



VOLUME 2

# **Australian-Asian Research Collaborations in the Humanities**

Mapping the Present,  
Planning the Future

07. Singapore

**Australian-Asian Research Collaborations in the  
Humanities: Mapping the Present, Planning the Future  
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# Singapore

This profile explores humanities research in Singapore. Following a thematic introduction by Nicki Tarulevicz and Antonia Finnane, the substantive report by Brigid Freeman commences with an overview of the higher education system. It then proceeds to explore humanities research and cultural institutions, humanities research policy, funding and incentives, humanities research outputs, and international engagement.

# Introduction

NICKI TARULEVICZ AND ANTONIA FINNANE

Former British colony, equatorial island-nation, port, and city-state, Singapore is a familiar point of reference in writings on Asia, appearing more often than its size would seem to warrant, and in a range of literary genres: fiction, autobiography, history, ethnography. Early records in Chinese, Javanese, and Malay shaped imaginings of a precolonial Singapore. British colonialism, international travel, and the Second World War gave rise to different genres of writing, ranging from short stories to prison diaries. These modern historical English-language accounts join contemporary Singaporean and Malaysian accounts of popular culture and everyday life – Terry Tan’s *Stir-Fried and Not Shaken*, Cheryl Lu-Lien Tan’s *A Tiger in the Kitchen* – to provide a humanities face to a culture and society more often considered in social science terms.

Contemporary cultural institutions reflect the colonial heritage and its practices of documentation. The National Museum of Singapore evolved from the Singapore Library, which opened in 1845. In its later expanded form, the library was known as the Raffles Library and Museum, which played a crucial role in cataloguing and ordering colonial knowledge. The Singapore Botanical Gardens, founded in 1859, was inaugurated with a commercial and scientific focus but moved into tourism and knowledge-building, and has served as a template for many cultural institutions in Singapore. Its Staff Library is one

of the oldest research libraries in Southeast Asia. The Mission Press, set up as a training ground for Malay apprentices in printing and lithography in the middle of the nineteenth century, provided the business foundations for Fraser and Neave, the owner of Times Publishing, which is a major press for educational publishing under the Marshall Cavendish brand.

## EDUCATION

In keeping with this strong tradition of publishing and librarianship, education has emerged as a key industry for Singapore. Current international student numbers stand at around 75,000 (from primary to tertiary). The government funds a raft of regional scholarships but many of these international students are full-fee paying, making education a significant export. Tertiary students constitute the category most desired, because Singapore is consciously trying to position itself as the ‘Boston of the East’ with a hub of universities. There are currently six universities, led by the flagship research institution, the National University of Singapore (NUS). NUS was founded in 1905 as a medical school, but developed a humanities focus through its merger with Raffles College (founded 1928). A number of foreign universities are represented in Singapore, the most notable being Yale, which in 2011 went into partnership with NUS to develop what is predominantly a fully residential institution

offering a four-year undergraduate degree. In addition to being Singapore's first designated liberal arts college, Yale-NUS College exemplifies a broader shift away from British university models, towards the United States model.

In the early colonial period, education in Singapore was the remit of missionaries, Catholic and Protestant, and despite state funding and regulation, there remains a strong association between religious orders and elite education at the pre-university level. There are no religiously-affiliated universities. The first post-secondary education initiatives were predominantly vocational, and from 1955 can be characterised as a 'survival-driven education' system focused on producing a workforce skilled for rapid industrialisation and economic development (Chia, 2015). With the exception of NUS, all of Singapore's universities have names that reflect their origins in planning around the provision of technical, scientific, or management education, even though most also embrace some humanities interests.

## LANGUAGE POLICY

English is the language of instruction and research across all institutions in Singapore, although this was not always the case. The history of Nanyang University (1958–1980) illustrates the historical lines of tension between English and Chinese as a means of communication in the city-state. Founded by Chinese rubber merchant Tan Lark Sye in 1953 and funded by the business and local community, Nanyang University was designed to provide higher education opportunities for graduates of Chinese-language institutions and streams, initially in British Malaya and then, after independence, in Singapore, the end goal being to provide Chinese-educated leaders and teachers for the future. Welcomed enthusiastically by the Chinese community, Nanyang University was beset by controversy almost from the beginning, with an English-speaking Chinese elite championing an alternative model of education. In 1975, ten years after independence, the entire curriculum was switched to English, and in 1980 the institution ceased to exist. Its students and courses were absorbed by the University of Singapore (henceforth National University of Singapore), and its vocational objectives were transferred to a new institution, the Nanyang Institute of Technology (Huang, 2008).

Language and cultural policy continue to be vexed political issues in Singapore. While English remains

the predominant language, within the school system it has been paired with a mother-tongue language learning policy, where students learn a language determined by their race. A number of scholars have raised concerns that this system advantages Chinese students, who emerge from their education with two international languages (Ng, 2014). This is especially the case for the Special Assistance Plan Schools inaugurated in 1979, effectively bilingual schools in which students have intensive instruction in Mandarin. Reflecting both a rise in international Chinese students coming to Singapore, and an increased focus on China as a market, a Bicultural Studies Programme was established in 2005 with the aim of producing proficient bilingual graduates able to engage with China. This program has contributed to a rising number of Singaporean students studying in the People's Republic of China (PRC), which from a low base line of 583 in 2002 had increased nearly tenfold by 2013 (Zhao, 2016, p. 184).

## RACE, GENDER, RELIGION

Language policy is connected to race, a key governmental organising principle in Singapore, with citizens officially classified as Chinese, Malay, Indian, or Other. Public policy is informed by these classifications, with public housing, for example, implementing racial diversity to such an extent that the racial composition of specific buildings must reflect the national racial breakdown (75 per cent Chinese, 15 per cent Malay, and 9 per cent Indian). Within the higher education sector, however, racial quotas are not used, with gender having instead been historically a more important factor in structuring university admissions. Until 2003, there was a 30 per cent cap on female admissions to study medicine. As of 2017, female students make up 71 per cent of Faculty of Arts admissions at NUS and are over-represented in traditional fields such as nursing but remain under-represented in fields such as law (42 per cent) and especially in engineering (15 per cent of mechanical engineering). In the humanities, female students dominate as PhD candidates and in rates of graduation.

