



University as real estate developer: Comparative perspectives from the Global East

Do Young Oh^a, Hyun Bang Shin^{b,*}

^a Department of Urban Planning and Engineering, Pusan National University, 2, Busandaehak-ro 63beon-gil, Geumjeong-gu, Busan, South Korea

^b Department of Geography and Environment and Director of Saw Swee Hock Southeast Asia Centre, The London School of Economics and Political Science, Houghton Street, London WC2A 2AE, United Kingdom

ARTICLE INFO

Keywords:

East Asia
Universities
Real estate
Developmental State
Urbanisation
Global East

ABSTRACT

By examining comparatively two recent projects of university-led large-scale real estate development in South Korea and Singapore, this paper contributes to the ongoing efforts to problematise the methodological statism in the study of East Asian urbanisation, i.e., understanding it as a process dominated by state actors, on the one hand, and to challenge the perspective that university-led real estate projects are a neoliberal strategy as conventionally understood in the West on the other. To this end, this paper uses qualitative research methods to investigate how and why East Asian universities participate in real estate development projects; how the universities pursue their material goals by negotiating with the state, which is known to have led condensed urbanisation and industrialisation in East Asia (Global East). This paper concludes that speculative real estate development activities of East Asian universities are variegated based on their developmental legacies and need to be understood as more nuanced processes. The case studies demonstrate that East Asian universities have worked beyond their social roles by directly participating in the urban process, pursuing the accumulation of real estate assets that would eventually undermine their public role as educational institutions.

1. Introduction

The rapid economic and urban development of the newly industrialised economies of East Asia, including South Korea, Taiwan, Singapore and Hong Kong, has attracted scholarly attention since the 1980s. The region's progress is often explained through the concept of developmental statism, which Hill et al. (2012) define as an ideology in which the state controls the public and private sectors to achieve economic progress. The ideology stipulates that both the public and private sectors are expected to follow planning guidance from the state to secure the nation's position in the global economy through rapid industrialisation. East Asian developmentalism is also closely related to the condensed urbanisation of East Asian countries, a phenomenon that has supported state-led economic growth (Shin, 2019).

While the literature on East Asian developmentalism explores the concept of urbanisation in locations outside the West, it often oversimplifies urbanisation in East Asia by conceptualising the process as homogeneous and state-dominated. In particular, this literature is often criticised for its embedded methodological statism or methodological nationalism, a practice that takes the nation state as a unit of analysis

and emphasises its role without considering geopolitical economic diversity (see Hwang, 2016). To escape this 'territorially trapped' (*ibid.*) strand of research, some recent works on urban developmentalism (for example, Doucette and Park, 2019) highlight the need to promote a heterogeneous and contextual understanding of developmental statism through the multi-scalar and situated aspects of the urbanisation process.

A more contextual and multi-scalar study of the urbanisation process in East Asia presents an opportunity to challenge the prevailing dichotomies of the Global North and South. Here, we build upon the recent call for framing East Asia as 'Global East' (Shin, 2021a). The concept of the Global East is proposed to help us interrogate the region's divergent urbanisation process that takes into consideration its place-based geographical and historical specificities and to acknowledge the fact that the East Asian experience of urbanisation and development fails to fit neatly into neither Global North nor South (Shin et al., 2016). The Global East perspective builds on and lends its support for the emergent theoretical movements such as "southern urbanism" (Schindler, 2017) and "theoriSE" (or "southeastern turn") (Yiftachel and Mammon, 2023), which aims to challenge the long-prevalent system of knowledge

* Corresponding author.

E-mail addresses: dy_oh@pusan.ac.kr (D.Y. Oh), h.b.shin@lse.ac.uk (H.B. Shin).

production that centres on the experience of post-industrial cities of the West. It joins the call to emphasise the need of de-centring the sites of knowledge production and paying attention to the geographical specificities that speak to both localised and transnational/relational forms of knowledge. In this regard, the Global East perspective takes the interconnectedness of wider Asian geographies, especially East and Southeast Asia, as its theoretical inspiration and method, inspired further by the work of Kuan-Hsing Chen (2010) on *Asia as Method* (on China as method, see Shin et al., 2022: 1458–1460).

In our study, we propose to carefully investigate the variegated relationships between universities and the built environment in the Global East, which, we argue, can provide an opportunity to contribute to the ongoing efforts to diversify understandings of the East Asian urbanisation process and de-centre urban knowledge production away from the Global North. A handful of studies (see, for example, Han and Yu (2008), Li et al. (2014), Oh (2022) and Shen (2022)) confirm these variegated university-urban relationships and call for more in-depth work that focuses on the situated and embedded contexts. These studies imply that universities need to be conceptualised not only as actors mobilised by the state for their spatial restructuring strategies but also as independent institutions utilising state accumulation strategies to pursue expansion. Furthermore, we need to consider the particular legacies of East Asian political economy, given the historical presence of those various local, regional and transnational agents that have frequently challenged the developmental state by mobilising networks and capital from different scales against common beliefs about the developmental state (see Hsu et al., 2018).

As such, in this paper, we conceptualise East Asian universities as active urbanisation actors and go beyond the narrow interpretation of

universities as simply producers of knowledge and innovation (see Arbo and Benneworth, 2007). We also note that because of their path-dependent legacies (Jessop, 2016), the developmental trajectory of East Asian universities differs from that of the increasingly neoliberal universities in the Global North (see Slaughter and Rhoades, 2004). The spatial development of universities in East Asia needs to be conceptualised as part of wider urban processes where the higher education sector has expanded rapidly in recent decades and has contributed to the shaping of urban space. We, therefore, ask: How and why do East Asian universities participate in real estate development projects? How are we to understand the relationship between the university and the state, given the contribution of this relationship to condensed urbanisation and industrialisation? How do university real estate practices undermine these institutions' social goals?

To address the above questions, we adopt comparative case study approaches (Nijman, 2007) and analyse contemporary university experiences in East Asia to overcome the Western-dominated view of university-urban relationships and to provide an understanding of the heterogeneous urbanisation processes in East Asia. Saym et al. (2022) argue that debates about justifying the choice of comparison sites are counterproductive, as they may rule out discussions on multiple ways of understanding cities. In this regard, and also inspired by Robinson's (2016) call for comparative urbanism, this paper attempts to compose bespoke comparisons focusing on the shared features of universities instead of focusing on controlling for differences. To do so, we investigate universities in South Korea (hereafter Korea) and Singapore. The two countries share similar experiences in terms of their rapid economic and urban development, while their socio-political contexts are appreciably different (see Park, 1998). As such, in conceptualising universities



Fig. 1. The view of some condominiums developed for the construction of Yonsei University's Songdo Campus (photograph taken by the first author in December 2018).

as ‘global public goods but still nation assets’ (Thrift, 2010), an investigation of university–urban relationships in Korea and Singapore would offer an opportunity to consider both cosmopolitan and region-/country-specific aspects.

In Korea, we investigate Yonsei University, one of the country’s most prestigious private universities, and its property development projects in the newly constructed Songdo International City (see Fig 1). In Singapore, we examine the ways in which the National University of Singapore (hereafter NUS), the country’s flagship university, became involved in a 1040-unit private residential development project known as Interlace Condominium (see Fig 2). The project was completed in 2013 and was intended to replace the Gillman Heights estate. These two cases are chosen based on the opportunities they present for maximising learning outcomes that reflect the political economy of urbanisation and the historical trajectories of the sectoral development of universities in each economy. In particular, we note the dominance of national universities in Singapore and private universities in Korea against the backdrop of the state-led expansion of the higher education sectors of both countries.

For our qualitative research, we use semi-structured interviews, archival records (e.g., proceedings of parliamentary and municipal committees) and secondary data, including government reports and media publications. In total, 22 interviews were conducted with government officials, university faculty and staff members, architects and residents between August 2015 and September 2016. The following section discusses the analytical framework that situates the university in the urban process and assesses the ways in which the university positions itself in the circuits of capital accumulation and in relation to the state. In-depth thematic analyses and discussions of the two case studies are then provided.

2. Understanding university-led urban development

Much of the literature on universities focuses on the knowledge and innovation function of these educational institutions, arguing that knowledge capital derived from universities is closely related to economic growth and wealth creation (see Benneworth & Hospers, 2007). According to Harvey (1982), in capitalist societies, the function of universities is to enhance the conditions of producing surplus value by promoting research and innovation, upgrading labour forces and supporting the ideological control of society. The university, as a form of social infrastructure, may offer a competitive advantage for its host city and help attract production capital (Harvey, 1982: 402–403), thereby contributing to the rise of agglomeration economies. The belief in the potential of universities’ contributions to the economy as economically beneficial institutions justifies investment in and the expansion of universities’ physical infrastructure to create the necessary preconditions for universities’ support for capital accumulation (cf., Harvey, 1989). However, while these attributes may strengthen universities’ position in their host cities, the production of knowledge and innovation can only be successful under certain geographical and socioeconomic conditions (see Goddard et al., 2012; Park and Markusen, 1995). Thus, this perspective can only provide a partial view of universities’ overall roles in urban development.

