

Make Your Publications Visible.

A Service of



Leibniz-Informationszentrum Wirtschaft Leibniz Information Centre

Rottleb, Tim; Kleibert, Jana M.

Article — Published Version

Circulation and containment in the knowledge-based economy: Transnational education zones in Dubai and Qatar

Environment and Planning A: Economy and Space

Provided in Cooperation with:

Leibniz Institute for Research on Society and Space (IRS)

Suggested Citation: Rottleb, Tim; Kleibert, Jana M. (2022): Circulation and containment in the knowledge-based economy: Transnational education zones in Dubai and Qatar, Environment and Planning A: Economy and Space, ISSN 1472-3409, SAGE, London, Iss. (OnlineFirst), https://doi.org/10.1177/0308518X221077105

This Version is available at: https://hdl.handle.net/10419/253374

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.



https://creativecommons.org/licenses/by-nc/4.0/

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.





Original article

A Economy and Space

Circulation and containment in the knowledge-based economy: Transnational education zones in Dubai and Qatar

EPA: Economy and Space I-I9
© The Author(s) 2022

Article reuse guidelines: sagepub.com/journals-permissions DOI: 10.1177/0308518X221077105 journals.sagepub.com/home/epn



Tim Rottleb D and Jana M. Kleibert D

Leibniz Institute for Research on Society and Space, Erkner, Germany Humboldt-Universität zu Berlin, Germany

Abstract

Our analysis focuses on evolving global capitalism's production of high-skilled temporary migrant labour through the technology of special economic zones. Drawing on debates in economic geography on zones as globalised spaces of production and interdisciplinary scholarship on economic transformation in the Arabian Peninsula, we interrogate a relatively new type of zone that agglomerates foreign higher education institutions: transnational education zones. We conceptualise these zones as a distinct form of exceptional space produced by aspirations for a knowledgebased economy. Transnational education zones provide financial benefits and legal exemptions to state territory for international higher education investors who operate offshore campuses. By conducting a situated empirical analysis of transnational education zones' logics and mechanisms in Dubai and Qatar, we show how these zones function as sites of circulation and containment that allow governments to harness globally circulating people and institutions for building a knowledge-based economy, while aiming to contain their social and political impact locally. While the underlying contradictions of simultaneous circulation and containment of knowledge and knowledge workers are modulated by the exceptional character of the zones, they cannot be fully resolved. In many ways, transnational education zones constitute a continuation of established strategies for economic development by exception that have been pursued by governments in the Gulf, which aim for global connectivity and rely heavily on controlling a temporary and contingent migrant workforce.

Keywords

Special economic zones, circulation and containment, knowledge-based economy, transnational education, Arab Gulf

Corresponding author:

Tim Rottleb, Leibniz Institute for Research on Society and Space, Erkner, Germany Humboldt-Universität zu, Berlin, Germany.

Email: tim.rottleb@leibniz-irs.de

Introduction

Capital accumulation under globalising neoliberal capitalism is becoming more financialised and networked in many ways. Yet, also the production processes of what is commonly referred to as a knowledge-based economy continue to rely on human labour. While neoliberal ideology desires and fosters the mobility of capital, goods and knowledge, the mobility of labour remains much more carefully controlled. States have established various border and migration regimes stretching across multiple scales that contain, but also modulate the mobility of people according to their utility in production processes. Governments have granted spatial-temporal exceptions to these regimes to enable a smoother operation of capital, resulting in geographies of exceptional economic spaces, such as free trade or export processing zones (Arnold, 2017). These spaces not only attract transnational capital, but also enable the exploitation of transnational (un)skilled labour in production processes, while retaining more restrictive policies in place across the rest of the nation state's territory. Our paper will focus on a relatively new type of exceptional spaces: 'transnational education zones' (Kleibert et al., 2021a), which are demarcated zones that host agglomerations of transnational higher education providers. As they have the ability to harness globalisation's logics of circulation and containment, governments establish these zones to create productive forces for a knowledge-based economy.

The knowledge and skills required for such an intended change in the mode of accumulation make international higher education a primary focus for states. A prolific body of research has shown how the state is a key actor orchestrating internationalising higher education in East Asia (Jessop, 2016; Olds, 2007; Sidhu et al., 2016). Beyond internationalising domestic higher education institutions by attracting international students and staff (Sidhu et al., 2016), governments have engaged in attracting investments of foreign higher education providers in the form of international branches, or offshore campuses. Offshore campuses enable students to acquire foreign university degrees, usually under the name of the higher education institution in situ, without having to attend classes abroad. Their number has increased significantly over time and the Arab Gulf¹ is a key region for offshore campuses (Kosmützky, 2018; Miller-Idriss and Hanauer, 2011). In particular, the higher education systems of the United Arab Emirates (UAE) and Qatar are heavily shaped and permeated by international providers and their degree programmes (Geddie, 2012; Koch and Vora, 2019). Where such mobile higher education institutions are enrolled by governments seeking to establish so-called 'international education hubs' (see Knight, 2018), states and universities are simultaneously embedded within broader capitalist restructurings (Jöns and Hoyler, 2013) as well as within localized and situated political economies. In such instances, the state and universities constitute an assemblage that refocuses its economy towards the knowledgebased economy (Olds, 2007).