Singapore's racial diversity reflects its religious diversity. While the category of Malay is sometimes sloppily conflated with the category of Muslim, there are non-Malay Muslims in Singapore, too, as well as Christian, Hindu, and Buddhist minorities. Religious tolerance is a foundational principle of contemporary Singapore, and religious background is not an impediment to accessing higher education. Curtailment of potentially sensitive political and

religious matters, however, remains a live issue in Singapore, including on campuses. Tensions between freedom of expression and sensitivity towards racial and religious minorities have been an issue for foreign universities, including being formally raised in the context of the Yale-NUS campus. From time to time, the Maintenance of Religious Harmony Act has been evoked to censor campus publications and cancel events ranging in nature from public lectures to fashion shows, on grounds of possible offence.

## TEACHING, RESEARCH AND APPLIED HUMANITIES

In both teaching and research, humanities trail other areas of scholarship. Within the National Research Foundation (NRF), for example, the Create Directorate would seem from its title likely to be about the creative arts and industries, but is in fact focused on technological innovation and excellence, while outside of the STEM (science, technology, engineering and mathematics) area, social science disciplines do better than the humanities in funding. The humanities have benefited somewhat from a rising interest in ‘soft power,’ deployed both at home and abroad. An example is the deployment of the classic liberal arts argument of producing well-rounded citizens, which underpins the compulsion on all students at NUS to take a module in Singapore Studies (SS) to satisfy a breadth requirement. Singapore Studies is not a major, and many SS modules are cross-listed from disciplines within the faculty of arts. They complement a general education that ‘prepares students to think deeply, ask critical questions, make logical inferences, and debate issues related to the diverse and changing cultural landscape occurring across the globe’ (NUS, 2018). Within this framework, telling Singaporean stories, capturing the nation’s past, and locating Singapore within its region are increasingly valued. Nation-building is seen as an area in which the humanities can contribute. At the same time, because criticism of the Singaporean government and the formation of the Singaporean state is censored, the SS agenda tends to blur the lines between critical studies and propaganda (Alviar-Martin and Baildon, 2017).

For the past two decades, again in response to the imperatives of soft power, Singapore has actively pursued a creative arts agenda through investment in gaming. From public investment in the Esplanade Theatres (a four-theatre complex with a dedicated Performing Arts Library) to policy support for independent games studios,

government has worked to make the creative arts across a broad spectrum of products highly visible for local audiences and visitors alike. Such spaces have been complemented by visual arts investments, including the establishment of the Singapore Arts Museum. Attracting tourists is a key objective of these investments, but they are also important symbols of Singapore’s status as a world city. In this sense, the creative arts have been tied to a tourism and globalisation strategy. Here, both the creative arts and the humanities are seen as relevant insofar as they are productive. Singaporean and international scholars have challenged this utilitarian argument and have made a number of critical interventions especially around the issue of critical thinking (Lim, 2016) and history education (Baildon et al., 2013).

## INTERNATIONAL CONNECTIONS

Internationally, Singapore is well connected, with an exceptionally high degree of prominence, including in education, for such a small state. International student movements contribute to its visibility, with Singaporean students now making their way to universities across the world. In 2017, Australia was the top destination for outward-bound Singaporean students, closely followed by the United Kingdom (Ang, 2017). Among inbound students, Chinese students are the most populous group, with upwards of ten thousand enrolled in universities and polytechnics in 2012. This helps counterbalance the ‘brain drain,’ a subject of constant anxiety in Singapore. Anxieties about immigration, on the other hand, have served to limit the numbers of international students. At NUS, the proportion fell from over 23 per cent in 2013 to 17 per cent in 2017 (Seah and Png, 2018).

The Singaporean government fosters international links and expertise in research through the sponsorship of higher education through research, the recruitment of high-achieving international researchers to its universities, and funding partnerships with foreign countries. Funding for research is predominantly provided by the government, either directly or via intermediate institutions, such as the National Library of Singapore (NLS), under the auspices of the Ministry of Communications and Information. The NLS houses, for example, the Lee Kong Chian Reference Library, which administers two prestigious research fellowship schemes. The Ministry of Education (MOE) oversees these and other funding schemes, as well as the general funding of higher education. Government

funding is also available for supporting overseas postgraduate study for exceptional Singaporean students, who in exchange are obligated to work a period of time for a Singaporean institution after graduating. The NRF, located within the Prime Minister's Office, has funding agreements with a range of international partners, including France, the United Kingdom, Luxembourg, Israel, and the PRC (Singapore Government, 2018). Across all higher education institutions in Singapore, applied research is rewarded and appreciated.

International scholars have also played an important role in Singaporean humanities scholarship, as scholars working in Singapore, and through collaborations and interactions. Visiting scholar programs such as those offered by the Asia Research Institute (ARI), NUS, and the Institute of Southeast Asian Studies (ISEAS) Yusof Ishak Institute (formerly the Institute of Southeast Asian Studies) nurture local, regional, and international scholars with a focus on Asian research. In bringing a range of international scholars to Singapore, short- and long-term collaborations and knowledge

networks are developed. Singapore, with its strong international position, facilitated in part by its English language capacity, combined with a political commitment to developing it as an educational hub, and enriched by regional and international students and scholars, plays an important intellectual role in the region.

For humanities scholars, the excellence of Singapore's educational and research cultures is qualified mainly by restrictions on free speech and publication. Within Singapore, it is difficult and risky to offer public criticism of the government, nation, or state, and university authorities frankly admit to engaging in 'risk mitigation' on this front (Polakiewicz, 2019). Perhaps unsurprisingly, the scholarly literature on education, the arts, and humanities scholarship in Singapore is thick with references to censorship and the constraints it places on innovation, creativity, and the focus and scope of research projects. These are factors that have to be taken into account in institutional and scholarly relationships connecting Australia and Singapore.





