle. *African Business*, 1 May.

Airline Business (2002) Making the grade. *Airline Business*, 1 June.

Bowen JT and Cidell JL (2011) Mega-airports: The political, economic, and environmental implications of the world's expanding air transportation gateways. In: Brunn SD (ed.) *Engineering Earth: The Impacts of Megaengineering Projects*. London: Springer, pp. 876–887.

Bunnell T (2004) *Malaysia, Modernity and the Multimedia Corridor: A Critical Geography of Intelligent Landscapes*. London: Routledge Curzon.

Bunnell T (2013) Antecedent cities and inter-referencing effects: Learning from and extending beyond critiques of neoliberalisation. *Urban Studies*. Epub ahead of print 14 October 2013. DOI: 10.1177/0042098013505882.

Bunnell T, Goh DP, Lai CK, et al. (2012) Introduction: Global urban frontiers? Asian cities in theory, practice and imagination. *Urban Studies* 49: 2785–2793.

Business Times Singapore (1989) Free city tours for transit passengers. *Business Times Singapore*, 29 September.

Business Times Singapore (2012) Changi Airport must act decisively. *Business Times Singapore*, 7 August.

CAAS (1989) *Singapore Changi Airport Terminal 2: Phase II Development*. Singapore: Imprint Singapore.

CAAS (1994) *Singapore Changi Airport: Providing the Best, Always*. Singapore: Imprint Singapore.

CAI (2008) *Changi World*, issue 1. Changi Airports International.

CAI (2009a) *Changi World*, issue 1. Changi Airports International.

CAI (2009b) *Creating World Class Airports Worldwide: Airport Investors, Airport Managers, Airport Planners*. Changi Airports International.

CAI (2011a) *Changi World*, issue 2. Changi Airports International.

CAI (2011b) *Changi World*, issue 4. Changi Airports International.

Chakraborty A (2009) Aerotropolis runs into rough weather. *The Times of India*, 12 September.

Changi Airport (1980) *Changi Airport: Singapore*. Singapore: Ministry of Communication; Changi Airport Development Division: Public Works Department: Department of Civil Aviation.

Changi Airport (2013) About Changi Airport. Available at: http://www.changiairport.com/our-business/about-changi-airport (accessed 18 August 2013).

Chua B-H (2011) Singapore as model: Planning innovations, knowledge experts. In: Roy A and Ong A (eds) *Worlding Cities: Asian Experiments and the Art of Being Global*. Oxford: Wiley-Blackwell, pp. 29–52.

Clarke N (2012) Urban policy mobility, anti-politics, and histories of the transnational municipal movement. *Progress in Human Geography* 36: 25–43.

Cochrane A and Ward K (2012) Researching the geographies of policy mobility: Confronting the methodological challenges. *Environment and Planning A* 44: 5–12.

Cook IR (2008) Mobilising urban policies: The policy transfer of US business improvement districts to England and Wales. *Urban Studies* 45: 773–795.

Cook IR and Ward K (2012) Relational comparisons: The assembling of Cleveland's waterfront plan. *Urban Geography* 33: 774–795.

Cook IR, Ward SV and Ward K (2014) A springtime journey to the Soviet Union: Post-war town planning and policy mobilities through the Iron Curtain. *International Journal of Urban and Regional Research* 38: 805–822.

Cullinane K, Firth M, Fung MKY, et al. (2011) Development of airport transport industry in the Asia-Pacific region. *Pacific Economic Review* 16: 42–46.

Doganis R (1992) *The Airport Business*. London: Routledge.

Freestone R (2011) Managing neoliberal urban spaces: Commercial property development at Australian airports. *Geographical Research* 49: 115–131.

Freestone R, Williams P and Bowden A (2006) Fly buy cities: Some planning aspects of airport privatisation in Australia. *Urban Policy and Research* 24: 491–508.

Harris A and Moore S (2013) Planning histories and practices of circulating urban knowledge. *International Journal of Urban and Regional Research* 37: 1499–1509.

Hindustan Times (2013) Hakim unaware about high risk at Andal airport. *Hindustan Times*, 23 January.

Holloway J (1981) Gloss, glass and concrete changing face of Singapore. *The Globe and Mail*, 12 December, 3.

Hutton P (1981) *Wings Over Singapore: The Story of Singapore Changi Airport*. Singapore: Department of Civil Aviation, Ministry of Communications.

Jacobs JM (2012) Urban geographies I: Still thinking cities relationally. *Progress in Human Geography* 36: 412–422.

Jarach D (2001) The evolution of airport management practices: Towards a multi-point, multi-service, marketing-driven firm. *Journal of Air Transport Management* 7: 119–125.

Joseph G (2006) Major management revamp at CAAS unit. *Business Times Singapore*, 14 February, 19.

Kasarda JD and Lindsay G (2011) *Aerotropolis: The Way We'll Live Next*. New York: Farrar, Straus and Giroux.

Kaur K (2012) What to do in Singapore? Ask Changi. *The Straits Times*, 10 August, 5.

Kishnani N (2002) *Designing the World's Best: Singapore Changi Airport*. Singapore: Page One Publishing Private Limited.

Koch N (2013) Why not a world city? Astana, Ankara, and geopolitical scripts in urban networks. *Urban Geography* 34: 109–130.

