

homogeneity. In turn, they make a valuable case for the IHC and its projects, including this publication. The Centre's community-driven curatorial process demonstrates how heritage is not necessarily defined by institutional networks and state establishments. On the contrary, it is reconstituted and mediated by the people, just as diasporic cohesion is not always led by state apparatuses.

The re-imaginings of heritage and diaspora continue to evolve across the pages of this book. Painstaking picture research connects objects from disparate local and overseas collections and archives with new themes. Overall, the broad range of material, confidently deployed as empirical data, and thematic and conceptual categories, produces a deft counter to elite, colonial historiographies. As an example, stories of skilled convicts, women and non-caste Hindus make for a balanced view of the diaspora. Likewise, in the realm of the visual, the delightful Krishnanagar clay figurines depicting Indian tradespeople (pp. 226–7) are relocated from their long-held provenance as Oriental exotica/objects of curiosity/ethnographic illustrations at European exhibitions to an Asian community-led museum. The latter's inclusive storyline activates the agency of craftsmen such as Rakhil Das and contributions of tradespeople to the diaspora to not only return the Orientalist gaze, but also unsettle certainties of the diaspora's own self-image by opening it up to internal differentiations.

PRIYA MAHOLAY JARADI

National University of Singapore

Singapore: Smart city, smart state

By KENT E. CALDER

Washington, DC: Brookings Institution Press, 2016. Pp. 233. Appendix, Notes, Bibliography, Index.

doi:10.1017/S0022463418000152

This is a good read on Singapore's recent urban development towards building an innovation ecosystem and smart nation. In 2014, Singapore announced its vision of becoming the world's first smart nation. Singapore ranks among the top three smartest cities in Asia (the others are Seoul and Tokyo) in the IESE Cities in Motion Index 2017. Yet, others like Juniper Research (Basingstoke, UK) have 'crowned Singapore as the smartest city on earth' (Brian Buntz, 'The world's 5 smartest cities', Internet of Things Institute, <http://www.ioti.com/smart-cities/world-s-5-smartest-cities>).

Ever since the 'smart city' concept entered into sustainable urbanisation discussions, interest in smart cities has mushroomed, along with the ubiquitous application of ICTs/digital technologies. Over the past two decades, the volume of research and papers about smart cities has been increasing, especially after 2010 (Analisa Cocchia, 'Smart and digital city: A systematic literature review', in *Smart city*, ed. R.P. Dameri and C. Rosenthal-Sabroux, Springer, 2014). An increasing number of cities around the world, from Amsterdam and Barcelona to Warsaw and Waterloo are devising visions and strategies for achieving smart urban development. The count of smart cities worldwide is projected to quadruple to 88 by 2025, with Asia Pacific leading the

growth (Lisa Arrowsmith, 'Smart cities: Business models, technologies and existing project', IHS Technology report, 2014). There are currently over 140 smart cities projects around the world (J.H. Lee, M.G. Hancock and M.C. Hu, 'Towards an effective framework for building smart cities: Lessons from Seoul and San Francisco', *Technological Forecasting and Social Change* 89, 1 [2014]: 80–99).

Investment in smart cities is anticipated to increase. By 2020, the global smart cities market could reach US\$1.56 trillion, according to Frost and Sullivan (<http://www.news-sgi.globalprintmonitor.org/index.php/en/econ/economic-outlook/global/24387-frost-sullivan-global-smart-cities-market-to-reach-us-1-56-trillion-by-2020>). It is no surprise, therefore, that the European Commission pronounces that '[d]igitization is not a choice but a necessity for European businesses and economies as a whole' ('Digital single market in practice: Digitisation, employability and inclusiveness — the role of Europe', EC Fact Sheet 2017). Yet, as many in the smart cities epistemic community observe, the fundamental questions of 'What does it mean to be a "smart city"?' and 'How exactly does my city make the transition to a smart city?' remain (Joe Cortright, 'What does it mean to be a "smart city"?', *City Observatory*, 19 Sept. 2015, <http://cityobservatory.org/what-does-it-mean-to-be-a-smart-city-2/>; G. Feller, 'WorldSmartCity: Bringing together leaders to focus on next-generation solutions', paper, World Smart City Forum 2016).