REPORT 07

# Singapore

BRIGID FREEMAN

## HUMANITIES RESEARCH AND CULTURAL INSTITUTIONS

### Background

Modern Singapore, founded as a trading post in 1819, became a British colony in 1824, and an independent sovereign state in 1965. Since independence it has been governed by the People's Action Party, and has effectively been a one-party state, listed as 'partly free' in the Freedom in the World 2015 rankings. According to Freedom House (2016, n. p.) 'academics engage in political debate, but their publications rarely deviate from the government line on matters related to Singapore.' Although Singapore ranks high in measures associated with order and security, criminal justice, and the absence of corruption and civil justice, Barr and Skrbiš (2008, p. 68) argue that its 'system of governance is systematically pervaded with ideological, social, ethnic and class biases.'

Singapore is a highly competitive, high-income economy, ranked second in the world according to the Global Competitiveness Index for the four years to 2015, behind Switzerland, and well ahead of Australia (ranked 22) (Sala-i-Martin et al., 2014, p. 13). Its economic strengths and high quality of life mask emerging challenges including an aging population, social and economic change, and security factors (Lee, 2014, p. 5). Nonetheless, in the years 2014 to 2019, Singapore has ranked first or second in Asia in terms of the Human

Development Index, rising from eleventh to ninth in the world over this period.

The Singapore Government invests heavily in education, which it sees as an important nation-building tool (20 per cent of total government expenditure in 2013, or 2.9 per cent of gross domestic product [GDP]) (The World Bank Group, 2018). Its financial commitment to research and development (R&D) is less remarkable. At 2.2 per cent of GDP, its gross expenditure on R&D in 2017 was considerably less than South Korea's (4.2) and Japan (3.1) (United Nations Educational, Scientific and Cultural Organization [UNESCO] Institute for Statistics, 2019a). Its strong showing in STEM-related research has been attributed to other factors: broadly to its networking capacity, and specifically to the 'recruitment of high-tech multinationals ... which have brought an enormous amount of innovation to the city-state' and the presence of 'a transnational elite of expatriates who play a vital role in entrepreneurship, R&D, and directing foreign investment in local S&T-based [science and technology] industries' (Taylor, 2016, p.168).

Networking and international recruitment are features of the humanities sector, as well, although with less stellar results. One challenge for the humanities is the government's emphasis on economic competition and profit-making, to the detriment of attention to 'spontaneity, creativity and entrepreneurship' and the 'appreciation and

development of “softer” skills such as creative thinking and artistic ambition’ (National Volunteer and Philanthropy Centre, 2013, n. p.). While the Singapore Government has sought to position the country as an arts and culture gateway, censorship and the commercialisation of art are not conducive to creative freedom. Another challenge lies in the high degree of instrumentalism evident in funding. The Social Science and Humanities Research Fellowship was welcomed on its launch in 2018, but the awards have been almost entirely in the social sciences area: geography, social work, health, political science (MOE, 2018b).

### Higher education system features

Singapore’s higher education sector comprises five public universities: NUS, Nanyang Technological University (NTU), Singapore University of Technology and Design, Singapore Institute of Technology, and Singapore Management University. The sixth local university, Singapore University of Social Sciences (SUSS), known before 2017 as Singapore Institute of Management University (SIM), is a private university. Both NUS and NTU are comprehensive universities, the latter having transformed itself from a mainly technological and teaching institution into a comprehensive, research-intensive, globally competitive university in a reform process beginning in 2006.

The tertiary system in Singapore also includes a liberal arts undergraduate college, the Yale-NUS College (mentioned above). Singapore has a strong polytechnic sector, two specialised arts schools (Nanyang Academy of Fine Arts and LASALLE College of the Arts) and three institutes of technical education.

**TABLE 1** Singapore’s Universities and Humanities-Related Academic Divisions

Institution	Relevant Academic division
National University of Singapore	Division of Humanities
Nanyang Technological University	School of Humanities
Singapore Management University	School of Social Sciences
Singapore University of Technology and Design	Humanities, Arts and Social Sciences
Singapore Institute of Technology	Design and Specialised Businesses
Singapore University of Social Sciences	School of Humanities and Behavioural Sciences

Of these universities, NUS performs very well in international ranking exercises. It ranked first overall in the 2016 Times Higher Education (THE) Asia University Rankings (THE, 2016), a position it maintained till displaced by China’s Tsinghua University in 2019 (THE, 2019). It was also represented in the Academic Ranking of World Universities (ARWU) ‘top 100’ in 2016 (ShanghaiRanking Consultancy, 2016). In the Quacquarelli Symonds (QS) Asia University Rankings it was still in top position in 2019, and in eleventh place in the world rankings (QS, 2019).

Singapore accepts foreign educational providers and is one of the largest hosting countries in the world, along with China, the United Arab Emirates, and Qatar (Wilkins and Huisman, 2012, p. 627). More than thirty United States, European, Asian, and Australian universities were delivering joint programs with Singapore universities in 2011 (Toh, 2012, p. 11). Some foreign universities have encountered or perceived difficulties with operating in Singapore. The University of Warwick rejected invitations to establish a campus in Singapore, citing concerns about academic freedom (Lee, 2012). The same concerns were raised in connection with the establishment of Yale-NUS (Tan, 2017a), and have continued to be aired, most recently in a controversy over an academic seminar on ‘Dialogue and Dissent in Singapore’ (Polakiewicz, 2019).

Several Australian universities have established a presence in Singapore. The James Cook University Singapore campus has a predominantly social science research program that complements social science, environmental science, and information technology subject offerings. The Curtin University Singapore campus delivers applied humanities (project management), business, and health sciences programs. La Trobe University runs nursing and business programs through partner institutions. Murdoch University offers Executive Education programs and teaches in business courses. The University of Adelaide’s Ngee Ann-Adelaide Education Centre was wound up in 2017 after eighteen years of operation.

Singapore’s tertiary education student population totalled 255,348 in 2013 (UNESCO Institute for Statistics, 2014a), but a relatively low percentage were enrolled in universities. In 2014, with a relatively small intake of 17,870 commencing students (Ministry of Education, 2015, p. 36) a total of 61,993 full-time students were enrolled in first-degree level university programs, with slightly more women than men (MOE, 2015, p. 21). The

majority (79 per cent) of higher education students are enrolled at the undergraduate level, with smaller proportions enrolled in masters programs (16 per cent) and doctoral programs (5 per cent) in 2011 (UNESCO Institute for Statistics, 2014b). Less than half of the doctoral student population (39 per cent in 2013) were women (UNESCO Institute for Statistics, 2014a). The percentage of doctoral candidates in Singapore (5 per cent in 2011) was higher than in other leading Asian countries (UNESCO Institute for Statistics, 2014a).<sup>1</sup>

In 2017, Singapore's R&D 'manpower' was calculated at 49,297, of which 65 per cent were male, and over 71 per cent were in the science and engineering category. Women researchers are a growing minority, both across all research sectors (30 per cent), and specifically in the higher education sector (33 per cent) (Organisation for Economic Co-operation and Development [OECD], n.d.).