A central gap in the existing literature on offshore campuses concerns the constitutive role of space in governmental strategies linking globalising higher education and creating the infrastructures deemed vital for the knowledge-based economy. By investigating the exceptional spaces of transnational education zones in Dubai and Qatar (Dubai International Academic City (DIAC), Dubai Knowledge Park (DKP) and Qatar's Education City) and the rationales for establishing them as well as the logics and mechanisms of their operation, we focus on the role of space in enabling selective circulation and containment within globalising higher education.

To make sense of these zones, we apply a political economy perspective and draw on respective literature on special economic zones (SEZ) as spaces of exception as well as on readings on the socioeconomic configuration of the Gulf states. We argue that transnational education zones in Qatar and Dubai emerged from the logics of neoliberal globalisation and its tendencies towards circulation and containment on the one hand, and local modes of accumulation and societal power relations on the other. Offering a situated empirical analysis that draws on expert interviews and

grey literature, we contribute to the above literature by showing how the zones function as exceptional spaces fulfilling important circulation and containment functions. In the particular contexts of Dubai and Qatar, they attract globally mobile institutions intended to provide the infrastructure and produce the labour pool of a knowledge-based economy. We show how these zones are the result of overlapping interests of the respective local ruling elites and of market-seeking universities. Furthermore, we contribute to a better general understanding of the production of labour in the knowledge-based economy.

In the following, we first develop our conceptual framework on transnational education zones as exceptional spaces that modulate the collision of local political economies with the movements of globalising capitalism. Then, we situate the development of transnational education zones in Dubai and Qatar historically and materially in their respective political economies. Section five analyses the moments of circulation and containment through which the zones operate. The last section concludes with a discussion of the findings' main contributions and suggestions for further research.

Circulation and containment in the global economy

Spaces of exception

The dependence of contemporary capitalism under globalisation and neoliberal ideology upon reducing barriers to trade and enabling the unhindered exchange of goods and services across national borders forms a continuation of capitalism's necessity to overcome spatial barriers (Harvey, 2001). Historical materialist theorisations of the spatialities of capitalism have argued that each mode of accumulation has its own particular space and the shift from one mode of accumulation to another entails the production of new spaces (Lefebvre, 1991). While the envisioned 'free-trade' world clearly has never been realised, the creation of specific spaces of exception enabling flows of capital and commodities forms the underlying infrastructure for global circulations. Spaces of exception enabling global circulations existed for centuries and have since proliferated and morphed. Today, they exist in different spatial forms and deploy different terminologies from free trade zones to export processing zones to SEZs (for a historical overview, see Arnold, 2017; Neveling, 2015).

Despite their heterogeneity, what unites these zones is their exceptional character as distinctly governed, spatially delineated areas that deviate in their rules and regulations from surrounding national territory and its laws. Within the zones, exemptions from taxes and duties for imports and exports are often granted to firms, administrative procedures are streamlined, and in some cases, differential environmental or labour regulations are applied. SEZs are not simply neutral efficiency-generating tools, but they are embedded within broader relations of power, including geopolitics (Hsu et al., 2018). We understand these zones as geographical and temporal exceptions to state territory that enable selective circulations and containments.

SEZs are a global phenomenon with governments as geographically diverse as Ireland's, Mexico's or India's having deployed them in economic development strategies. For example, from the mid-1960s onwards, SEZs played a crucial role in the export-oriented industrialisation strategies of East and Southeast Asian countries that were based upon labour-intensive manufacturing. Very prominently, China developed zones into a strategic industrial policy tool and changed their scale to encompass entire cities (Arnold, 2017). Globally, there were ~3500 zones in operation in 135 countries, employing 66 million workers in 2006 (FIAS, 2008). A large body of literature exists that measures the economic effects of SEZs, often finding only limited positive effects. While neoliberal policy advisors are sceptical about developing contemporary zones as free trade 'exceptions' at the expense of rolling out free-trade policies across national territory, they argue that SEZs in the past used to be a 'powerful instrument through which to capture increasingly

mobile foreign investment' (Farole and Akinci, 2011: 6). We argue that beyond their obvious function as sites aiming to enable the circulation of capital, SEZs are sites enabling the containment of labour. From a critical political economy perspective, these zones are sites 'emblematic for a global class struggle' as they have shifted the bargaining power towards capital (Neveling, 2015: 8). The power of labour has been contained within manufacturing zones, for instance, restricting workers' bargaining powers and the ability to form labour unions. The zones are not only sites of containment for workers, they are also actively engaged in their circulation through the reliance on migrant labour, particularly in economic border zones (Arnold and Pickles, 2011; Campbell, 2018).

The creation of exceptions as ways to modulate sovereignty and citizenship is key to Ong's (2006) work. She has shown how Asian governments have used zoning technologies to carve out state territories for engagement with global markets, policy experimentation and biopolitics (deployed to manage populations), arguing that 'the logic of the exception fragments human territoriality in the interests of forging specific, variable, and contingent connections to global circuits' (Ong, 2006: 19). These arguments underlie Ong's separate discussion of zoning technologies of SEZs and of globalizing higher education. With the rise of 'transnational education zones' (Kleibert et al., 2021a), these two dimensions come together in space and form new spaces of exception.

From early free trade ports to industrial SEZs to contemporary zones intended to support the evasive quest for the 'knowledge economy', zones have been re-invented by governments and changed scales, geographies and ambitions. In particular, they have become more flexible in size and focused on knowledge-intensive industries, for example in the form of science parks and university campuses (Easterling, 2014; Kleibert, 2015). Hence, in accordance with Lefebvre's theoretical considerations, the 'global knowledge economy' requires its own spaces forming particular subjects and labour much like globalised industrial production has produced its own spaces that enable circulation and containment of labour, capital and goods. Higher education plays a crucial role in the production of such spaces (Moisio, 2018).