As Haar (2011: xxv) argues, universities and urban spaces have historically been in ‘constant negotiation’. From this perspective, investigating universities’ contributions to the production of the built environment and the impact of such contributions on host cities need to go beyond the domain of knowledge and innovation, which is also an argument made by Tretter (2016). Accordingly, several urban scholars, including Perry and Wiewel (2005), recently examined the diverse relationships between universities and their host cities, many of which centred on the US experience. For example, Coffey and Dierwechter (2005), among others, demonstrate the ways in which US universities



Fig. 2. Overview of Interlace condominium (photograph taken by the first author in September 2016).

become part of the neighbourhood development process by engaging in real estate development. These activities may represent universities' attempts not only to improve their local neighbourhoods but also to enhance their competitiveness by actively intervening in the process of place-making, thus improving their respective reputations. Universities also directly engage in urban planning processes by working with local governments under the mission of urban revitalisation (Bunnell and Lawson, 2006) and taking a leadership role in city affairs (Stoker et al., 2015). Closely related to the university, property developers, and local and national state actors, students are also agents in the transformation of urban spaces (Collins, 2010).

Recent studies further suggest that universities are fast becoming entrepreneurial subjects in neoliberal cities by actively mobilising powerful actors to proceed with redevelopment projects and achieve material gains (Bose, 2015). Universities' engagements with the built environment are reinforced through financialisation, fostering universities' increasing interest in real estate. As a socioeconomic process that enables 'profit without producing', the realm of finance has stretched to non-financial corporations and institutions by means of co-opting these institutions to actively participate in financial markets (Lapavistas, 2013). As financialisation and urbanisation become increasingly interdependent systematically, the financialisation process has come to be closely related to speculative urban development, elevating the importance of real estate speculation (see Būdenbender and Aalbers, 2019; Goldman and Narayan, 2021; Moreno, 2014). The university is also considered rapidly financialised, notably in the US (Eaton, 2022), but also elsewhere, like in the Netherlands (Engelen et al., 2014), suggesting that the financialisation of the university may entail the financialisation of the university space itself (see, for example, Reynolds, 2022).

The financialisation of the university's built environment also takes place off campus. As financialisation and urbanisation entangle, universities are increasingly lured into investing their resources in land and real estate markets for speculative gains. For instance, Yale University, which operates the second largest endowment fund in the US after Harvard University, held \$4.3 billion in real estate assets in 2008 immediately preceding the subprime mortgage crisis (Yale Investment Office, 2012). Given that this trend is not limited to Yale University (see Eaton et al., 2016), Heller (2016: 181) posits that the US university is effectively 'a real-estate company which also issues degrees'. However, painting a homogeneous picture of financialised universities across the globe can be erroneous in the same manner as we try to avoid understanding the global capitalism as producing homogenising effects across cities (Ong, 2011). Universities undergoing financialisation are expected to engage in the built environment in diverse ways based on their historical and geographical contexts. In this regard, additional scholarly attention is needed to disentangle the increasingly intertwined relationship between the university and real estate in the urban process.

In the context of East Asia, the role of the university in urban development has increasingly attracted attention, especially in mainland China such as the development of university towns (*daxuecheng* in Mandarin Chinese), which are considered local state-driven suburban development projects involving satellite campuses of universities located elsewhere (Li et al., 2014; Shen, 2022; Sum, 2018; Wu, 2018). It is estimated that there are more than 100 university towns in China (Li et al., 2014). These projects are understood as an outcome of local state entrepreneurialism that mobilises universities to facilitate rapid urban development (Wu, 2018). More recently, universities have turned out to be increasingly instrumental as a financial vehicle for raising funds to facilitate suburban development projects (Shen, 2022). Such university towns in China can be considered state-led projects, politically motivated as much as they are economically driven (see Li et al., 2014; Sum, 2018). While these studies about university towns help us understand diverse university-urban relationships, especially outside the West, they tend to conceptualise the university as a passive actor mobilised by the state.

Following Haar (2011), we see the university-urbanisation

relationship to be processual. The divergent historical trajectories of urbanisation in East Asia would suggest that the university-urban relationship may also be variegated even if the political economies in the region share certain similarities. Here, it would be helpful to be reminded of the recent work by Shatkin (2016) who argues that in much of Asia, the state endeavours to increase and appropriate land values in urban development projects, and the revenues from such projects are often shared with state allies. China's experience in building university towns may also fall into this description. On the other hand, in the case of Korea, although the Korean state pursued speculative urban development (see Shin, 2021b), the country's higher education sector can be characterised by the dominance of private universities, with only minor state subsidies in the education sector (Han and Yu, 2008; Oh, 2021) (see the following section for further discussions on this). Considering these differences within East Asia, we posit that further research into the ways in which universities pursue their material goals by interacting and negotiating with the state and other key actors is required. Furthermore, such research should consider these countries' different historical and geographical contexts, as well as the varied socioeconomic and political processes across geographies.

3. Locating the East Asian university in the urban process

A diverse range of actors participate in real estate projects with different objectives, methods, and strategies. As Harvey (1989: 5) defines, the urban process is 'a spatially grounded social process in which a wide range of different actors with quite different objectives and agendas interact through a particular configuration of interlocking spatial practices.' Furthermore, these objectives are not always driven by market forces. As Hyde (2022: 189) demonstrates, it is often difficult to distinguish between 'economic' and 'non-economic' motivations for real estate development projects, and 'fictional expectations' are often mobilised to maximise profits. However, as Boanada-Fuchs and Boanada Fuchs (2022) mention, such diverse motivations and behaviours have rarely been investigated in depth. Thus, how the university relates to the built environment would benefit from close scrutiny, particularly because universities do not operate solely on market forces.

In Korea, the state has pursued urban development in conjunction with other actors, especially the *chaebol* (large conglomerates in Korean). For example, the state-chaebol alliance was a key mechanism for housing provisions in response to the rapid urbanisation of the country's population since the late 1970s (Park, 1998). The Korean government minimised housing expenditure and channelled funds to the manufacturing sector. In this process, *chaebols* pursued profit maximisation in the increasingly speculative housing markets (Ronald and Jin, 2010; Shin, 2021b). This state-chaebol alliance was considered a hierarchical one led by the state, as the developmental state was nurturing the growth of industrial capital in the early stage of Korea's industrialisation, but the Korean state's leading role in urban development has become less clear since the onset of neoliberalisation from the 1990s (Park et al., 2012). Douglass (2016) dubbed this post-1990s transformation 'Chaebol Urbanism' to demonstrate the chaebol's increasing dominance in city-making in Korea due to their growing influence on the globalising economy of Korea. The changing dynamics of the production of urban space imply that the state-chaebol alliance is not static and that, as argued by both Douglass (2016) and Shin et al. (2015), there may be other actors emerging in the urban development process in Korea. Still, these emerging actors have rarely been identified and investigated.

Korean universities can be identified as one of those emerging urban actors. While the state focused on achieving rapid economic growth at the expense of social development in Korea (Park et al., 2021), private universities accommodated around three-quarters of all university students. Despite this, public resource allocation to this sector in Korea was inconsequential; Only 24.3 % of total university expenditure in 2005 was supported by public funds, whereas the OECD average was 73.1 %

in 2008 (OECD, 2008: 253). Thus, similar to the state-chaebol alliance in Korea, private universities have led the higher education sector in Korea while maintaining a close relationship with the state (Kim, 2017; Kim and Lee, 2006). Private universities in Korea are *de jure* non-profit organisations, but they often take advantage of their privileged position by engaging in rent-seeking activities, as until recently, the supply of higher education has always exceeded the demand (Kim, 2017; Kim and Lee, 2006). As Oh (2021) investigated, historically, universities have been land-based urban actors to expand their campuses by negotiating with the state. However, how universities negotiate and conflict with the state and other urban actors are in need of further examination, an area to which our study contributes.

In Singapore, the urban development process is often understood as part of 'state capitalism' (Chua, 2016). The state has a dominant role in both urban planning and development processes through its institutional arms, including Urban Redevelopment Authority (URA) and Housing & Development Board (HDB). Such a role was more explicit in the 1970s and 1980s (Pow, 2018). Since the 1990s, as Singapore began reinventing itself as a 'global city', the private sector has come to increasingly influence urban development planning and development practices. This transition to greater involvement of the private sector can still be distinguished from the neoliberalisation of urban development seen in the West. Pow (*ibid.*) labels the Singaporean urban development process as 'homegrown neoliberalism' because influential firms in Singapore related to urban development were 'corporatized offshoots of state agencies', and it is uneasy to distinguish between the private and the public. Shatkin (2014) also points out the hegemonic control of the urban development process by the state with the support of corporate interests as the key feature of the Singaporean urban development model. The differences in the relationship between the state and the private sector in Korea and Singapore show that although the state plays a leading role in the urban development process in East Asia, the way it works is not the same.

Singaporean universities can be an entry point to further investigate how corporatised state entities collaborate and conflict with the state and other urban actors. The state-university relationship in Singapore can be understood as the extension of state capitalism. Through state capitalism, the Singaporean state successfully transformed its economic engine from low-end labour-intensive manufacturing to high-value-added professional and financial services industries (Chua, 2016). To achieve this transformation, similar to the urban planning sector, the state has granted a high degree of institutional autonomy to universities as well as material support to achieve global competitiveness, although the universities' major decisions, including spending on capital projects, still require government approval (Mok, 2008; Olds, 2007). In this regard, the state effectively manages Singaporean universities, and their activities are strongly aligned with the state's strategies (Lo, 2014). This condition limits the current discussion of urban universities in Singapore to the university's urban knowledge production function, rendering the university's involvement in urban affairs to be analysed from a technocratic perspective (see Addie et al., 2019). Our study aims to overcome such limitations, asking how the university, as an autonomous entity, interplays with state-led urban planning and policy frameworks in Singapore, a question that has not been much discussed in the literature.