### Humanities research in leading higher education institutions

Humanities research in the Singapore university sector is concentrated largely in two universities: NUS and NTU. NUS is Singapore's flagship comprehensive research university. In the early 2000s, Harvard-trained President Shih Choon Fong aimed to establish NUS as a borderless 'Global Knowledge Enterprise' where the humanities and social sciences could serve national development with their analytical abilities and indigenous perspectives on regional economics and society (Sidhu, Ho and Yeoh, 2011, p. 33). In recent times, President Tan Chorh Chuan has aspired to have NUS achieve the status of 'a leading global university centred in Asia,' in part through recruiting 'world class faculty (Sidhu, Ho and Yeoh, 2011, p. 33). At present, humanities scholarship at NUS is concentrated on English and Chinese language, literature and linguistics; Asian, European, American, and military history; Chinese, Indian, and Western philosophy; theatre studies and archaeology. These disciplines are complemented by Asian area studies of China, Japan, the Malay-Indonesian archipelago, South Asia, and Southeast Asia.

The need for interdisciplinary research involving humanities scholars at NUS has long been recognised (Chua, 1999, p. 4). Such interdisciplinary research may involve humanities

scholars working with others to address problems such as 'aging, sustainability, the future of health care, financial risk, and the Asian diaspora' (Halliwell, 2010, p. FA15). In fact, NUS already supports interdisciplinary, Asia-focused research institutes that span the humanities and social sciences. ARI attracts a large number of visiting researchers from Australia, Europe, the United States, and Asia, and 'aims to be the hub for high-quality social science and humanities research on Asia' (ARI, 2015, p. 15). ARI undertakes interdisciplinary research based around clusters exploring migration, urbanisation, culture, religion, globalisation, and science and society (NUS, 2016). Other institutes include the Institute for South Asian Studies; and the East Asian Institute, the governing board of which is chaired by Professor Wang Gungwu, former President of the Australian Academy of the Humanities (AAH) (1980–1983). The long-standing ISEAS Yusof Ishak Institute is autonomous but located on the NUS campus.

NTU is principally focused on technology-related disciplines. Founded in 1991 from a merger of two pre-existing institutes, NTU has developed rapidly in research capacity and global standing and is now recognised as a leader in fields such as interactive digital media. The College of Humanities, Arts and Social Sciences at NTU encompasses schools offering programs in art, design and media, humanities, and communication and information. Other NTU institutes and centres include the Nanyang China Institute, the Centre for Chinese Language and Culture, the Chinese Heritage Centre, and the Confucius Institute. Centres focused on the arts include the Centre for Asian Art and Design, and the Centre for Contemporary Arts. NTU offers joint PhD programs with leading international universities including Imperial College London; provides interdisciplinary graduate education (e.g., focusing on interactive digital media); and supports international research collaboration on key research priorities such as new media (Lim and Boey, 2014, pp. 5–6).

Among smaller providers of humanities education and research are the Singapore Management University (SMU), Mediapolis@one-north, and Yale-NUS College (above). SMU specialises in social science disciplines, but some humanities and interdisciplinary research is undertaken in research centres focused on issues such as gender identity, culture, religion, thought, and contemporary Asian

1. The percentage of doctoral candidates in other leading Asia countries includes: Hong Kong (5 per cent), Malaysia (4 per cent), Japan (2 per cent), and Korea (2 per cent) (UNESCO Institute for Statistics, 2014b).

**TABLE 2** Select Leading Universities: Humanities and the Arts Teaching and Research Strengths, Singapore

Discipline	Institutions, Centres and Projects	Humanities Teaching and Research
Language and Linguistics	<ul style="list-style-type: none"> <li>National University of Singapore</li> <li>Nanyang Technological University</li> </ul>	<ul style="list-style-type: none"> <li>Chinese</li> <li>Multilingual studies</li> </ul>
History	<ul style="list-style-type: none"> <li>National University of Singapore</li> <li>Nanyang Technological University</li> <li>Yale-NUS College</li> </ul>	<ul style="list-style-type: none"> <li>Southeast Asia</li> <li>East Asia</li> <li>Europe</li> <li>America</li> <li>Military</li> </ul>
Philosophy and Religion	<ul style="list-style-type: none"> <li>National University of Singapore</li> <li>ISEAS Yusof Ishak Institute</li> <li>Singapore Management University</li> <li>Yale-NUS College</li> </ul>	<ul style="list-style-type: none"> <li>Chinese</li> <li>Continental</li> <li>Indian</li> <li>Western</li> <li>Chinese religions (Buddhism, Daoism, popular religion, sectarian religion)</li> <li>Religion and civil society (Southeast Asia)</li> </ul>
Archaeology	<ul style="list-style-type: none"> <li>National University of Singapore</li> <li>Nanyang Technological University</li> <li>ISEAS Yusof Ishak Institute</li> </ul>	<ul style="list-style-type: none"> <li>Archaeology</li> </ul>
Area Studies/ Asian Studies	<ul style="list-style-type: none"> <li>National University of Singapore</li> <li>ISEAS Yusof Ishak Institute</li> <li>Institute of South Asian Studies</li> </ul>	<ul style="list-style-type: none"> <li>China</li> <li>Japan</li> <li>Malay-Indonesian archipelago</li> <li>South Asia</li> <li>Southeast Asia (Indonesia, Malaysia, Thailand, Myanmar, Vietnam)</li> <li>ASEAN studies</li> <li>Europe</li> </ul>
Cultural and Communication Studies	<ul style="list-style-type: none"> <li>ISEAS Yusof Ishak Institute</li> <li>Nanyang Technological University</li> <li>Singapore Management University</li> <li>Mediapolis</li> </ul>	<ul style="list-style-type: none"> <li>Regional, social and cultural studies (Southeast Asia)</li> <li>Cultural studies</li> <li>Gender, identity and culture</li> <li>Emerging media technologies, content and services</li> </ul>
English Language and Literature	<ul style="list-style-type: none"> <li>National University of Singapore</li> <li>Nanyang Technological University</li> </ul>	<ul style="list-style-type: none"> <li>English language and linguistics</li> <li>English literature</li> </ul>
Literature	<ul style="list-style-type: none"> <li>National University of Singapore</li> <li>Yale-NUS College</li> </ul>	<ul style="list-style-type: none"> <li>Chinese literature</li> </ul>
The Arts	<ul style="list-style-type: none"> <li>National University of Singapore</li> <li>Nanyang Technological University</li> </ul>	<ul style="list-style-type: none"> <li>Theatre studies</li> <li>Art</li> <li>Design</li> <li>Media</li> </ul>
Digital Humanities	<ul style="list-style-type: none"> <li>National University of Singapore</li> <li>Nanyang Technological University</li> </ul>	<ul style="list-style-type: none"> <li>NUS: Map of Origins: Chinese Clans in Singapore; Singapore Places of Worship; Asian Shakespeare Intercultural Archive; Wayang Kontemporer: Innovations in Javanese Wayang Kulit</li> <li>NTU: Singapore Internet Research Centre</li> </ul>