In higher education systems across the world, neoliberalism's tendencies to dismantle the institutions of the welfare state (Harvey, 2019) have exposed universities to logics of marketisation and, closely related to that, internationalisation (Jessop, 2017). While universities have always been to some degree constituted by international mobilities of faculty, students and knowledge, the exposure of higher education to market mechanisms such as global university rankings (Jöns and Hoyler, 2013) has increased the impetus for internationalisation strategies for university leadership and encouraged the transformation of domestic higher education systems (Koch, 2014) as well as the expansion to overseas markets through offshore campuses. However, research by Sidhu and colleagues (2016) on East Asia has shown how policies for the creation of 'world-class' international universities can also have unintended side effects of destabilisation or deterritorialisation when established mechanisms of ordering the social configuration become undermined or established roles obsolete. Universities' roles as representative national institutions educating a national elite, for example, become increasingly weakened with increased inflows of foreign students (Sidhu et al., 2016). Hence, governments equip their policies aimed at circulation and mobility with safeguard mechanisms that produce moments of containment to prevent such unintended side effects. Logics of containment become visible in the institutional arrangements and spatial forms that are the result of such governing processes and manifest 'in specific arenas such as university campuses and the arrangement of materials, bodies and ideas therein' (Sidhu et al., 2016: 1498).

The logics of circulation and containment, thus, are co-constitutive and may exist simultaneously. In cases where institutions themselves are mobile and entire transnational higher education zones are established, the tensions enabling circulation and containments have not yet been explored but may arguably be more pronounced.

Circulation and containment in the Gulf

While reflective of global capitalism's logics of exception, the establishment of transnational education zones in Dubai and Qatar is at the same time inseparable from the local political economies. These are produced by the Gulf states' role in the circulations of global capitalism, the developmentalist 'petro-modernist' (AlShehabi, 2015) state projects of powerful local economic and political elites (a transnational class formation Hanieh (2011) describes as 'Khaleeji capital'²), and biopolitical necessities for containment of the foreign labour required for these projects.

Circulation is a feature historically engrained in capital accumulation in the Gulf states. Already in precolonial economies transnational local merchant families lived and moved across the shores of the Gulf, the Indian subcontinent and beyond (Al-Sayegh, 1998; Keshavarzian, 2010). Building on the Gulf cities' role as commercial posts, colonial (the British in particular) powers embedded the Gulf in (trans)regional economic and political networks (see Onley (2007) for an extensive account of the crucial role of the Gulf for the British Indian Empire). The resulting patterns shape (trans) regional political economies until today (Khalili, 2021). Due to their abundance of oil and gas reserves and the surplus capital created by it, the Gulf states today occupy strategic positions in the organisation of global capitalism (Harvey, 2019). Yet, despite the continuing importance of oil and trade, the accumulation regimes in the Gulf are facing increasing pressures, and, in turn, the rent-based neopatrimonial social contracts ensuring the political power of Khaleeji capital are threatened. Hence, governments in the Gulf have sketched out ambitious plans for economic diversification, outlined in numerous 'vision' documents such as the UAE's Vision 2021 or the Oatar Vision 2030 (Erfurth, 2019). These are guided by the economic imaginary of the knowledgebased economy (Jessop, 2017) and promote the production, valorisation and application of knowledge as a key driver of economic efficiency, competitiveness, and profit. The plans also link economic development to the ambition of becoming global 'nexus states' (Henderson, 2017) whose economies are firmly interlaced with neoliberal capitalism's globally circulating goods, capital, and knowledge (Hanieh, 2018).

In their attempts to build up various non-oil economic sectors, governments in the Gulf seek to attract foreign investment and branches of international corporations (Buckley and Hanieh, 2014). In this regard, particular places and often whole cities are assigned prominent roles as beacons for this desired investment, which embody their rulers' global ambitions (Acuto, 2010). Globalisation in the Gulf is thus not only mediated through the territorial organisation of the nation state, but in particular through sub-national units that 'intermediate between global and regional economies' (Sigler, 2013: 613). Thus, scholars have explored how governments in the Gulf tap into globally circulating flows not only through the plethora of logistics spaces of ports and airports (Mohammad and Sidaway, 2016), but by establishing for example urban hubs and zones for finance (Bassens et al., 2010), trade (Katodrytis and Mitchell, 2015), tourism (Steiner, 2010), humanitarian assistance (Ziadah, 2019), and education (Miller-Idriss and Hanauer, 2011).

Agglomerating offshore campuses in zones thus continues strategies of establishing exceptional economic spaces as the infrastructural backbone of development. Academic literature has explored how governments in the Gulf have used such spaces to establish global and transregional hubs (Ewers and Malecki, 2010) and how specialised zones are an integral component of circulation strategies anchoring their economies to international networks and flows through various sectors (Ziadah, 2019). Yet, the spatial form of zones also fulfils important containment functions and enables Khaleeji capital to solidify political power over territory (Keshavarzian, 2010). The proliferation of exceptional spaces resulted in socio-spatial configurations that not only physically segregate social and economic functions (Elsheshtawi, 2019), but also ethnicity and class (Sidaway, 2007). Scholars have shown how the spatial segregation of non-citizens within Gulf states not

only pertains to low-skilled workers in labour camps, but also pertains to high-skilled professionals (Vora, 2015a).