As examined in the previous section, studies on the roles of the university in the built environment are primarily concerned with the practices of neoliberal universities in the West. In East Asia, it can be expected that state control of the higher education sector supports the rapid development of the national economies in this region, as shown in the case of the university towns in China. For the developmental state, education is a key foundation for economic growth. While higher education was not emphasised in the early stages of industrialisation, the sector became important for states that began to focus on nurturing the growth of the high-tech industries (Altbach, 2004) and coping with the pressures of globalisation (Mok, 2006). Despite the similarities between

countries in this region, it is also important to note that education structures and policies vary considerably within East Asia (Green, 1999). Such differences were initially related to colonial legacies and Cold War politics, followed by divergent responses to the emerging reform pressures resulting from these states' globalising economies (Altbach, 2004; Mok, 2006). As such, we posit that it is crucial to consider each state's formative role.

In summary, this review indicates the need for an in-depth study into the diverse ways in which universities engage with the built environment. The existing literature lacks studies exploring how the various stakeholders, including universities, interact and negotiate with one another to pursue their material goals in the East Asian context (Le Feuvre et al., 2016; Yip et al., 2020). In East Asia, the evolving relationships between urbanisation actors under the (post-)developmental state differ from those observed in Western countries (Adams and Hastings, 2001; Doucette and Park, 2019). In addition, these relationships are not static but evolve over time. The relationships also often do not work in the way the stakeholders expect them to. For example, Kim (2022) assesses how decentralisation affects public-private partnerships for large-scale urban development projects in South Korea and how such partnerships often fail.

To help fill in these knowledge gaps, the following sections provide a detailed account of the two case studies of university-related property development projects from Korea and Singapore, focusing on the process through which universities collaborate and come into conflict with other urbanisation actors, including the state. In doing so, we highlight how and why East Asian universities differ from other conventional urbanisation actors.

4. Emerging property development opportunities for universities

4.1. Forming a coalition with the state and conglomerates in Korea

Yonsei University has expanded its campus space by closely working with the state and *chaebols*. One of the most notable events regarding the university's expansion programme was opening a satellite campus in Wonju, about 90 km from the main campus, in the early 1980s. Two major support schemes enabled the university to open this satellite campus. The first was a state incentive for private universities to open satellite campuses outside the capital region. This incentive permitted universities in Seoul to increase previously restricted enrolment quotas, which aided universities in funding the operation of newly opened satellite campuses. By mobilising private universities, the state intended to address the problems associated with the concentration of economic activities and people in the capital region and to promote a geographically balanced approach to development in the country. However, many private universities used the state incentive to increase profits by minimising their investments in new campuses while increasing tuition fees (Pyo, 2000).

In this period, universities also received substantial support from large conglomerates. For example, Yonsei University received a significant 165-hectare land donation in Wonju from the founder and former chairman of the Daewoo Group, one of the leading *chaebols* at the time.¹ *Chaebols* frequently supported elite universities in Korea and provided financial contributions to help universities build new campus buildings, and some even purchased elite private universities outright. Yonsei University's close relationship with the Daewoo Group continued until

¹ In general, as university income was restricted because of state control over student numbers, it was challenging for private universities to secure land for their campus expansion projects. Universities occasionally misappropriated funds to purchase land for their satellite campuses (Oh, 2017). However, Yonsei University did not engage in fund misappropriation as a result of the Daewoo Group's donation.

the *chaebol* was affected by the 1997 Asian financial crisis, during which the organisation declared bankruptcy. The case of Yonsei University demonstrates that private universities in Korea pursued and sustained their spatial expansion projects through state support and *chaebols*. This support allowed these universities to minimise their own investment and risk levels.

Yonsei University's Songdo campus is part of the university's recent strategy of conducting large-scale campus development projects. This project reflects the neoliberal approach to the developmental state in Korea that, since the early 2000s, focuses on capital accumulation (Shin, 2017). In January 2006, Yonsei University reached an agreement with the Incheon municipality to purchase 182 ha of land in Songdo International City, a newly developed urban district built on reclaimed land located in Incheon Metropolitan City, west of Seoul. In the first stage, the municipality made 92.6 ha of land available to Yonsei University, only charging the institution for the cost of the reclamation. The municipality provided the university with an additional incentive for expansion, granting it permission to develop 29 % (26.5 ha) of the allocated land for commercial and residential use so that the university could use the revenues to subsidise the construction of its new Songdo campus (Yonsei University, 2008). The university was, therefore, able to begin building its satellite Songdo campus, paying the bargain land price. The average land price for other government-led development projects in the capital region at the time was reportedly nearly eight times more than the land price agreed upon by the municipality and the university (Maeil Business, 2006).

Through the university's housing and commercial development projects, its capital gains were expected to reach KRW 800 billion² thanks to the preferential land price offered by the municipality (Hankyoreh, 2008). This was almost equivalent to the total annual budget for the university in 2010 (UNN, 2010) and reportedly nearly equivalent to the total amount of endowments the university managed to raise during the preceding ten years (Hankyoreh, 2008). Such gains would be a tremendous addition of real estate assets for the university: the combined value of its assets after the expansion was KRW 2,311 billion (Yonsei University, 2006). Although the deal was made possible because of the overlapping interests of the then-mayor of Incheon, Ahn Sang-Soo, and the university, although Yonsei University, one of Korea's elite universities, took the upper hand in the negotiations with the municipality, resulting in a favourable deal for the university. From a strategic standpoint, the mayor saw Songdo as a legacy project that could support his re-election bid (interviews with former municipality officials and IFEZ Authority official, 24 August and 2 September 2015, respectively). A former key municipality official interviewed in 2015 clearly articulated this point (24 August 2015):

If there is a 2020 plan [established in 2006], you are supposed to proceed with it for 20 years. But every mayor is in a hurry because there is a mayoral election every four years, and it [Songdo project] becomes an electoral issue. So, a mayor has to reveal his [election] cards as soon as possible. In the end, a plan eventually becomes no more than a froth. It's a pity.

The then-mayor Ahn sought to attract some well-known universities to open facilities in Songdo, a vision he details in his autobiography (Ahn, 2012). Yonsei University emerged as an appropriate partner, and the university was able to use its prestige to secure funding for its expansion. The original municipal plan positioned the university in the city's R&D district to encourage collaborations between the high-tech and higher education sectors, but the university made a specific request for a site near Songdo's first metro station to enable staff and students to travel to Seoul more easily (Yonsei University, 2008). In this process, the broader development goal of Songdo as a high-tech hub was

² This is equivalent to about 632 million US dollars based on xe.com historical exchange rate (mid-market rate) for 31 December 2008.

inevitably undermined (interview with former municipality official, 24 August 2015). Decisions like these were often made in a clandestine manner to minimise any potential opposition.

4.2. The Singaporean university as the brainchild of the state

In Singapore, the NUS is a privileged institution supported by the state and integrated into the operation of Singapore's state capitalism. The changes surrounding the Gillman Heights residential complex reveal various facets of the state–university relationship. In the early 1980s, in an attempt to secure 1,000 housing units for new academic staff recruited from abroad, the NUS received state support to purchase 303 residential units (50 % of the total) in Gillman Heights (Business Times, 1981). Although the residential complex was initially built as a public housing estate developed by the Housing and Urban Development Company (henceforth HUDC), the university negotiated a deal to secure residential units for its academic staff (*ibid.*). Established in 1974, HUDC was a government company offering housing options to middle-income households earning more than the minimum income required to purchase the well-known HDB flats but could not afford private properties (Teo and Kong, 1997). The decision to grant 303 units in Gillman Heights to the NUS resulted in heavy criticism from the public, as more than 6,400 citizens were already on the HUDC waiting list at the time (New Nation, 1981). Nevertheless, the Ministry of Finance granted \$80 million to the NUS to purchase the 303 units (Straits Times, 2001).

Twenty-five years later, Gillman Heights again became the centre of controversy in the city-state's promotion of high-density urban redevelopment. The strategy of redevelopment is frequently used in Singapore to increase the building density of its limited land. As such, 'en-bloc' redevelopment was used as a state initiative to accelerate the overall process of redevelopment. 'En-bloc' refers to the collective sale process of a private condominium, legally referred to as a 'strata-titled estate' in Singapore. The process was initiated when the Urban Redevelopment Authority (a state agency) released its Development Guideline Plan in 1993 with increased plot ratios in selected areas to promote the so-called 'optimised' use of the national territory. This plan provided new opportunities for private condominium owners in these areas to sell their properties collectively at much higher prices to private developers. Eventually, en-bloc sales reportedly became 'a password for wealth', with the idea 'spreading like wildfire' (Straits Times, 1997: 60).