society. A notable example is the Wee Kim Wee Centre, headed by Associate Professor of English Literature, Kirpal Singh, a leading humanities scholar with research interests spanning creative writing, thinking and reasoning, and literature.

Mediapolis was established as a living laboratory for emerging media technologies, content and services, in parallel with Singapore's biomedical sciences hub (Biopolis) and science, engineering and information technology hub (Fusionopolis). It is a hub for Singapore's growing digital media sector, embracing animation, film and television, interactive digital media, games and publishing (Media Development Authority Singapore, 2011). It has partnered with Western

Australia's ScreenWest in a number of projects (Gonzalez, 2011).

Yale-NUS College represents a departure from the Singapore model of higher education focused on science and technology (Chan, 2010). It provides a liberal arts education spanning the humanities, social sciences, and sciences. As a recently established, undergraduate education provider, Yale-NUS College's research profile is only just emerging. It has a number of Australian or Australia-trained faculty, including Professor Jane Jacobs, currently director of the Division of Social Sciences, who taught at the University of Melbourne and was a founding member of Melbourne's Institute of Postcolonial Studies.

**TABLE 3** Intake, Enrolment and Graduates of Universities by Course (Full-Time, First Degree Only) (2014)

Courses	Intake		Enrolment		Graduates	
	Total	Female	Total	Female	Total	Female
Engineering Sciences	4,938	1,441	16,606	5,050	4,221	1,174
Humanities & Social Sciences	3,129	2,107	11,291	7,535	2,422	1,619
Natural, Physical & Mathematical Sciences	2,276	1,357	8,145	4,922	1,889	1,103
Business & Administration	1,902	1,065	6,577	3,597	1,477	846
Accountancy	1,515	860	4,368	2,456	1,122	649
Information Technology	1,166	343	4,152	1,343	997	289
Health Sciences	544	379	1,498	1,076	433	309
Fine & Applied Arts	491	304	1,578	937	394	229
Architecture & Building	470	314	1,990	1,213	404	258
Law	397	170	1,514	715	356	176
Medicine	379	182	1,585	801	261	127
Education	301	233	1,065	813	508	388
Mass Communication	185	139	729	555	158	114
Services	123	69	679	393	354	219
Dentistry	54	38	216	132	45	30
<b>TOTAL</b>	<b>17,870</b>	<b>9,001</b>	<b>61,993</b>	<b>31,538</b>	<b>15,041</b>	<b>7,530</b>

Source: Ministry of Education, 2015, p. 21.

### Humanities undergraduate provision and research training

Of the relatively small cohort of full-time students enrolled in first-degree level university programs (61,993 in 2014), 11,291 were enrolled in humanities and social sciences programs (18 per cent), and a further 1578 in fine and applied arts (3 per cent). In addition, 729 were enrolled in mass communication programs (1 per cent). By contrast, large numbers of first-degree students were enrolled in engineering sciences (16,606 or 27 per cent), natural, physical, and mathematical sciences (8145 or 13 per cent) and business administration (6577 or 11 per cent). While Singapore's undergraduate cohort comprises only slightly more women than men (51 per cent), significantly more women than men are enrolled in humanities and social sciences programs (67 per cent) and fine and applied arts (59 per cent) (MOE, 2015, p. 21) (Table 3). By 2019, the absolute numbers had increased but the proportions had not greatly changed.

Just as enrolment patterns for humanities students differ between the universities, so too do graduation rates. Graduates from the NUS Faculty of Arts and Social Sciences, along with graduates from the NUS Yong Siew Toh Conservatory of Music, represented less than one fifth of all NUS graduates in 2014 (Ministry of Manpower, 2015).<sup>2</sup> The proportion of humanities undergraduate and masters graduates from NTU is extremely small but growing, increasing from 3 per cent in 2005 to 7 per cent in 2014,<sup>3</sup> along with a number of humanities PhD graduates. NTU has invested heavily in transforming itself from a technical into a comprehensive university. In 2018 to 2019, the College of Humanities, Arts and Social Sciences had around 400 research students (PhD and MA) (NTU, n.d.). At SIM University (now SUSS) the proportion of humanities graduates dropped from 18 per cent in 2010 to 13 per cent in 2014 (Table 4). Aggregate data for all Singapore universities do not, however, suggest continuation of a downward trend. The percentage of humanities

<sup>2</sup> While humanities graduates represent a proportion of this, it is not possible to disaggregate this data and identify graduation rates for humanities graduates specifically.

<sup>3</sup> The data for NTU PhD graduates was not disaggregated to the discipline level. While the total number of PhD graduates grew rapidly from 85 in 2005 to 548 in 2014, it is not possible to determine the number of humanities PhD graduates.