The application of zone technology and its capacity for containment to transnational higher education needs to be understood against a key element of the Gulf's political economy. According to statistical data provided by the respective authorities, Dubai (3.4 million)³ and Oatar (2.7 million) have rather small populations with an overly large proportion of non-citizens (92% and 91%, respectively) forming the bulk of their labour base. From resource extraction to construction to the finance and trade sectors, the Gulf states' economies rely on these foreign workers. Relying on foreign labour in itself is a continuation of historical materiality engrained in the Gulf. It stretches from the long history of South Asian merchants' activities in the Gulf.⁴ on which the British Empire relied on as political agents during its earlier years of involvement in the region (Onley, 2007). A more large-scale influx of foreign labour happened as a function of both colonial and capitalist logics when expatriates from South Asia and Western countries were systematically imported as skilled labour for the companies exploiting the newly found oil reserves (AlShehabi, 2015). While patterns of labour migration changed along with transforming geopolitical and economic realities, and despite governmental efforts to incorporate more citizens into the workforce (processes called for example 'Qatarization' or 'Emiratization'), today the working populations of the Gulf states are characterised by a small minority of Arab Gulf citizens and a large majority of contingent residents most of whom hail from South Asia. The foreign workforce is heterogeneous in terms of education and skill levels and tends to be delineated along ethnic lines (Stephenson and Rajendram, 2019). Two key mechanisms ensure the political and economic power of the ruling classes: an extensive welfare system restricted to Gulf citizens that is internally segmented according to the closeness to the ruling families; and further a whole system of legal, spatial and cultural containment measures keeping the foreign workforce in a temporary and segregated state preventing and discouraging them from fully integrating into local society and from acquiring full citizenship (AlShehabi, 2015).

These systems include spatial technologies such as segregated urban quarters (Buckley, 2014), a number of legal mechanisms, such as the 'kafala' system – an institutionalised traditional sponsorship system governing and temporarily incorporating foreign labour into local society (Gardner, 2011) – and K-12 education systems dividing students according to their citizenship (Vora, 2014). There are insightful ethnographic studies illustrating the experiences of migrant workers in the Gulf and how they navigate the complex systems of their permanently temporary lives (see Kanna, 2010; Vora, 2014). Despite many migrant families living in the Gulf states for more than one generation, it is common among the ruling classes to perceive migrants 'as temporary necessary evils of development, and they discourage intermarriage, cultural assimilation, naturalization, or other processes that would make foreign residents more permanent' (Vora, 2015b: 23).

The Gulf states seek highly skilled labour required for a diversified knowledge-based economy beyond their own citizenry among the resident migrant population and by facilitating further skilled labour immigration (Ewers, 2013). Here, transnational higher education and its delivery within exceptional spaces play a key role (Miller-Idriss and Hanauer, 2011). Foreign universities are supposed to attract foreign expertise (Ewers, 2017) and are perceived as 'pipelines' for knowledge workers (Ewers and Malecki, 2010: 503). Moreover, offshore campuses function as controlled testbeds for foreign, often Western, forms of education perceived as crucial for a globalised knowledge economy (which scholars have analysed for their complex neo-colonial and imperial implications, see Koch and Vora, 2019). While the more elitist campuses also serve a minority of Arab Gulf citizen students, they mainly offer degree programmes to the large populations of resident migrants to produce a domestic pool of high-skilled labour (Geddie, 2012; Miller-Idriss and Hanauer, 2011; Rensimer, 2021; Stephenson and Rajendram, 2019).

Whereas existing scholarship has analysed the entanglement of higher education projects in the Gulf with economic development strategies relying on foreign investment and foreign labour, we now turn to investigate the constitutive role of space in these strategies to understand why governments deploy the technology of transnational education zones. We argue that while these zones are a continuation of existing strategies for circulation intended to attract foreign organisations, they also fulfil important containment functions reinforcing the systems that keep migrant labour in a temporary state and adapting them for their visions of a knowledge-based economy.

Methodology

We empirically investigate the transnational education zones in Dubai and Qatar: DIAC, DKP and Qatar's *Education City* in Doha. Following Kleibert et al. (2021a) we understand transnational education zones as 'a territorially defined area at the urban scale with at least two offshore campuses that provides shared campus infrastructure, advertises itself as an education hub, and has higher education as its primary function' (p. 2851). In addition to offering rental buildings or construction land to universities, these zones provide shared facilities usually associated with campus spaces such as canteens, sports facilities and student accommodation. Moreover, they create spaces of exceptional higher education where foreign degrees can be delivered with less regulatory and cultural restrictions than in the larger state territory.

Dubai's DKP and DIAC are located in two different locations. The smaller and densely built DKP is wedged in between other free zones and commercial areas in the city centre and its uniform architecture mostly consists of rentable campus spaces. DIAC sits on Dubai's eastern fringes bordering the desert and includes large unused areas. While it provides rentable spaces of different sizes, it also hosts large individual university campus buildings owned by foreign universities and/or their investors. Education City occupies a vast area in the western part of Doha's urban agglomeration, consisting not only of elaborately designed offshore campus buildings and related facilities, but also features a public library, a sports stadium, research facilities and a free zone for technology companies. All three zones have a clearly demarcated spatial layout. While in the past, Education City has been fenced off and anybody entering had to submit a passport at the entrance, today all three are, in principle, freely accessible. However, movement is restricted by security desks within the buildings and by zone security personnel overseeing the streets. Table 1 provides an overview of the transnational education zones in Dubai and Qatar. In our analysis, we will further elaborate on how these zones specifically materialise in Dubai and Qatar.