The NUS also became involved in the en-bloc process. After having changed its status from a HUDC estate to a private condominium in 2002, Gillman Heights saw the first proposal for a collective sale agreement in February 2006. Within four months, the share of property owners agreeing to the collective sale reached 82.4 % (Strata Title Board, 2007) – higher than the 80 % threshold required by the Land Titles (Strata) Act for developments over ten years old to proceed with an en-bloc sale. The estate's first sale attempt, which featured the highest-ever asking price (S\$529 million) for an en-bloc sale at the time, failed. In February 2007, CapitaLand, a government-linked property giant, signed a sale contract for S\$548 million after carrying out private negotiations with the sales committee (Straits Times, 2006, 2007a). In this process, the NUS was expected to receive S\$250 million,³ equal to about 16.7 % of the total endowment funds NUS reported in 2007 (NUS, 2007). The application to the Strata Titles Board for approval of the sale was made in May 2007, and the process was to be completed by the end of 2007 (CapitaLand, 2007; Strata Title Board, 2007).

The en-bloc sale of Gillman Heights could not proceed without the consent of the NUS, as the university owned 303 units in Gillman Heights, accounting for a 49.8 % share of ownership. The NUS initially had no stance on the sale and encouraged other owners not to cast their votes without the majority's consent. When a sufficient number of the

³ This would be equivalent to about 164 million US dollars based on xe.com historic (mid-market) rates for 28 February 2007.

other owners agreed to proceed with the sale, the NUS cast its vote in favour of the sale (Straits Times, 2008a, 2008b). Given the market conditions, the NUS decision to sell the estate was timely. As the university planned new housing options for staff and students, Singapore experienced a property market boom and a significant increase in en-bloc sales. Indeed, in the first half of 2007, 109 estates across the country were sold collectively, with the total sales volume reaching more than S\$13 billion (Straits Times, 2007b).

The NUS's involvement in the redevelopment of Gilman Heights was controversial because the university, one of the estate's main property owners, was also directly involved in the estate's redevelopment project. During the court battle between Ankerite Pte, the project vehicle set up by CapitaLand, and the minority of dissenting residents unhappy with the en-bloc sale approval, it was revealed that the NUS purchased a 15 % stake in Ankerite Pte, thus effectively becoming one of the developers (Teo, 2008). As a privileged institution supported by the state, the NUS was given an opportunity to cooperate with other government-linked companies, such as CapitaLand, to maximise profits. Despite the university's public status, the public and the university community had no access to information on the university's property investment activities.

4.3. The meaning of real estate for entrepreneurial universities

Both cases discussed above demonstrate the ways in which East Asian universities became involved in the property market in diverse ways over time. Although the two universities' involvement did not feature the explicit aim of achieving speculative property gains, their situations enabled them to cultivate a superior status.

In the case of Songdo, Yonsei University's motivation to secure more land was realised through the mobilisation of various resources combined with the entrepreneurial mayor's efforts to increase his popularity. The university's engagement in Songdo can also be understood as an example of the wider real estate practices of the university sector in Korea. Indeed, extracting profits from land and buildings is a common practice among Korea's private universities. In 2015, land and buildings accounted for 84 % of the total profitable assets owned by private universities (Korea Advancing Schools Foundation, 2015). Between 1980 and 2010, the land occupied by universities in the country increased more than threefold, from 4,536 to 14,135 ha, and the total floor area of university buildings increased more than sevenfold, from 6.2 million to 43.6 million square metres (KEDI, 2010; Korea Ministry of Education, 1980). In the case of Yonsei University, 99 % of the Education Foundation's total profit of KRW 54.3 billion was derived from its for-profit building projects in 2015 (Korea Advancing Schools Foundation, 2020).

The Songdo campus clearly demonstrates the integration of campus development and real estate development, part of a wider process through which the university amassed extensive real estate assets during the period in which Korea saw the increasing influence of speculative urbanism (Shin, 2021b). Placing the above discussions in their respective historical contexts, the development of Songdo is not simply part of the new financialisation process of the university in response to the emergence of neoliberal higher education policies, a line of thinking often suggested by Western scholars. Instead, we posit that the development of Songdo reflects a continuous engagement with the built environment, which in turn mirrors the practices of the higher education sector under developmental urbanisation as pursued by the developmental state.

At the same time, the NUS's engagement with the built environment demonstrates how state capitalism works outside the domain of sovereign wealth funds and state-owned enterprises. Indeed, the university's engagement with the built environment is indicative of a wider alignment of the NUS with various state strategies. In 1999, the NUS collaborated with CapitaLand (then Pidemco Land), carrying out a property investment (S\$200 million) by purchasing half of a 37-storey office building in Singapore's central business district (Straits Times, 2000). Even though the NUS Endowment Fund was established in 1996,

it is now Asia's largest university endowment fund, having invested S\$6.5 billion of its assets in 2020 (Lee, 2002a; NUS, 2021). The endowment funds operate like private companies, meaning that there is limited information available to the public about their portfolios and investment strategies. However, according to an interview with the NUS Endowment Fund manager (23 September 2016), around 12.5 % of its funds were said to be in real estate. As of 2020, given the fund's total amount as reported by the NUS (2021), the amount invested in real estate can be estimated as S\$808 million. Investing in real estate brings a high rate of return to the university.

The university's investment activities in the built environment demonstrate how the state-led financialisation process actually works in various ways in Singapore. The NUS Endowment Fund was largely derived from the state capital. The government initially pledged to contribute two to three dollars for every dollar raised by the university, which meant that if the university raised S\$50 million, the government would give a maximum of S\$150 million to the Endowment Fund (Mok and Lee, 2003). Currently, the government offers one and a half times the amount of each donation that the NUS raises (Straits Times, 2019a). The state has shifted its approach, giving the university more managerial autonomy and operational flexibility while providing extensive financial and operational support through co-investment opportunities with sovereign wealth funds. In this process, the overall amount of public money increases through profits and donations, while the university benefits from the state's institutional and financial support. As Haila (2016) argues, this arrangement demonstrates how the Singaporean 'property state' balances the need to maximise rent revenue and promote public goods.

5. Conflicts in the process of property speculation

5.1. Negotiations with the state in Korea

Yonsei University and the NUS faced challenges from various groups regarding their respective speculative property development projects. Such challenges allow us to reconsider the legitimacy of universities' property development activities. Yonsei University's ambitious plan to build a new campus in Songdo raised objections from various stakeholders. Student groups pointed out that the decision to open the new campus was made in a non-democratic manner without proper consultation (Yonsei Chunchu, 2006). Civic organisations in Incheon also claimed that the municipality gave excessive privileges to Yonsei University while discriminating against local universities (Incheon Today, 2007). Although these opponents were unable to halt the project, the central government and the municipal council faced challenges that affected the project's progress. Despite the agreement between the university and the municipality of Incheon, which was made extremely quickly, the development pace slowed because of the time needed to receive approvals from the central government and the municipal council. This approval process took 33 months, with the groundbreaking ceremony for the construction of the new campus taking place in November of 2008.

The university was able to overcome the hesitation of the central government through close cooperation with the municipality, revealing the heterogeneity of the state. Indeed, the state cannot be conceptualised as a unitary entity that can be exploited by growth-oriented actors seeking to advance their interests. As it was the first large-scale university development project in Korea's first Free Economic Zone, the central government was cautious about Yonsei University's expansion project and saw the university's plan to lead a large-scale residential and commercial property development project as a special favour granted by the municipality (interviews with IFEZA official and university staff, 2 and 3 September 2015, respectively). In this regard, the central government instructed the university and the Incheon municipality to establish a quasi-public project vehicle to ensure that the project had a public purpose. Nevertheless, the municipal government designed the

project vehicle in such a way as to grant equal voting power to the university and to allow the university to appoint the project's key staff even though the university had no share in the project vehicle itself (interviews with former project vehicle staff and university staff, 31 August and 3 September 2015, respectively). In other words, the central government's intervention did not play a decisive role.

The most critical challenge to the arrangement came from the municipal council, which forced the university to distribute some of its opportunities to allow other local universities to make nominal profits. Municipal councillors strongly objected to approving the project twice, once in February 2008 and again in March 2008. They questioned the municipality's preferential treatment of Yonsei University (Incheon Metropolitan Council, 2008a, 2008b; interview with a former council member, 17 September 2015). One of the then-councillors who opposed the project elaborated on the reasons for their objection during an interview (17 September 2015):

Now is the era of local autonomy. There are many universities in Incheon, but there has been no equity for them. So, we asked that if the city provides 600 billion won for Yonsei University, 300 billion should go to local universities. If 130 or 160 ha of land are given to Yonsei University, 30 ha should also be given to Inha University [an Incheon-based private university]. And this is not enough. What is the point of only giving land to local universities, which have no big money to build their campuses? Give them several hundred billion in addition to land as well. Support them to some extent for fairness, even if the government cannot support them greatly.

After a two-month negotiation, the council approved the project by capping the future revenues allocated to Yonsei University at KRW 650 billion (Incheon Metropolitan Council, 2008c). Any additional revenue above this threshold, estimated to be KRW 350 billion, was to be allocated to attracting foreign universities and institutions and shared by all of the universities in Songdo. This conflict and its resolution suggest that profit sharing with stakeholders was more important to the councillors than the city's growth.