**TABLE 4** Number of Graduates from Singapore Institutions of Higher Learning and Course (2005, 2010, 2014)

	2005		2010		2014	
<b>National University of Singapore</b>						
• Faculty of Arts and Social Sciences*	1,718*	1,718 (19%)	1,701*	1,741 (18%)	1,761*	1,827 (17%)
• Yong Siew Toh Conservatory of Music	—		40		66	
<i>Total NUS graduates, all disciplines:</i>	8,881		9,442		10,748	
<b>Nanyang Technological University</b>						
• Art, Design and Media	—	(152) 3%	143	(473) 6%	148	592 (7%)
• Chinese	—		88		141	
• Communication Studies	146		177		158	
• English	—		62		78	
• Linguistics and Multilingual Studies	—		—		63	
• Master of Communication Studies	6		3		4	
<i>Total NTU graduates, all disciplines:</i>	6,057		7,882		8,467	
<b>SIM University**</b>						
• Chinese Language	—	—	—	263 (18%)	72	285 (13%)
• English	—		217		154	
• Malay Language	—		—		40	
• Tamil Language	—		46		19	
<i>Total SIM University graduates, all disciplines:</i>	—	—	1,463		2,197	
<b>Singapore Institute of Management**</b>						
• Design and Applied Arts	12	857 (17%)	48	357 (5%)	62	194 (2%)
• Language and Cultural Studies	845		309		132	
<i>Total SIM graduates, all disciplines:</i>	5,006		6,910		8,838	

\* These figures include a number of graduates who are not in the humanities.

\*\* The SIM University and Singapore Institute of Management are both under the auspices of the SIM Group. The Ministry of Manpower data is disaggregated for this group into the two institutions.

Source: Ministry of Manpower, 2015, pp. H9–H19.

and social sciences graduates in 2018 was 18.23 in 2018, compared to 15.75 in 2014 (Department of Statistics, 2019). Employment rates for arts and humanities bachelor graduates are high, with over 80 per cent employed on a full-time, part-time or temporary basis (MOE, n.d).

### Humanities academic societies

The Singapore National Academy of Science (SNAS) is Singapore's leading learned academy and operates as an umbrella organisation for scientific societies that are focused on science teachers, statistics, and the STEM disciplines (physics, science, biology, mathematics, chemistry, microbiology and biotechnology, biochemistry and molecular biology). Singapore does not have a learned academy for the humanities, but complementing the SNAS, the Social Science Research Council (SSRC) was established in

2015. Its establishment is viewed as significant in signalling 'a shift away from a heavy emphasis on science and technology-led growth' (Sharma, 2016).

### Cultural institutions and humanities infrastructure

Singapore is home to several cultural institutions relevant to humanities research, including the National Museum of Singapore, the Asian Civilisations Museum, Peranakan Museum, and Singapore Art Museum. The NUS museum has significant holdings such as the Straits Chinese Collection, and the South and Southeast Asian Collection. Major art galleries include the Arts House, the Home for the Arts, and Objectifs. Singapore also has a number of institutions that celebrate its varied origins, such as the Chinatown Heritage Centre, Malay Heritage Centre, Indian

Heritage Centre, Sun Yat Sen Nanyang Memorial Hall, and Teochew Culture Centre.

Other infrastructure for humanities research includes the National Library of Singapore established in 1823, which is both well-resourced and well-used. Its Lee Kong Chian Reference Library holds collections focused on Asia. The National Archives of Singapore houses national and historically significant records including photographs, maps and plans, posters, speeches and press releases, and private records. The Oral History Centre has a growing collection of interviews. Singapore is also home to a large number of publishers, including foreign publishers (such as Wiley-Blackwell and Cambridge University Press) and local Singaporean publishers (such as Singapore Press Holdings, Marshall Cavendish, and NUS Press).

## HUMANITIES RESEARCH POLICY, FUNDING AND INCENTIVES

### Humanities-related policies and reforms

Government arts and culture policy was developed as Singapore's economy and living standards improved (Kong, 2012, p. 281). In 1985, the *Report of the Sub-Committee on the Service Sector* recommended greater focus on 'performing arts, film production, museums, art galleries, entertainment centres and theme parks' to enhance Singapore's attractiveness and reputation (Kong, 2012, p. 282). In response, the Ministry of Information and the Arts and the Singapore Tourist Promotions Board aimed to make Singapore the 'global city of the arts' by 2000 (Kong, 2012, p. 282). In 2002, the Singapore government's Economic Review Committee Sub-Committee Workgroup on Creative Industries recommended in their report, *Creative Industries Development Strategy: Propelling Singapore's Creative Economy*, a range of strategies to 'fuse arts, business and technology' (Economic Review Committee, 2002, p. iii). The government's commitment to this sector has been further elaborated in the Ministry of Information, Communication and the Arts (MICA) Renaissance City Plans (MICA, 2002; MICA, 2008), and *The Report of the Arts and Culture Strategic Review* by the Ministry of Culture, Community and Youth released in 2012. Tertiary-level arts education and information technology (hardware and software) were emphasised, but the report did not address humanities research.

The *Research, Innovation and Enterprise 2015* (RIE2015 Plan), released by the Ministry of Trade and Industry (MTI) in 2011, establishes R&D as integral to Singapore's economic strategy. The plan seeks to establish Singapore as Asia's innovation capital and R&D hub (MTI, 2011, p. 4). The RIE2015 Plan also orients R&D towards the achievement of economic outcomes and commercialisation of intellectual property. To attract significant financial support, humanities research would therefore need to serve direct technological and economic goals (MTI, 2011, pp. 20–21).

On the other hand, the *SkillsFuture* programme launched in 2015 was directed at promoting life-long learning and had positive implications for the humanities in its emphasis on 'learning for the joy and sense of fulfilment that it brings' (Tan, 2017b, p. 281). In the following year the MOE announced a 45 per cent hike in funding for the humanities and social sciences, in wake of the establishment of the SSRC (Sharma, 2016). While it is as yet unclear how much of this funding will flow to the humanities, the initiative shows an intent to broaden the focus of higher education beyond the STEM disciplines.

### Structures (Ministries, Departments, Councils)

The MOE plays a central role in education policy, even intervening in faculty appointments and research in some humanities and social science disciplines. The Ministry's Academic Research Division is responsible for academic research policy. The division is also responsible for the allocation of funding under the RIE2015 Plan.