As our research question aims to understand the rationales guiding the implementation of transnational education zones, our analysis relies on official accounts of the governments and institutions involved filtered through the perspective of senior decision makers. Accordingly, our empirical analysis is based on qualitative data gathered during 32 expert interviews conducted between April 2019 and June 2020. Respondents included senior administrators of government agencies and zone authorities in Qatar (4) and the UAE (5) as well as executive managers of offshore campuses in Qatar (8) and the UAE (14). Government administrators were asked about the rationales and drivers for their government's decisions to establish and operate transnational education zones. Offshore campus managers were asked to reflect on how the concrete operationalisation of these strategies impacted their higher education institutions. The majority of interviews took place face-to-face in the respondents' offices. All interviews were conducted in English and either audio-recorded and transcribed, or in instances when respondents did not grant permission to be recorded, were protocolled from memory. The interview data were complemented by observations in the field recorded as field notes and photos, and by grey literature such as governmental strategies, universities' annual reports and promotional material of the campuses and education zones. Subsequently,

Table 1. Transnational education zones in Dubai and Oatar.

	Dubai (UAE)	Doha (Qatar)
Transnational Education Zones (TEZ)	Dubai Knowledge Park (2003) Dubai International Academic City (2007)	Education City (2001)
Zone operator	TECOM Group	Qatar Foundation
Offshore campuses in	•	
Zone	Dubai Knowledge Park: Heriot-Watt University (UK) Islamic Azad University (Iran) Middlesex University (UK) Murdoch University (Australia) The University of Manchester (UK) University of Bradford (UK) University of Exeter (UK) University of Wollongong (Australia) Dubai International Academic City: Amity University (India) BITS Pilani (India) Curtin University (Australia) Institute of Management Technology (India) Manipal Academy of Higher Education (India) SZABIST (Pakistan) SP Jain Center of Management (Australia) University of Birmingham (UK) University of Saint Joseph (Lebanon)	Education City: Carnegie Mellon University (USA) Georgetown University (USA) HEC Paris (France) Northwestern University (USA) Texas A&M University (USA) Virginia Commonwealth University School of the Arts (USA) Weill Cornell Medicine (USA)
Total number of offshore campuses	ESMOD (France) 29 (18 in TEZ)	13 (7 in TEZ)
Programmes offered	More than 50% in business, others include engineering, architecture and IT	Variety of programmes, including medicine, journalism, art, engineering, business and IT

Source: the authors based on desk-top research and fieldwork.

data were critically analysed thematically using the qualitative data analysis software MaxQDA. The following sections present the results of our empirical analysis.

Transnational education zones and the political economy of Dubai and Qatar

The differences between Qatar's and Dubai's strategies towards transnational education zones are mainly reflective of their different political economies. Qatar is a small nation state whose government commands vast state funds from the country's oil and gas production that it invests in national development projects. Dubai as a political and territorial entity is part of the federally organised country of the UAE which grants its individual emirates a high degree of autonomy in some

policy areas, including higher education. Dubai's economy mainly relies on its status as an international trade and services hub which its government fosters through strategic investments in infrastructure. It follows a 'hyper-entrepreneurial' (Acuto, 2010) mode of governance in which the economy, despite official narratives of neoliberal free-market paradigms describing Dubai as 'the most business friendly city in the world' (Government of Dubai, 2014: 17), interlocks closely with authoritarian rule and hierarchical family structures embedded in the state apparatus. This blurriness of individual, class and state interests, common in the Gulf states (Hanieh, 2018), can also be observed in the way transnational education zones in Dubai and Qatar are managed. Dubai's zones are run by TECOM Group, which operates multiple other industry-specific zones in the city. TECOM is a subsidiary of the multinational investment conglomerate Dubai Holding of which Sheikh Mohammed Bin Rashid Al Maktoum, the ruler of Dubai, is the majority shareholder, Education City is the flagship project of Oatar Foundation, which, in contrast to TECOM, portrays itself as a non-profit organisation but similar to the former, it is a vehicle for implementing state interests. Nominally a 'private' foundation, it was founded by the late Emir and its leadership recruits itself mainly from the ruling families. As one of the main instruments for developing Oatar's economy, it is equipped with vast state funds.

Dubai' approach to higher education reflects a vision of higher education as another services sector that can be imported to Dubai to broaden the emirates' consumer offerings and, as one zone administrator described it, add to the city's 'cosmopolitan' character. Unlike Qatar, Dubai's government does not directly fund offshore campuses. The aim is to create an environment in which foreign universities bear financial risks and compete for students. Dubai has drawn in a range of mid-tier higher education institutions from the marketised higher education systems of the United Kingdom and Australia, but also from other countries including India and Pakistan, which reflect the origin of a considerable share of migrant workers in Dubai. According to our review of the respective annual reports of these universities, more than half of the programmes offered by offshore campuses in the emirate are relatively inexpensive to roll out undergraduate degrees in international business and economics and many campuses were established in partnership with a private company which acted as an investor and often is in charge of the campus' operational business. In contrast in Qatar, Education City mostly hosts offshore campuses by prestigious US-based universities, which are completely funded by the Qatar Foundation and offer specialised programmes such as medicine, engineering or journalism. Together, these campuses are supposed to form the 'MultiverCity' of Education City (Qatar Foundation, 2021). Education City is indicative of a general development paradigm involving more direct funding, made possible by the significant financial resources that Qatar's government can mobilise.