5.2. Being part of state capitalism in Singapore

The NUS's approach to the Gillman Heights redevelopment project also brings to light the privileged status of the university and, indeed, the state-granted power to redevelop properties in Singapore. Several property owners living in Gillman Heights were unhappy with the decision to sell their homes. These individuals attempted to resist the sale, eventually leading to a 14-month-long lawsuit. A minority of the owners (53 residents) opposed the sale and appealed to the Strata Titles Board as part of the en-bloc appeals process (Strata Title Board, 2007). Two additional lawsuits followed this appeal. The most controversial debate, which emerged as a result of the ambiguity of the legal provisions, was related to the decision on whether to increase the threshold for a collective sale agreement from 80 % to 90 %. One of the minority owners argued that Gillman Heights was a testing ground for the government for en-bloc sales of HUDC estates, given the many loopholes in the Act (interview with a former resident of Gillman Heights, 23 September 2016). Gillman Heights was also one of the first two HUDC estates to be privatised through a government pilot scheme designed to 'test the scheme and iron out any problems which might rise' (Straits Times, 1995: 1). In this regard, as presented by the state, Gillman Heights was a site performing different functions. As a majority shareholder of the estate, the NUS was a key player in facilitating the process, positioning itself as the extended arm of the state.

During the lawsuit, the NUS received further attention because it was revealed that the university was one of the developers purchasing the estate. In mid-May 2007, when the Strata Title Board was reviewing the collective sale, CapitaLand announced that three private funds took a 50 % stake in the project vehicle for the redevelopment of Gillman Heights. It was not known at the time that the NUS was one of the three private

funds, although the university's participation was revealed during the appeals process in mid-March 2008 (Teo, 2008). The Board's sales review process included a statutory declaration of affiliation and any conflict of interest between the purchaser and the owners as a procedural safeguard. In addition, the process stipulated that the Board could reject the sale if it emerged that the deal was not executed in good faith, after considering the relationship between the purchaser and owners (Chen, 2008). Nevertheless, the High Court dismissed the appeal, during which the minority owners criticised the bad faith of the NUS (Business Times, 2008). The court decision was reportedly based on the principle that the purchase of the share by the NUS was carried out after the application had been made to the Board and that the NUS had no representative on the sales committee.

Even though the court did not reprimand the NUS for its investment decision, it can be asked whether the NUS, as a public institution, carefully considered the side effects of its profit-seeking activity in advance. One citizen wrote the following to the Straits Times (2008c: 41) to express their anger:

Property development is a potentially risky activity given the volatility of property prices, so has NUS considered the risks? Or does the investment involve an immaterial financial commitment or has NUS established that this investment is low-risk? [...] As an educational institution, NUS has to behave even more responsibly than other corporations. Even though it is trying to raise as much funds as possible, it should not do so at the risk of damage to its reputation.

Although the minority owners of Gillman Heights were not displaced through the redevelopment processes, these individuals were nevertheless powerless relative to the Singaporean state, property giants and the university, and indeed less experienced. This process exemplifies the existence of an uneven playing field between civil society and the state in Singapore. As Lee (2002b) notes, although the Singaporean state seems to promote the idea of civil society, when a key decision is made, citizen participation remains 'gestural'. A minority owner in an interview also mentioned that although the developer possessed the required negotiation skills and the ability to oversee the entire process, the residents had no such skills or experience (interview with a former resident of Gillman Heights, 23 September 2016). As a result of the sale process, Gillman Heights residents lost their sense of the community, leading to what Atkinson (2015) calls 'symbolic displacement'.

5.3. Questioning the university's profit-maximising strategies

The conflicts faced by both universities during their property development projects demonstrate that their strategies to gain profit through real estate did not go unchallenged. It can be argued that the university is a rational investor that believes that its investments will eventually benefit the public. However, real estate profit should function as a tool to support these universities' respective public missions. Furthermore, we agree with Weber et al. (2005: 285), who question 'the ethics of university real estate development', given the nature of the 'private choices' of such investment practices that go against a university's 'public obligations'. Indeed, we need to consider the problematic nature of the process through which public resources are invested to support elite universities' property speculation at the expense of the public. In the East Asian context, it is unclear to what extent such investments will benefit the many, in particular considering that elite universities in both Korea and Singapore reproduce 'an ideology of inequality' by promoting meritocracy and elitism (Lee and Brinton, 1996; Tan, 2008: 9; Tremewan, 1994).

In the case of Yonsei University in Songdo, the promised contribution to local universities as a compromise with the municipal council never materialised. Yonsei University's profit was supposed to be shared with local universities based on the projection that the institution would earn KRW 1,000 billion from the project, reflecting the conditions of the booming property market before the Global Financial Crisis in 2008.

However, the post-crisis market slump led to a reduction in the expected income from the project to less than KRW 500 billion, which was even less than the KRW 650 billion that the university originally intended to claim (interviews with IFEZA official and Yonsei University professor, 2 and 9 September 2015, respectively). As a result, although opposition from municipal council members slowed the project's progress, the council members ultimately failed to achieve their goal of supporting local universities. These events related to the case attest to the need to question the ways in which (post-)developmental urbanism operates on the ground. That is, the intention of the (local) state does not always materialise. These stories also reveal the vulnerability of pursuing wider public benefits based on property speculation. In the case of the NUS, the local developmental coalition guaranteed a certain level of protection for the university.

The case of Yonsei University in Songdo also exposes the university's unique position that straddles the line between public benefits and the institution's material interests when negotiating with the state. The university mobilised its symbolic status assets to justify the preferential treatment it secured from the municipal government. For example, to persuade the municipal council to accept their proposal, during the negotiation, the Yonsei University project team emphasised the expected increase in land and housing prices and the resulting increased property tax income that would result from attracting an elite university to Songdo (interview with a Yonsei University professor, 9 September 2015). In December 2020, the university secured another 33.8 ha of newly reclaimed land in Songdo from the municipality by stressing the public benefits associated with building hospital facilities (Yonsei University, 2020). Although the deliberation process with regard to building a new university hospital began in 2006, the university did not implement the plan until additional reclaimed land was made available in 2018 (Seoul Public News, 2020). The university secured the land on the condition that it would build a new 800-bed hospital in Songdo, thereby expanding its real estate assets in the city by striking another favourable deal. The case of Yonsei University shows how private universities pursued their own material interests by exploiting the needs of the state.

The NUS's strategy to pursue property development remains questionable. According to the university's financial statement for the financial year 2014/15, Valparaiso Capital I Ltd became an associated company of the NUS on 26 June 2014, with the university holding a 22 % stake in investing in property companies (NUS, 2015). A merger between Valparaiso Capital V Ltd and Valparaiso Capital I Ltd occurred on the same day, and the combined company was registered in the Cayman Islands (Cayman Islands Government, 2014: 827). The merger between the two companies resulted in the NUS holding a 20 % stake, so the company should have been publicised in their financial statements. Otherwise, the presence of these companies in an offshore tax haven like the Cayman Islands would not have been known. There is no detailed information on the new company's operations or where the properties invested in by the company are located. Such investment activity, therefore, raises doubts about whether it is appropriate for public universities to invest in the property market through offshore tax havens like the Cayman Islands (see also O'Malley, 2018).

It is also important to note that the NUS's relationship with real estate is not limited to the investment activities carried out by its endowment fund. The NUS received the largest donation amount in 2018 among all charitable institutions in Singapore, totalling S\$227 million (Straits Times, 2019b). These donations often come from property magnates. Indeed, several NUS buildings, such as the Tahir Foundation Building and the Mochtar Riady Building, are named after donors. This complex circulation of capital mediated by speculative property investment practices cannot be achieved without the arbitration of the Singaporean state and its financial support. The state funds universities by matching incoming donations, offering donors a S\$2.5 tax deduction for every S\$1 donated (Appell, 2013). However, as discussed earlier in this paper, the participation of rank-and-file university

members in monitoring and reviewing the flow of donations and university spending is limited, and the process does not involve public consultation. Considering that speculative property investment practices often affect the lives of a variety of actors, such practices by the university raise ethical questions.

6. Conclusion

Through an in-depth case study of two universities in Korea and Singapore, this paper argues that East Asian universities participate in speculative property development activities in various ways by working closely with the state. Compared to Western universities, the close relationship between the state and the university can be considered a distinctive feature of the university in the Global East. As Haila (2000) and Shin (2021b) note, speculative urbanisation is a key element of the East Asian developmental state. In this regard, our paper shows that universities participate in speculative urbanisation by cooperating with the state. Investments in social infrastructure projects, including universities, are mainly seen as compensatory investments by the state to absorb the inevitable struggles and paradoxes in the accumulation process (King, 1989: 458; Soederberg, 2015: 5). Our case studies show that East Asian universities work beyond their social roles by directly participating in the urban process, implying that the condensed development of East Asian economies was driven both by industrialisation and by the actions of social institutions such as educational establishments that pursued the accumulation of real estate assets. The support from the state was essential in this process.

This paper also demonstrates that the practices of universities participating in large-scale property development projects are rooted in their historical and geographical contexts, shaped by the (post-)developmental state. In this regard, universities' behaviour should be understood as a nuanced process. Although the two universities investigated in this paper were not the instigators of the property development projects in which they were involved, they became active enablers and powerful negotiators for the successful completion of the projects. The universities also tried to minimise their investment risk and seek maximum benefit by shifting the risk to other sectors, emphasising their public role as higher education providers to justify their gains. However, it is unclear whether speculative profits from large-scale property development projects will always benefit the public. Our cases suggest that these investment practices are potentially profoundly problematic, given that the stated aim of profiteering would be no less alarming than other speculative investment decisions by predatory financial capital firms, which place returns on investments before people (see Beswick et al., 2016).