The MTI oversees A\*STAR, which spans the biological and physical sciences, and engineering (Olds, 2007, p. 11). The NRF within the Prime Minister's Office is involved in the development of research, innovation, and enterprise policy. The NRF supports Singapore's peak innovation authority, the Research Innovation Enterprise Council, which is chaired by the Prime Minister.

### Research funding

#### Funding bodies, programs and incentives

The MOE allocates competitive research funding to Singapore's universities. The leading research funding body, A\*STAR, focuses on science, engineering, and technology, and industry engagement for intellectual property commercialisation. Similarly, the

NRF implements a number of programs that support STEM disciplines but where humanities scholars may participate in STEM-oriented, interdisciplinary research.

### Humanities research funding

Funding for humanities research and international collaboration comes from government competitive grants and internal university funding. Funding is available for fields including the humanities through the MOE Academic Research Fund (AcRF) Tiers 1–3 schemes. AcRF Tier 1 provides research grants between S\$5000 to S\$400,000 over three years. Projects under the Accountancy, Business, Humanities and Social Sciences cluster are funded up to S\$100,000. AcRF Tier 2 is the premium competitive research funding mechanism. The scheme provides research funding to a total project value (excluding research scholarships) of S\$500,000 to S\$1 million over three years. Projects funded under the Accountancy, Business, Humanities and Social Sciences discipline cluster are funded for S\$100,000 and above. Applications are evaluated against criteria including scientific significance and potential synergies for research capabilities in Singapore’s university and research community. The Ministry also allocates Research Scholarship Block grants. The 45 per cent increase in funding associated with the establishment of the SSRC in 2016 amounted to S\$350 million for humanities and social science research over a period of five years (Teng, 2016).

In addition to MOE research funding, there are a small number of targeted funding schemes. For example, the Interactive and Digital Media (IDM) Programme Office runs the Interactive and Digital Media R&D Programme that supports research regarding animation, games and effects, media intermediary services, and ‘on-the-move’ technologies. The National Heritage Board allocates Heritage Research Grants to encourage heritage-related research. The Japan Society for the Promotion of Science, and NUS in collaboration with NTU supports collaborative research in the natural sciences, humanities, and social sciences. The Media Development Authority (2011) supports projects in animation, broadcast, film, games, interactive media, and publishing (Academic Engagement Programme). Universities have also been successful in winning international grants for humanities research. In 2014, funding organisations included the Max Planck Institute for the Study of Religious and Ethnic Diversity, the Harvard-Yenching Institute, the Social Sciences and

Humanities Research Council of Canada, and La Trobe University (ARI, 2015).

### HUMANITIES RESEARCH OUTPUTS

Research output in humanities has grown over the last two decades. The number of indexed humanities publications increased from a low base of 38 in 1996 to 405 in 2014 (SCImago Journal & Country Ranking [SJR], 2016). Strengths lie in language and linguistics, history, history and philosophy of science, and philosophy. (SJR, 2016) (Table 5).

**TABLE 5** Humanities Publications (and ‘Arts and Humanities, Miscellaneous’) by Subject Categories, Singapore (1996–2014)

Subject category	1996	2014
Language and Linguistics	13	97
History	5	47
History and Philosophy of Science	4	44
Philosophy	2	40
Literature and Literary Theory	1	30
Visual Arts and Performing Arts	1	21
Music	2	16
Religious Studies	1	13
Archaeology (Arts and Humanities)	—	6
Conservation	—	2
Classics	—	1
Museology	—	1
Arts and Humanities (Miscellaneous)	12	131

Source: SCImago Journal & Country Ranking, 2016.

The total number of citations for humanities publications for this period was 48,873 (h index = 92). Singapore’s contribution towards total humanities publications in the region has fluctuated around 5 per cent. Globally, Singapore’s contribution to global humanities publications grew from 0.1 per cent in 1996 to 0.4 per cent in 2014 (SJR, 2016).

### INTERNATIONAL ENGAGEMENT

Singapore has positioned itself ‘as a bridge between East and West and between North and South’ (Andersson and Mayer, 2015, p. 110). Universities have pursued internationalisation strategies, and participated in international networks such as the ASEAN (Association of South East Asian Nations) University Network, the Association of Pacific Rim Universities, Universitas 21, and International



Alliance of Research Universities. In the area of personnel, the Singapore Government's policy of attracting foreign scholars has produced some global-local tensions manifest in 'Singaporeans first' demands (Lo, 2014, p. 263), but the pressure of world rankings continues to provide a strong incentive for international recruitment. In 2018, NUS and NTU both launched recruitment programs aimed at attracting promising young scholars from around the world, offering successful candidates extraordinarily generous research grants as well as internationally competitive salaries. That these grants are made available in the humanities as well as science fields has been a matter for comment (Lim and Fong, 2018).

### Inbound and outbound students

The Singapore government was an early adopter of internationalisation of education. The Global Schoolhouse initiative, established in 2002, had a target of 150,000 inbound international students (spanning pre-tertiary and tertiary education) by 2015 (Lo, 2014, pp. 263, 270). However, concern about privileging foreign students to the detriment of Singaporeans led to dropping Global Schoolhouse targets (Lo, 2014, pp. 263, 270). The government capped international student intake at 18 per cent of the cohort in 2011, while seeking to increase the number of local students attending university (Ng, 2013, p. 289). The number of inbound international students declined from about 97,000 in 2008 to 84,000 in 2012, and then 75,000 in 2015 (Tan, 2016). Government spending on international students continues to be a source of local controversy, with Minister for Education Ong Ye Kung forced to clarify and defend outlays in parliament (Quinn, 2019).

The number of outbound tertiary students fluctuates (UNESCO Institute for Statistics, 2014a), but Australia has long been a top destination country. In 2014, of 34,325 Singaporean students studying abroad at tertiary level, nearly one in four were enrolled in Australian higher education programs (Garrett-Jones and Turpin, 2017, p. 72). By 2019, the total number of outbound students had fallen to 23,715, of whom 7864 were in Australia (UNESCO Institute for Statistics, 2019b).