The different approaches outlined here are also visible in the zones' different student numbers: according to publicly available data, in 2018/19 there were ~21,200 students studying at one of the offshore campuses in Dubai's transnational education zones (of Dubai's 60,000 higher education students in total) and only 2250 students at Education City's offshore campuses (of 34,000 in total). Also, while national students are the minority in all three zones, Education City's prestigious universities do serve a small but stable number of (mainly female) Qatari students.

Transnational education zones: logics and mechanisms of circulation and containment

While there are differences in both the scale and institutional design of the three zones, our main analysis will focus on their similar strategic functions that are realised through their spatial form. We will show how, despite their differences, they are varieties of a similar strategy by tapping into global flows of circulating institutions and human capital while containing these flows

locally. These moments of circulation and containment are inherently connected to each other, often characterised by simultaneousness and thus difficult to disentangle. However, in the following, we will differentiate between the two logics to understand the particular functions producing them. Table 2 summarises our empirical findings.

Logics of circulation

For most government administrators we interviewed, attracting foreign universities constitutes a logical continuation of established modes of economic development. Guided by self-images of being cosmopolitan and open to the world and driven by the overarching rationale to diversify their economies, the governments of Dubai and Qatar aim to position Dubai and Doha as international hubs for higher education and knowledge-based economic development. Rather than developing the required capacities from domestic universities, governments intend to 'leapfrog' (Ewers and Malecki, 2010) the process by attracting foreign offshore campuses with different programmes, cultural backgrounds and faculty. Government administrators in both contexts emphasised in our interviews their conviction that developing such an infrastructure domestically would simply take too much time. Therefore, they extended the free zone logic to education and established transnational education zones as an infrastructure to both attract foreign skill and knowledge, and to produce the required human resources endogenously.

Attracting mobile institutions. Deploying the exceptional logic of the zone, education zones enable governments to capture a general trend in higher education towards transnational provider mobility where universities, seeking additional revenues from foreign markets and to increase their international reputation, are responsive to opportunities for developing subsidiaries abroad (Kosmützky, 2018). Most campus managers named similar rationales for their university located in a transnational education zone. The zones offer financial benefits ranging from direct funding to

Table 2. Logics of circulation and containment in transnational education zones.

Logics	Dimensions	Mechanisms of transnational education zones
Circulation: Enabling transnational flows of capital and (high-skilled) migration	Attracting transnational universities	Financial benefits Regulatory exemptions Infrastructure and operational support Visibility/branding
	Attracting/developing transnational human resources	Fast-tracking visa services Recruitment of transnationally mobile faculty & students Extending higher education to resident migrants' children
Containment: Managing populations, reinforcing social power relations	'Exceptional' higher education	Special accreditation of degrees Type and content of degrees Teaching in English
,	Socio-spatial segregation	Demarcated and marketed as distinct areas Remote location of zones Enable certain transgressive cultural practices

comparatively low rents in rental buildings or land for constructing campuses, shared campus facilities and services such as maintenance and security. Operational support by the zone authorities covers administrative issues, such as visa support, and includes advice on the viability of universities' business plans for the local market. Such features are intended to make it 'easy for educational institutions to come in', as one administrator in Dubai described.

In both Dubai and Qatar, transnational education zones are an extension of a governmental zone strategy (see, e.g. Ministry of Development Planning and Statistics, 2018). In Dubai, transnational education zones are 'free zones' under UAE law and part of TECOM's zone ensemble. Dubai's government aims to attract higher education institutions through differential regulation in these zones, such as fiscal exemptions and allowing unhindered repatriation of profits. Importantly, offshore campuses in Dubai's zones are exempted from the UAE's federal higher education accreditation regime by the Commission for Academic Accreditation under the Ministry of Education which otherwise applies to all universities operating in the country. Universities can thus transfer programmes to Dubai largely unchanged, which significantly reduces their financial and operational costs – a crucial factor for most campus managers in Dubai.

Unlike DKP and DIAC, the territory of Education City (except for the area occupied by the free zone Qatar Science & Technology Park) is not subject to legal exemptions but unfolds its zone character through more subtle mechanisms. While all offshore campuses in Qatar are formally accredited by Qatar's Ministry of Education and Higher Education, those in Education City were automatically accredited as 'partner universities' of Qatar Foundation without significant changes to their programmes, given they were selected for their perceived high-quality education in the first place as one government administrator emphasised. Other offshore campuses in Qatar have to actively apply for accreditation and go through a more thorough administrative process. Much more crucial incentive factors for the interviewed university managers were full financial coverage, expensive buildings and extensive institutional support from the Qatar Foundation – all of which provides universities located in Education City with a significant financial advantage.

Finally, the imaginary of the 'international education hub' connected to transnational education zones and the brand-building opportunities it holds was also a major factor in universities' location choices. In our interviews, campus managers emphasised that the visibility, as well as a promise of academic vibrancy and international connectivity connected to these 'education cities' in Dubai and Doha, significantly contributed to their university's decision to set up offshore campuses there. To them, the zones signify a 'coincidence of money, power and commitment' (interview with campus manager in Qatar). They saw them as expressions of 'places which have a vision' (interview with campus manager in Dubai) and a materialisation of long-term and strategic planning, which convinced university managements of the seriousness and determination of governments. Despite these benefits, the zones were also reflected critically. A manager in one of Dubai's zones complained about the rent of the campus building being too high in comparison with an individual location while several managers considered whether a more central location than DIAC or Education City would not be more beneficial for student recruitment and connecting the campus to society.