It is important to note that there are also notable differences between the two cases. While the two cases investigated in this paper were initiated around the same time in the 2000s, we have demonstrated that universities' relationships with the state would still vary based on their political economic contexts within which universities are embedded. In Singapore, the NUS's behaviour was closely aligned with the state's strategy, while in Korea, Yonsei University actively negotiated with various state actors to maximise its material gains. The findings from Korea, in particular, motivate us to question the methodological statism that assumes the state to be a unitary entity and an isolated unit of analysis (see Doucette and Park, 2019). Our observations in Singapore and Korea reflect the recent debates regarding the East Asian (post-)developmental state, which pay close attention to the region's historical specificities. For example, as Yeung (2017) notes, Singapore is characterised by its institutional consistency, but in Korea, we must not overlook the role of large conglomerates in formulating and influencing industrial policy-making. As such, the findings from this paper confirm the conceptualisation of East Asian urbanisation as a variegated socio-economic process rooted in the region's geographical and historical contexts (Doucette and Park, 2019).

Finally, in this paper, we primarily focused on universities' economic

functions, although this does not mean that these institutions' political functions are unimportant. As Harvey (1982) mentions, social infrastructure projects can reflect class struggles where different classes project their needs even though the state and the capitalist class often fund this infrastructure. One of the key considerations in observing the political function of the university is the understanding that social infrastructures also work for ideological control and the repression of society (Harvey, 1982:401). The traditional function of the university is arguably to nurture elite citizens (Readings, 1996), and the university functions to solidify national cultures as a socio-political mission with the support of the state (Readings, 1996; Scott, 2006). These political functions of the university are also crucial to understanding the ways in which East Asian universities have been able to expand by participating in the consolidation of the legitimacy of the ruling state with the help of land-based strategies for strengthening their material basis, from the developmental state era to the present.

CRedit authorship contribution statement

Do Young Oh: Conceptualization, Methodology, Validation, Formal analysis, Investigation, Project administration, Data curation, Writing – original draft, Writing – review & editing. **Hyun Bang Shin:** Conceptualization, Methodology, Validation, Formal analysis, Writing – original draft, Writing – review & editing, Supervision.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Data availability

The data that has been used is confidential.

Acknowledgements

Earlier versions of this paper have been presented at the Urban Studies Institute Comparative Urbanism Conference at the Georgia State University in 2019 and the National Chengchi University-Lingnan University International Research Seminar in 2021, and the comments from the members of audience are much appreciated. Fieldwork in Singapore by the first author is supported by Santander Travel Research Fund and LSE PhD Mobility Bursary. The authors thank all the interlocutors in the fields who kindly shared their insights during the fieldwork. The encouragement and constructive comments from the anonymous reviewers are much appreciated. The usual disclaimer applies.

References

- Adams, D., Hastings, E.M., 2001. Assessing institutional relations in development partnerships: The land development corporation and the Hong Kong government prior to 1997. *Urban Stud.* 38 (9), 1473–1492.
- Addie, J.-P.-D., Acuto, M., Ho, K.C., et al., 2019. Perspectives on the 21st century urban university from Singapore – A viewpoint forum. *Cities* 88, 252–260.
- Ahn, S.-S., 2012. *Incheon Story with Ahn Sang-Su's Spirit* [Ansangseueui honyi dangin incheon iyagi]. Lux Media, Paju, South Korea.
- Altbach, P.G., 2004. The past and future of Asian universities: Twenty-first century challenges. In: Altbach, P.G., Umakoshi, T. (Eds.), *Asian Universities: Historical Perspectives and Contemporary Challenges*. The Johns Hopkins University Press, Baltimore, MD, pp. 13–32.
- Appell, D., 2013. Singapore's approach to endowments rare in region. *Pensions Investments*, 18 February, 26.
- Arbo, P., Bennenworth, P., 2007. *Understanding the Regional Contribution of Higher Education Institutions: A Literature Review*. OECD, Paris (OECD education working papers 9).
- Atkinson, R., 2015. Losing one's place: Narratives of neighbourhood change, market injustice and symbolic displacement. *Hous. Theory Soc.* 32 (4), 373–388.
- Bennenworth, P., Hospers, G.-J., 2007. Urban competitiveness in the knowledge economy: universities as new planning animateurs. *Prog. Plan.* 67 (2), 105–197.
- Beswick, J., Alexandri, G., Byrne, M., et al., 2016. Speculating on London's housing future. *City* 20 (2), 321–341.
- Boanada-Fuchs, A., Boanada Fuchs, V., 2022. The role of real estate developers in urban development. *Geoforum* 134, 173–177.
- Bose, S., 2015. Universities and the redevelopment politics of the neoliberal city. *Urban Stud.* 52 (14), 2616–2632.
- Büdenbender, M., Aalbers, M.B., 2019. How subordinate financialization shapes urban development: The rise and fall of Warsaw's Stuzewiec business district. *Int. J. Urban Reg. Res.* 43 (4), 666–684.
- Bunnell, G., Lawson, C.T., 2006. A public university as city planner and developer: experience in the 'capital of good planning'. *Plan. Pract. Res.* 21 (1), 25–43.
- Business Times, 1981. University to apply for 1,000 HUDC units. 21 February, 1.
- Business Times, 2008. Gillman En Bloc Sale to be Proceed. 26 June, 29.
- CapitaLand, 2007. *CapitaLand Acquires Gillman Heights Condominium*. Available at: <http://investor.capitaland.com/newsroom/CLannceLlGillman6Feb07.pdf> (accessed 20 December 2021).
- Cayman Islands Government, 2014. Certificate of Merger Notices. *Cayman Island Gazette* 15, 762–851.
- Chen, J., 2008. China's Ding Zi Hu, the United States' Kelo, and Singapore's En-Bloc process: A new model for economic development eminent domain from a givings perspective. *J. Land Use Environn Law* 24 (1), 107–158.
- Chen, K.H., 2010. *Asia as Method: Toward Deimperialization*. Duke University Press, Durham, NC.
- Chua, B.H., 2016. State-owned enterprises, state capitalism and social distribution in Singapore. *Pac. Rev.* 29 (4), 499–521.
- Coffey, B., Dierwechter, Y., 2005. The urban university as a vehicle for inner-city renewal: The University of Washington, Tacoma. In: Perry, D.C., Wiewel, W. (Eds.), *The University as Urban Developer: Case Studies and Analysis*, M.E. Sharpe, Armonk, NY, pp. 80–97.
- Collins, F.L., 2010. International students as urban agents: International education and urban transformation in Auckland, New Zealand. *Geoforum* 41 (6), 940–950.
- Doucette, J., Park, B.G. (Eds.), 2019. *Developmentalist Cities?: Interrogating Urban Developmentalism in East Asia*. Brill, Leiden.
- Douglass, M., 2016. Creative communities and the cultural economy – Insadong, chaebol urbanism and the local state in Seoul. *Cities* 56, 148–155.
- Eaton, C., 2022. *Bankers in the Ivory Tower: The Troubling Rise of Financiers in US Higher Education*. University of Chicago Press, Chicago.
- Eaton, C., Habinek, J., Goldstein, A., et al., 2016. The financialization of US higher education. *Soc. Econ. Rev.* 13 (3), 507–535.
- Engelen, E., Fernandez, R., Hendrikse, R., 2014. How finance penetrates its other: A cautionary tale on the financialization of a Dutch university. *Antipode* 46 (4), 1072–1091.
- Goddard, J., Robertson, D., Vallance, P., 2012. Universities, technology and innovation centres and regional development: The case of the North-East of England. *Camb. J. Econ.* 36 (3), 609–627.
- Goldman, M., Narayan, D., 2021. Through the optics of finance: Speculative urbanism and the transformation of markets. *Int. J. Urban Reg. Res.* 45 (2), 209–231.
- Green, A., 1999. Education and globalization in Europe and East Asia: convergent and divergent trends. *J. Educ. Policy* 14 (1), 55–71.
- Haar, S., 2011. *The City as Campus: Urbanism and Higher Education in Chicago*. University of Minnesota Press, Minneapolis, MN.
- Haila, A., 2000. Real estate in global cities: Singapore and Hong Kong as property states. *Urban Stud.* 37 (12), 2241–2256.
- Haila, A., 2016. *Urban Land Rent: Singapore as a Property State*. Wiley-Blackwell, Chichester, UK.
- Han, G.Y., Yu, W., 2008. Partnering with private corporations to build on campus: Yonsei University, Seoul Korea. In: Wiewel, W., Perry, D.C. (Eds.), *Global Universities and Urban Development: Case Studies and Analysis*. M.E. Sharpe, Armonk, NY, pp. 155–180.
- Hankyoreh, 2008. Yonsei University Songdo Campus was braked by the rumour about the KRW 800 billion preferential treatment [Yeonsedae songdokaempeoseu 8cheoneok teukhyeseollo 'jedong']. 2 February, 10.
- Harvey, D., 1982. *The Limits to Capital*. Basil Blackwell, Oxford.
- Harvey, D., 1989. From managerialism to entrepreneurialism: The transformation in urban governance in late capitalism. *Geografiska Annaler. Series B, Human Geography* 71 (1), 3–17.
- Heller, H., 2016. *The Capitalist University: The Transformations of Higher Education in the United States Since 1945*. Pluto Press, London.
- Hill, R.C., Park, B.G., Saito, A., 2012. Introduction: Locating Neoliberalism in East Asia. In: Park, B.G., Hill, R.C., Saito, A. (Eds.), *Locating Neoliberalism in East Asia: Neoliberalizing Spaces in Developmental States*. Blackwell, Chichester, UK, pp. 1–26.
- Hsu, J.-Y., Gimm, D.-W., Glassman, J., 2018. A tale of two industrial zones: A geopolitical economy of differential development in Ulsan, South Korea, and Kaohsiung, Taiwan. *Environ. Planning A* 50 (2), 457–473.
- Hwang, J.-T., 2016. Escaping the territorially trapped East Asian Developmental State thesis. *Prof. Geogr.* 68 (4), 554–560.
- Hyde, Z., 2022. Giving back to get ahead: Altruism as a developer strategy of accumulation through affordable housing policy in Toronto and Vancouver. *Geoforum* 134, 187–196.
- Incheon Metropolitan Council, 2008a. 162nd-4th Economic Development Committee Meeting. *Minutes of Economic Development Committee Meeting*, 1 February, Incheon Metropolitan Council.
- Incheon Metropolitan Council, 2008b. 163rd-1st Economic Development Committee Meeting. *Minutes of Economic Development Committee Meeting*, 11 March, Incheon Metropolitan Council.