### Scholarly collaboration

Singapore has a high profile in international research collaborations, which at government level are fostered through the Agency for Science,

Technology and Research (A\*STAR) (originally the National Science and Technology Board). Its research networks are widespread, embracing the USA, United Kingdom, France, Germany and Sweden (Andersson and Mayer, 2015, p. 111), as well as, increasingly, other parts of Asia. The proportion of Singapore's scientific publications involving international co-authors has increased dramatically from less than 35 per cent in 1997 to more than 55 per cent in 2012 (Barlow, 2014, pp. 17–18). Since 2011 Singapore's percentage of indexed humanities publications involving international collaborations has also been more than 40 per cent (SJR, 2016).

### Australia-Singapore collaborations

Singapore ranks fifth behind the United States, China, Japan and New Zealand for Australia's internationally co-authored scientific papers, ahead of India, South Korea and Taiwan (Barlow, 2014, p. 18).<sup>4</sup> Many Australian universities have established collaborations with Singapore universities, especially NUS and Nanyang, through formal agreements spanning academic/research collaboration, and staff exchange (Universities Australia, 2014).

According to the AAH's *Survey of the International Collaboration of Fellows* in 2013, Australian collaborations with Singapore-based partners are third in volume following China and Japan in Asia. The survey identified a large number of initiatives between AAH Fellows and faculty at the NUS, as well as collaborations with faculty at Nanyang. Several AAH Fellows were also affiliated with these Singaporean institutions, and many of their collaborations were based around Asian Studies.

Australian-Singaporean government-level agreements tend to emphasise the importance of science, technology, trade, and defence as areas of cooperation and collaboration. The Australia Singapore Arts Group (ASAG), is an example of an initiative that links research, the arts, and the cultural economy in an international setting. Funded through Australia's Department of Communication and the Arts (abolished in December 2019), ASAG was formed in 2016 to 'enhance cultural relations between Singapore and Australia by promoting sustainable artistic and cultural activities' (Council of Australasian Museum Directors, 2019). Its brief is to advise on exchange, capacity building, exhibitions, collaboration,

4. This analysis excludes humanities publications.

and market enhancement in the arts (Street and Neideck, 2018).

## CONCLUSION

As a site of humanities research, Singapore has limitations arising from restrictions of academic freedom. Its government is generally characterised as authoritarian (Rodan, 2004; Leo and Lee, 2004, p. 214) and controlling (Trocki, 2006), even if that authoritarianism is qualified (Rahim and Barr, 2019). Restrictions on media and academic freedom inhibit research in the humanities and social sciences (Ng and Tan, 2010, p. 187; Baildon, 2014, p. 42). The constraints are felt in the social sciences as well as in the humanities, particularly in the fields of politics and sociology, and in anything to do with Singapore itself. NTU's refusal of tenure to journalism professor Cherian George in 2014 is widely attributed to the fact that he was a critic of the Singapore government (see Cheong, 2015).

At the same time, its leading universities perform very well in world rankings, have excellent research facilities, and are well networked globally. NUS and NTU between them have a concentration of humanities teaching and research strengths across the spectrum of disciplines and studies areas, with an impressive diversity of offerings in terms of

area studies. An English-speaking city-state with a high proportion of ethnic Chinese, Singapore has teaching and research strengths in Chinese and multilingual studies, alongside English language, literature, and linguistics.

The Singapore Government aims to establish Singapore as a regional R&D hub. To this end, the Government and universities have together pursued internationalisation policies, including accommodating foreign higher education providers, recruiting international faculty and students, welcoming visiting researchers, and expanding international scholarly collaboration and publication. The Government has also sought to cultivate the cultural and creative industry sectors.

As a significant destination for outbound students from Singapore and as a source country for many academic appointments in the humanities, Australia is well placed to support Singapore's policies and initiatives in these various domains. Increasing international collaboration in the humanities could be achieved through consolidating links with NUS, exploiting NTU's obvious ambition to strengthen its HASS sector, and ensuring the continued vitality of ASAG and the activities that it oversees.

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APPENDIX A

KEY INDICATORS, SINGAPORE

Geographical location	Southeast Asia, separated from Malaysia to the north and Indonesia to the south*
Economy (GDP)	Services (76 per cent), industry (24 per cent), agriculture (0 per cent) (2015 estimate)*
Population	5,469,700 including citizens (3,343,000), permanent residents (527,000) and a very high number of non-residents (1,599,000) in 2014#
Official language	Mandarin (official; spoken by 36 per cent of the population), English (official; 30 per cent), Malay (official; 12 per cent) and Tamil (official; 4 per cent). Hokkien (8 per cent) Cantonese (4 per cent) and Teochew (3 per cent), along with other Indian languages (1 per cent) and Chinese dialects (1 per cent) are also spoken (2010 estimate)*
Ethnicity	Chinese (74 per cent); Malay (13 per cent); Indian (9 per cent); other (3 per cent) (2013 estimate)*
Religions	Buddhist (34 per cent), while smaller proportions also identify as Muslim (14 per cent), Taoist (11 per cent), Catholic (7 per cent), Hindu (5 per cent) and other Christian (11 per cent) (2010 estimate)*
GNI per capita (PPP) current international	80,270 (2014)^
Human Development Index	0.718 (1990) 0.912; ranked 11th (2014)‡
Population density	Very high (7,736.5 people per square kilometre) (2014)▲

**Sources:** \*Central Intelligence Agency, 2016. #National Population and Talent Division, n.d., p. 4. ^The World Bank Group, 2016a. ‡United Nations Development Programme, 2015. ▲The World Bank Group, 2016b.

**Abbreviations:** GNI = gross national income; PPP = purchasing power parity

APPENDIX B

UNIVERSITY RANKINGS, SINGAPORE (ARWU, QS, THE)

Academic Ranking of World Universities (ARWU) 'top 500' 2016			Quacquarelli Symonds (QS) World University Rankings 2016-2017		Times Higher Education (THE) World University Rankings (Asia University Rankings 2016)	
Country Rank	Institution	World Rank	Institution	World Rank	Institution	Asia University Ranking
1	National University of Singapore	83	National University of Singapore	12	National University of Singapore	1
2	Nanyang Technological University	101-150	Nanyang Technological University	13	Nanyang Technological University	=2

Source: ShanghaiRanking Consultancy, 2016; Quacquarelli Symonds (QS) 2016; Times Higher Education (THE), 2016.