Kuus M (2013) Foreign policy and ethnography: A sceptical intervention. *Geopolitics* 18: 115–131.

Lee H-L (2009) National Day Rally speech. Available at: http://www.news.gov.sg/public/sgpc/en/media_releases/agencies/pmo/transcript/T-20090816-3.html (accessed 18 August 2013).

Lim V (2008) *Creating Paradise T3: Singapore Changi Airport*. Singapore: SNP International Pub.

McCann EJ (2008) Expertise, truth, and urban policy mobilities: Global circuits of knowledge in the development of Vancouver, Canada's 'four pillar' drug strategy. *Environment and Planning A* 40: 885–904.

McCann E (2011) Urban policy mobilities and global circuits of knowledge: Toward a research agenda. *Annals of the Association of American Geographers* 101: 107–130.

McCann E and Ward K (2010) Relationality/territoriality: Toward a conceptualisation of cities in the world. *Geoforum* 41: 175–184.

McCann E and Ward K (eds) (2011) *Mobile Urbanism: Cities and Policymaking in the Global Age*. Minneapolis: University of Minnesota Press.

McCann E and Ward K (2012) Assembling urbanism: Following policies and 'studying through' the sites and situations of policymaking. *Environment and Planning A* 44: 42–51.

McCartney S (2011) The world's best airport? Posh shops, lush spaces: It's the place that makes layovers feel fun again. *The Wall Street Journal*, 1 December. Available at: http://online.wsj.com/article/SB100014240529702043977045777070502443425304.html (accessed 18 August 2013).

McFarlane C (2011) *Learning the City: Knowledge and Translocal Assemblage*. Oxford: Blackwell.

McNeill D (2009) The airport hotel as business space. *Geografiska Annaler: Series B, Human Geography* 91: 219–228.

McNeill D (2010) Behind the 'Heathrow hassle': A political and cultural economy of the privatized airport. *Environment and Planning A* 42: 2859–2873.

McNeill D (2011) Airports, territoriality, and urban governance. In: McCann E and Ward K (eds) *Mobile Urbanism: Cities and Policymaking in the Global Age*. Minneapolis: University of Minnesota Press, pp. 146–166.

Monclús FJ (2003) The Barcelona model: An original formula? From 'reconstruction' to strategic urban projects (1979–2004). *Planning Perspectives* 18: 399–421.

Olds K and Yeung H (2004) Pathways to global city formation: A view from the developmental city-state of Singapore. *Review of International Political Economy* 11: 489–521.

Ong A (2006) *Neoliberalism as Exception: Mutations in Citizenship and Sovereignty*. Durham: Duke University Press.

Parle D (1988) Terminal 3's private ambitions. *Metropolitan Toronto Business Journal*, 1 September, 34.

Peck J (2003) Geography and public policy: Mapping the penal state. *Progress in Human Geography* 27: 222–232.

Peck J (2011) Geographies of policy: From transfer-diffusion to mobility-mutation. *Progress in Human Geography* 35: 773–797.

Peck J and Theodore N (2010a) Mobilising policy: Models, methods, and mutations. *Geoforum* 41: 169–174.

Peck J and Theodore N (2010b) Recombinant workfare, across the Americas: Transnationalizing 'fast' social policy. *Geoforum* 41: 195–208.

Peck J and Theodore N (2012) Follow the policy: A distended case approach. *Environment and Planning A* 44: 21–30.

Raguraman K (1997) Airlines as instruments for nation building and national identity: Case study of Malaysia and Singapore. *Journal of Transport Geography* 5: 239–256.

Realty Plus (2011) Land trouble. *Realty Plus*, 21 August.

Review (1989) Captives find an attractive base. *Review*, 13 May.

Robinson JD (2011) The spaces of circulating knowledge. In: McCann E and Ward K (eds) *Mobile Urbanism: Cities and Policymaking in the Global Age*. Minneapolis: University of Minnesota Press, pp. 15–39.

Robinson J and Parnell S (2012) Traveling theory: Embracing post-neoliberalism through Southern cities. In: Bridge G and Watson S (eds) *The New Blackwell Companion to the City*. Oxford: Blackwell, pp. 521–531.

Rowles J (1991) *Airtropolis – A Commemorative Publication*. Singapore: Al Hilal Publishing (Far East) Private Limited.

Roy A and Ong A (eds) (2011) *Worlding Cities: Asian Experiments and the Art of Being Global*. Oxford: Wiley-Blackwell.

Sesser S (1992) A nation of contradictions. *The New Yorker*, 13 January.

Söderström O and Geertman S (2013) Loose threads: The translocal making of public space policy in Hanoi. *Singapore Journal of Tropical Geography* 34: 244–260.

Sreenivasan V (2008) Give CAI more space to spread its wings. *Business Times Singapore*, 28 April, 17.

The Statesman (India) (2010) Violence over Aerotropolis again. *The Statesman*, 25 March.

The Statesman (India) (2011) Aerotropolis: Unwilling farmers to get back land. *The Statesman*, 11 July.

The Telegraph (India) (2012) Andal on lips, Delhi stokes coal concern. *The Telegraph*, 20 April.

Ward K (2006) 'Policies in motion', urban management and state restructuring: The trans-local expansion of business improvement districts. *International Journal of Urban and Regional Research* 30: 54–75.