- Incheon Metropolitan Council, 2008c. 164th-2nd Economic Development Committee Meeting. *Minutes of Economic Development Committee Meeting*, 29 April, Incheon Metropolitan Council.
- Incheon Today, 2007. The construction cost support for Yonsei University's Songdo Campus is special treatment [yeonseadae songdokaempeoseu geollipbiyong jiwonun teukye]. Available at: <http://www.incheontoday.com/news/articleView.html?idxno=4466> (accessed 20 December 2021).
- Jessop, B., 2016. Putting higher education in its place in (East Asian) political economy. *Comp. Educ.* 52 (1), 8–25.
- KEDI, 2010. *Statistical Yearbook of Education 2010*. Korean Educational Development Institute, Seoul.
- Kim, S., 2017. Public-Private Mix of Higher Education in South Korea. In: *Rethinking the Public-Private Mix in Higher Education: Global Trends and National Policy Challenges*. SensePublishers, Rotterdam, pp. 107–139.
- Kim, Y.-J., 2022. Public-private partnerships for urban projects: A Korean case of partnership failure. *International Journal of Public Administration* 45 (6), 499–510.
- King, R.J., 1989. Capital switching and the role of ground rent: 1. Theoretical problems. *Environ. Plann.* A 21 (4), 445–462.
- Korea Advancing Schools Foundation, 2015. *A Study on Utilisation of For-Profit Basic Asset of Private Universities to Improve the Financial Stability* [Sahakgigwan jaejeonggeonjeonseong jegoreul wihan suigyong gibonjaesan hwaryongbangan yeongu]. Korea Advancing Schools Foundation, Seoul.
- Korea Advancing Schools Foundation, 2020. Private Universities Finance Information. Available at <http://uniarlimi.kasfo.or.kr/totalAnno/properties/property> (accessed 31 August 2020).
- Korea Ministry of Education, 1980. *Statistical Yearbook of Education 1980*. Korea Ministry of Education, Seoul.
- Kim, S., Lee, J.-H., 2006. Changing facets of Korean higher education: Market competition and the role of the state. *High. Educ.* 52 (3), 557–587.
- Lapavistas, C., 2013. *Profiting without Producing: How Finance Exploits Us All*. Verso, London.
- Le Feuvre, M., Medway, D., Warnaby, G., et al., 2016. Understanding stakeholder interactions in urban partnerships. *Cities* 52, 55–65.
- Lee, M.H., 2002a. A tale of two cities: Comparing higher education policies and reforms in Hong Kong and Singapore. *Aust. J. Educ.* 46 (3), 255–286.
- Lee, T., 2002b. The politics of civil society in Singapore. *Asian Stud. Rev.* 26 (1), 97–117.
- Lee, S., Brinton, M.C., 1996. Elite education and social capital: The case of South Korea. *Sociol. Educ.* 69 (3), 177–192.
- Li, Z., Li, X., Wang, L., 2014. Speculative urbanism and the making of university towns in China: A case of Guangzhou University Town. *Habitat Int.* 44, 422–431.
- Lo, W.Y.W., 2014. Think global, think local: The changing landscape of higher education and the role of quality assurance in Singapore. *Policy Soc.* 33 (3), 263–273.
- Maail Business, 2006. The land value of the 17 new residential district plots differed by up to 13 times [Taekjijigu 17got ttanggap choego 13bae chail]. 16 October, 30.
- Mok, K.H., 2006. *Education Reform and Education Policy in East Asia*. Routledge, London.
- Mok, K.H., 2008. Singapore's global education hub ambitions: University governance change and transnational higher education. *Int. J. Educ. Manag.* 22 (6), 527–546.
- Mok, K.H., Lee, M.H.H., 2003. Globalization or globalization? Higher education reforms in Singapore. *Asia Pacific J. Educ.* 23 (1), 15–42.
- Moreno, L., 2014. The urban process under financialised capitalism. *City* 18 (3), 244–268.
- New Nation, 1981. Longer HUDC wait. 21 February, 1.
- Nijman, J., 2007. Introduction—Comparative urbanism. *Urban Geogr.* 28 (1), 1–6.
- NUS, 2007. *Summary Financial Statements Prepared from the Audited Financial Statements for the Financial Year ended 31 March 2007*. Available at: <https://www.nus.edu.sg/docs/default-source/annual-report/nus-financialreport-2007.pdf> (accessed 28 February 2023).
- NUS, 2015. *Financial Statement 2014/15*. National University of Singapore, Singapore.
- NUS, 2021. *National University of Singapore Annual Report 2021*. National University of Singapore, Singapore.
- OECD, 2008. *Education at a Glance 2008: OECD Indicators*. OECD, Paris. Available at: <https://www.oecd.org/education/skills-beyond-school/41284038.pdf> (accessed 20 December 2021).
- Oh, D.Y., 2017. From a Colonial Institution to a Neoliberal Real Estate Developer: Comparative Analysis of Universities in the Urban Process in East Asia. PhD thesis. The London School of Economics and Political Science.
- Oh, D.Y., 2021. Verticalization process of universities: Focusing on the cases of physical expansion activities of private universities and their foundations in South Korea from the late 1990s [hanguk daehagui sujikwa gwajeong: 1990nyeondae hubanbuteo jinhaengdoen saripdaehakgwa sahakjaedanui mullijeok hwakjangsaryereul jungsimeuro]. *Space Environ.* 75, 102–138.
- Oh, D.Y., 2022. The university and East Asian cities: The variegated origins of urban universities in colonial Seoul and Singapore. *J. Urban Hist.* 48 (2), 336–360.
- Olds, K., 2007. Global assemblage: Singapore, foreign universities, and the construction of a “Global Education Hub”. *World Dev.* 35 (6), 959–975.
- O'Malley, B., 2018. Elite universities invest endowments via tax havens University World News. 11 November 2017. Available at: <https://www.universityworldnews.com/post.php?story=20171111043203537> (accessed 20 December 2021).
- Ong, A., 2011. Introduction: Worlding Cities, or the Art of being Global. In: Roy, A., Ong, A. (Eds.), *Worlding Cities: Asian Experiments and the Art of Being Global*. Wiley-Blackwell, Chichester, pp. 1–26.
- Park, B.G., 1998. Where do tigers sleep at night?: The state's role in housing policy in South Korea and Singapore. *Econ. Geogr.* 74 (3), 272–288.
- Park, B.G., Hill, R.C., Saito, A. (Eds.), 2012. *Locating Neoliberalism in East Asia: Neoliberalizing Spaces in Developmental States*. Wiley-Blackwell, Chichester.
- Park, S.O., Markusen, S., 1995. Generalizing new industrial districts: A theoretical agenda and an application from a non-Western economy. *Environ Plan A* 27 (1), 81–104.
- Park, S.H., Shin, H.B., Kang, H.S. (Eds.), 2021. *Exporting Urban Korea? Reconsidering the Korean Urban Development Experience*. Routledge, Abingdon, Oxon.
- Perry, D.C., Wiewel, W. (Eds.), 2005. *The University as Urban Developer: Case Studies and Analysis*. M.E. Sharpe, Armonk, NY.
- Pow, C.P., 2018. Constructing authority: Embodied expertise, homegrown neoliberalism, and the globalization of Singapore's private planning. *Environ. Plan. A* 50 (6), 1209–1227.
- Pyo, S.-Y., 2000. The Problems of branch schools and solutions [Bungyoui munjejeomgwa gaeseonbangan]. *High. Educ.* 105, 45–53.
- Readings, B., 1996. *The University in Ruins*. Harvard University Press, Cambridge, MA.
- Reynolds, A., 2022. Contesting the financialization of student accommodation: campaigns for the right to housing in Dublin, Ireland. *Housing Stud.* <https://doi.org/10.1080/02673037.2021.2023731>.
- Robinson, J., 2016. Comparative Urbanism: New Geographies and Cultures of Theorizing the Urban. *Int. J. Urban Reg. Res.* 40 (1), 187–199.
- Ronald, R., Jin, M.-Y., 2010. Homeownership in South Korea: Examining sector underdevelopment. *Urban Stud.* 47 (11), 2367–2388.
- Sayin, Ö., Hoyler, M., Harrison, J., 2022. Doing comparative urbanism differently: Conjunctural cities and the stress-testing of urban theory. *Urban Stud.* 59 (2), 263–280.
- Schindler, S., 2017. Towards a paradigm of Southern urbanism. *City: Analysis of Urban Change, Theory, Action* 21 (1), 47–64.
- Scott, J.C., 2006. The mission of the university: Medieval to postmodern transformations. *J. High. Educ.* 77 (1), 1–39.
- Seoul Public News, 2020. ‘16-year-long daydreaming’ of Songdo Severance: Yonsei University only now proceeds to the design stage as public anger grows [16nyeon yeotkkum] Songdo sebeuranseu... Minsin deulkkulcha yeonseadae jidea 'seolgye taryeong']. Available at: <https://go.seoul.co.kr/news/newsView.php?id=20200814014004> (accessed 23 May 2021).
- Shatkin, G., 2014. Reinterpreting the meaning of the ‘Singapore Model’: State capitalism and urban planning. *Int. J. Urban Reg. Res.* 38 (1), 116–137.
- Shatkin, G., 2016. The real estate turn in policy and planning: Land monetization and the political economy of peri-urbanization in Asia. *Cities* 53, 141–149.
- Shen, J., 2022. Universities as financing vehicles of (sub)urbanisation: The development of university towns in Shanghai. *Land Use Policy* 112, 104679.
- Shin, H., Park, S.H., Sonn, J.W., 2015. The emergence of a multiscale growth regime and scalar tension: The politics of urban development in Songdo New City, South Korea. *Environ. Plann. C* 33 (6), 1618–1638.
- Shin, H.B., 2017. Envisioned by the state: Entrepreneurial urbanism and the making of Songdo City, South Korea. In: Datta, A., Shaban, A. (Eds.), *Mega-urbanization in the Global South: Fast Cities and New Urban Utopias of the Postcolonial State*. Routledge, Abingdon, pp. 83–100.
- Shin, H.B., 2019. Asian urbanism. In: Orum, A.M. (Ed.), *The Wiley-Blackwell Encyclopedia of Urban and Regional Studies*. Wiley-Blackwell, Hoboken, NJ. <https://doi.org/10.1002/9781118568446.eurs0010>.
- Shin, H.B., 2021a. Theorising from where? Reflections on de-centring global (South) urbanism. In: Lancione, M., McFarlane, C. (Eds.), *Global Urbanism: Knowledge, Power and the City*. Routledge, Abingdon, Oxon, pp. 62–71.
- Shin, H.B., 2021b. Urban transformation ‘Korean Style’: Lessons from property-based urban development. In: Park, S.H., Shin, H.B., Kang, H.S. (Eds.), *Exporting Urban Korea? Reconsidering the Korean Urban Development Experience*. Routledge, Abingdon, Oxon, pp. 58–80.
- Shin, H.B., Lees, L., López-Morales, E., 2016. Introduction: Locating gentrification in the Global East. *Urban Stud.* 53 (3), 455–470.
- Shin, H.B., Zhao, Y., Koh, S.Y., 2022. The urbanising dynamics of global China: Speculation, articulation, and translation in global capitalism. *Urban Geogr.* 43 (10), 1457–1468.
- Slaughter, S., Rhoades, G., 2004. *Academic Capitalism and the New Economy: Markets, State, and Higher Education*. Johns Hopkins University Press, Baltimore, MD.
- Soederberg, S., 2015. Subprime housing goes South: Constructing securitized mortgages for the poor in Mexico. *Antipode* 47 (2), 481–499.
- Stoker, R.P., Stone, C.N., Horak, M., 2015. Contending with structural inequality in a new era. In: Stone, C.N., Stoker, R.P. (Eds.), *Urban Neighborhoods in a New Era: Revitalization Politics in the Postindustrial City*. University of Chicago Press, Chicago, pp. 209–249.
- Sum, C.-Y., 2018. A great leap of faith: Limits to China's university cities. *Urban Stud.* 55 (7), 1460–1476.
- Straits Times, 1995. Govt to privatise HUDC estates. 26 May, 1.
- Straits Times, 1997. Have en-bloc sales lost original aim and become a money game?. 20 September, 60.
- Straits Times, 2000. NUS buys half of Hitachi Tower. 16 March, 84.
- Straits Times, 2001. NUS flat left vacant for 3 years. 14 July, H1.
- Straits Times, 2006. Two former HUDC estates run into en bloc. 3 November, F12.
- Straits Times, 2007a. CapitaLand pays \$548m for Gillman Heights. 7 February, 49.
- Straits Times, 2007b. Meet the anti-en bloc sellers. 29 December, 159.
- Straits Times, 2008a. NUS: No conflict of interest in property deal. 2 April, 36.
- Straits Times, 2008b. NUS played critical role in Gillman Heights en-bloc sale. 19 April, 55.
- Straits Times, 2008c. Should NUS be involved in properties? 26 March, 41.
- Straits Times, 2019a. Parliament: Younger universities get double the government funding in matching grants of older counterparts. 15 January. Available at: <https://www.straitstimes.com/politics/parliament-younger-universities-get-double-government-funding-than-older-counterparts> (accessed 20 December 2021).