This book on Singapore goes some way to answering these important questions.

Over the space of seven chapters, Calder meticulously sets out to unravel Singapore's ambition to become a smart city, smart state, and smart global hub. He traces Singapore's journey towards smartness, providing copious references, chapter endnotes, and a chronological table of Singapore's experience from 1923 to 2015 in the appendix. It is a well-researched work.

A central tenet of this book is Singapore's adaptability. In particular, attention is placed on understanding how and why a 'once somnolent Southeast Asian nation has morphed into a paradigm of pragmatic, technologically sensitive policy adaptation of relevance to both developing and advanced industrial nations throughout the world' (p. xi).

Calder begins the book with an Introduction, which deftly lays out the central research questions of his book:

Why has Singapore so successfully swum against the tide, both of its challenging circumstances and of contrary opinion? How long can it continue to do so and how? What do its successes, such as they are, suggest in a broader global context for how the world should deal with its pressing economic and social problems, both today and tomorrow? (p. 15).

The first question is addressed in Chapter 2, where he hypothesises and explains Singapore's imperative to be smart. Calder also expounds on the 'smart' concept and its constituent qualities as well as a scalar analytical framework of smart institutions, smart states, smart cities, and smart global hubs.

Chapter 3 moves into the core of the discussion. Using historical narration, Calder examines 'the emergence and evolution of Singapore's smart institutions and smart group dynamics' (p. 29) through the lens of crisis and response. He considers the 'how' and identifies several key operational traits that would enhance the effectiveness of smart institutions.

Singapore as a smart state is discussed in Chapter 4. This chapter explores and evaluates the nation's performance along three key state functional roles — that of providing social protection and stability, facilitating economic development, and conducting foreign policy and national security. As with his analysis of smart institutions, Calder highlights the central traits of a smart state and goes on to illustrate the smart state in action.

Chapter 5 calibrates Singapore's development as a smart city, how it is responding and riding ICT developments to create a liveable urban environment. Singapore's urban development challenges, policies and innovations in land transport, resource management and environmental protection are discussed.

Chapter 6 examines Singapore's capitalisation of globalisation to nurture a smart global hub. Four key dimensions are discussed – creating infrastructure for global interaction, attracting foreign investment and knowhow, creating a knowledge economy, exporting urban solutions. The underlying premise is that 'Singapore's experience thus speaks clearly to the cities of the world, especially those that must transform or re-create themselves to meet the immense new demands imposed by urbanisation' (p. 149). Examples of cross-regional and global knowledge and solutions sharing are included.

While Singapore's development experience may be astounding by many measures, Calder is astute and quick to acknowledge that 'one size never fits all'. In the concluding chapter, he raises and debates the prospects of the transferability and scalability of the Singapore experience. Calder also returns to the key research questions, summarising how the innovation ecosystem of smart institutions, smart city, smart state and smart global hub emerged in Singapore, how they function, and what the implications are for Singapore's continued relevance in and relations with the world. Even though the book has covered a broad range of topics, Calder ends the chapter (and book) with issues for future research and implications for policy.

Despite extensive research and excellent scholarship, some minor aberrations that sometimes happen with books remain. These include, for example, writing 'Economic Policy Board' when it should be 'Economic Development Board' on p. 159; making a reference to Jurong and Paya Lebar as key new towns in fig. 5-3 on p. 115 when there are 23 public housing new towns in Singapore with no mention of Paya Lebar among them (see the Housing and Development Board annual reports). Still, there is plenty in this book to offer the interested reader.

There is little doubt that smart urbanism is among the next phase of global urban development. When examining whether smart urbanism is a 'utopian vision' or 'false dawn', to paraphrase the question posed in the title of another recent book on this topic by Simon Marvin, Andres Luque-Ayala and Colin McFarlane (Routledge, 2016), Calder's book — *Singapore: Smart city, smart state* would be interesting to read and equally interesting to discuss in that debate.

BELINDA YUEN

Singapore University of Technology and Design