Attracting mobile skill. A crucial difference from classical special economic zone models is that higher education is never just another economic sector but is vital in reproducing the labour force. In particular, in the context of the Gulf, the education of human subjects raises issues related to political legitimacy and citizenship formation. The zones' purpose of attracting foreign higher education providers is inseparably connected to the purpose of attracting foreign skills in the form of faculty and students – two groups from which potential workers for a knowledge-based economy can be recruited. Political decision-makers in the Gulf states realise that they 'need to invest in a highly-skilled workforce that is here to serve in the long run' (interview with zone administrator in Qatar).

Despite the rhetoric of 'international student hubs' and promotional material by the offshore campuses highlighting their diverse student bodies, few students in Dubai and Qatar are international students according to the OECD's (2013) definition as 'having moved to a country for the purpose of studying'. While there are few numbers on students' origins available, anecdotal data from our interviews further confirm existing research on the issue (Rensimer, 2021). Those that did migrate for studying tend to be recruited from countries that already heavily contribute to Qatar's and Dubai's resident migrant population, that is, from South and Southeast Asia as well as other Arab countries. According to the campus managers, international students are mostly attracted by the possibility to obtain a Western degree without actually moving to a Western country, which can be more costly, more restrictive with regard to visa procedures, and characterised by greater cultural differences. The majority of students within the transnational education zones are in fact children of resident migrant workers living in the Gulf, to which we will now turn our attention.

Logics of containment

Similar to other globalised economic spaces of exception, transnational education zones enable circulations but are also equipped with mechanisms that ensure the containment of the various sociopolitical impacts of mobile institutions and skilled human beings. Although the governments of Dubai and Qatar portray offshore campuses as crucial institutions for their knowledge infrastructures under development, these foreign universities also bear the danger of disturbing the delicate local social power relations by adding more non-citizens to the population and by empowering existing migrants by providing them with higher education. Transnational education zones feature various safeguard mechanisms to mitigate these perceived threats. Through the delivery of exceptional higher education in spatially segregated environments, the ruling elites make sure the foreign universities and the high-skilled labour they create are firmly embedded within their respective national developmental strategies, while remaining contained within an exceptional transnational space that is clearly delimited from the rest of the nation and citizenship.

Exceptional' higher education. The exceptional higher education delivered in transnational education zones functions as containment on several levels: the type and form of degrees delivered and the student population. While part of the purpose of the offshore campuses attracted by the zones is to provide Qatari and Emirati students with globalised higher education, these students are not the majority. Realising that their countries' economic development will continue to rely on migrant labour, the governments of Dubai and Qatar recognise that a knowledge-based economy will require a different kind of labour force. Hence, they established zones not only to attract further high-skilled individuals, but also to produce a high-skilled labour force from the existing migrant population: 'these people that were coming in, one, needed education opportunities for themselves. Two, if they were bringing their families, we needed more private schools and eventually, we would need more private universities' (interview with government administrator in Dubai).

Thus, it is largely the children of the middle-class resident migrant communities originating predominantly from the Indian subcontinent and Southeast Asia that are studying at the offshore campuses in Dubai and Qatar. In both contexts, such students are usually excluded from entering a domestic university due to the high costs, requirements of speaking Arabic, and degrees often not holding much value outside of the Gulf region (Stephenson and Rajendram, 2019). The latter in particular is an important factor to consider for resident migrants as they live in an insecure and temporary status in the Gulf, and may be forced to leave should they lose employment or the political climate changes. Contrary to the degrees of domestic Emirati or Qatari universities,

students believe that the international degrees delivered by offshore campuses provide greater cosmopolitan capital and thus raise not only employment opportunities within their current places of residence but also abroad (Rensimer, 2021). By providing these higher education opportunities to their resident migrant populations, the governments of Qatar and Dubai aim to contain the outflow of potential knowledge workers for international study.

Besides preventing a brain drain, transnational education zones have a socio-political containment function. Although the degrees of offshore campuses are often issued by universities that are ranked higher than the Qatari and Emirati domestic universities, they do not equip graduates with the necessary cultural, social and sometimes neither legal credentials to advance into the inner circles of Qatari or Emirati societies. While offshore campuses and zone operators emphasise transnational education zones as spaces of intercultural encounter and learning, and other research confirms that they occasionally can function as such (Vora, 2014), our respondents at the same time recognised that the type of internationalised higher education delivered at the offshore campuses tends to reproduce the barriers between citizens and migrant populations. This pertains for example the language in which the programmes are taught (usually English), the topics they teach, the cultural and social knowledge they transmit or their co-educative mode of teaching. In Dubai's zones, these barriers are also reproduced legally through the special accreditation of degrees of offshore campuses, which are not recognised by public employers in Abu Dhabi and other emirates, containing these graduates even firmer in Dubai.

This exceptional form of higher education can also contradict the official development agendas as a campus manager in Qatar explained: '[A] lot graduate very fluent in English and capable of working for Goldman Sachs or the government of whatever, but not the Qatari government which operates in Arabic'. Thus, transnational education zones prepare graduates to work as temporary experts or managers in the globalised parts of their host countries' economies, but they do not provide them with the same privileges as Arab Gulf nationals. Due to the international degrees and their globalised study experience, graduates often prefer to seek a career outside of the Gulf where they feel they can fully utilise the potential of their education. The zone's exceptional higher education thus has the potential to undermine the government's efforts to produce a sustainable high-skilled local workforce for a knowledge-based economy, which a senior government administrator in Qatar also recognised: 'Basically you end up creating diamonds but you cannot wear them locally'.