- Straits Times, 2019b. NUS and New Creation Church among top 10 richest fund-raisers here. 13 July. Available at: <https://www.straitstimes.com/singapore/universities-and-mega-churches-among-the-top-10-richest-charities-here> (accessed 31 August 2020).
- Strata Title Board, 2007. *STB No 53 of 2007 (Gillman Heights Condominium)*. Available at: <https://www.stratatb.gov.sg/public-data/doc/judgements/2007/STB-53-of-2007-Gillman-Heights-Condominium.pdf> (accessed 20 December 2021).
- Tan, K.P., 2008. Meritocracy and elitism in a global city: Ideological shifts in Singapore. *Int. Polit. Sci. Rev.* 29 (1), 7–27.
- Teo, X., 2008. New twist to saga: NUS link in Gillman Heights sale under query. TODAY 17 March, 10.
- Teo, S.E., Kong, L., 1997. Public housing in Singapore: Interpreting 'quality' in the 1990s. *Urban Stud.* 34 (3), 441–452.
- Thrift, N., 2010. A question (about universities, global challenges, and an organizational-ethical dilemma). *GlobalHigherEd*, 8 April. Available at: <https://globalhighered.wordpress.com/2010/04/08/a-question/> (accessed 20 December 2020).
- Tremewan, C., 1994. *The Political Economy of Social Control in Singapore*. Palgrave Macmillan, London.
- Tretter, E.M., 2016. *Shadows of a Sunbelt City: The Environment, Racism, and the Knowledge Economy in Austin*. University of Georgia Press, Athens, GA.
- UNN, 2010. The 'maximum' budget for Yonsei University to reach 797.9 billion won [Ol Saripdae Yesan Yeonsedae 'Choidae' 7979 eokwon]. 19 March. Available at: <http://news.unn.net/news/articleView.html?idxno=60170> (accessed 28 February 2023).
- Weber, R., Theodore, N., Hoch, C., 2005. Private choices and public obligations: The ethics of university real estate development. In: Perry, D.C., Wiewel, W. (Eds.), *The University as Urban Developer: Case Studies and Analysis*. M.E. Sharpe, Armonk, NY, pp. 285–299.
- Wu, F., 2018. Planning centrality, market instruments: Governing Chinese urban transformation under state entrepreneurialism. *Urban Stud.* 55 (7), 1383–1399.
- Yale Investment Office, 2012. The Yale Endowment 2012. Available at: https://static1.squarespace.com/static/55db7b87e4b0dca22fba2438/t/578e4253e58c629352d75955/1468940884840/Yale_Endowment_12.pdf (accessed 20 December 2021).
- Yeung, H.-W.-C., 2017. Rethinking the East Asian developmental state in its historical context: Finance, geopolitics and bureaucracy. *Area Development and Policy* 2 (1), 1–23.
- Yiftachel, O., Mammon, N. (Eds.), 2023. *Debating the Southeastern Turn in Urban Theories*. African Centre for Cities, Cape Town.
- Yip, M.-K.-C., Lee, J.-W.-Y., Tang, W.-S., 2020. From God's home to people's house: Property struggles of church redevelopment. *Geoforum* 110, 14–24.
- Yonsei Chunchu, 2006. Special roundtable for Songdo Campus [Songdokaempeoseu gwallyeon teukbyeol jwadamhoe]. 13 March, 7.
- Yonsei University, 2006. *Annual Report 2005*. Yonsei University, Seoul.
- Yonsei University, 2008. *Yonsei Songdo Global Academic Complex Master Plan*. Yonsei University, Seoul.
- Yonsei University, 2020. Yonsei University and Incheon Metropolitan Government signed an agreement for the second phase of the International Campus [Yeonsedaehakgyo-incheongwangyeoksi, gukjeaempeoseu 2dangye joseongsaeop hyeobyak chegyeol]. Available at: https://www.yonsei.ac.kr/sc/intro/pressrel.jsp?mode=view&article_no=191607 (accessed 23 May 2021).