Socio-spatial segregation. Our interviews corroborate research on transnational higher education in the Gulf as experimental spaces of containment (Koch, 2018; Koch and Vora, 2019; Vora, 2015a). Through their spatial demarcation as distinct areas of 'foreign' higher education and their remote location, transnational education zones emphasise the exceptionality of the hosted offshore campuses and their students. In the Gulf societies, the small citizen population increasingly perceives their ethnic and cultural identity under threat. Since importing offshore campuses of foreign universities often also means to import parts of their institutional, social and cultural identities, in particular, Western campuses have the potential to spark social conflict: 'With conservative parts of the community, they're still seen as Western universities which are not acceptable' (interview with zone administrator in Qatar). The reservation concerns for example the content of offshore campuses' programmes, certain topics dealt with in campus exhibitions, but also cultural practices at the campus, such as public display of affection between young men and women.

To fulfil their aspired function of producing knowledge workers equipped with a globalised education, offshore campuses need to negotiate, mediate and at times transgress normative systems in Dubai and Qatar. The demarcated spaces of education zones are marked as exceptional and enable the governments of Dubai and Qatar to temporarily solve this contradiction. The zones and their operators grant the hosted campuses a certain degree of autonomy and make sure 'there's some

kind of buffer between [offshore campuses] and the rest of the authorities' (interview with campus manager in Qatar). While the zone authorities, often representing more progressive parts of their society, play a crucial role in this, it is particularly the spatial form of the zones that enables the governments to contain these campuses spatially, keeping them and their graduates removed from the political and cultural space of the 'nation'. This capacity for spatial distinction also benefits the offshore campuses themselves, as the exceptionality of the zones provides them with the required space to navigate the narrow course that exists between the boundaries of their home campus' as well as their own faculty's expectations, habits and aspirations for academic life, their host authorities' expectations for fostering innovative graduates and the politically and culturally conservative elements of the Gulf states.

However, there are also contradictions emerging from the exceptional spatial character of the transnational education zones. As it is very inconvenient to reach DIAC without a car, the remote location of the zone undermines the government's efforts to position it as Dubai's main offshore campus hub: 'they were actually pushing us really to move to Academic City, but we didn't really see how the business will work from the Academic City given the fact it's about 40 minutes out from here, from Knowledge Park, to Academic City. The area there is still not developed properly, there isn't transportation or tram line, and it's away from businesses' (interview with campus manager in Dubai). Education City's offshore campus managers similarly perceived the zone, while connected to a metro line, as located relatively far away from the city centre.

Their spatial distinction also has the potential to turn the zones into enclaves: 'We realized that even within the Qatari community, [Education City] was perceived as a gated community which it's not' (interview with government administrator in Qatar). The respective governments and the campus managers are aware of this and are trying to mitigate this effect. 'One of the things I was told you absolutely have to do, is make sure that you show you're not an island, that you are open. That you do bring added value, and as a constant thing, not just of outreach and PR' (interview with campus manager in Qatar). Qatar's government has been trying to make Education City more approachable and to foster outreach activities as is apparent for example in the removal of the barriers surrounding it or in academic and cultural public events taking place there. Although both zone administrators and campus managers in Dubai expressed ambitions for similar developments in DKP and DIAC, so far there are limited mechanisms that foster society—university linkages.

Conclusions

Our empirical study has shown the logics of circulation and containment embedded in transnational education zones and the mechanisms through which they function. These zones resemble the developmental technology of SEZ and in many ways constitute a continuation of established strategies for economic development that have been based upon the contradictions inherent in the Gulf's distinct political economies. The zones attract foreign investment in the form of universities and their globalised higher education. Operating from the exceptional spaces of the transnational education zones, these universities play crucial roles in the strategies to reproduce the temporary skilled labour force vital for the Gulf states' ambitions to move beyond resource revenues and diversify their economies into knowledge-based economies.

We contribute to the literature on transnational education projects in the Gulf by analysing the role of the actual spaces constituted by them in the form of transnational education zones. While transnational higher education projects have previously been argued to play a key role in the strategies of circulation of the Gulf states to attract inward investment, foreign labour and developing an endogenous high-skilled labour base (Ewers and Malecki, 2010; Geddie, 2012), our analysis reveals the logics and mechanisms of containment that underlie spaces for higher education. Previous research has shown how internationalising universities, in general, can act as sites of

circulation *and* containment (Sidhu et al., 2016). Our analysis suggests that this dialectical relation becomes compressed in space and modulated through the exceptional character of transnational education zones.

The transnational education degrees offered within Dubai's and Qatar's zones produce a transnationally mobile class equipped with 'global' education but perpetuate their insecure and temporal non-citizenship status, rendering them unable to challenge the status quo of power. Consequently, contrary to the generally assumed role of universities in citizenship formation processes, our research suggests that offshore campuses are not offering a pathway to citizenship, confirming former assumptions that citizenship in the Gulf is not subject to meritocratic considerations, but tied to 'national ethics and the modes of proper and authentic citizenship' (Kanna, 2010: 104). These logics of circulation and containment are reflective of a predicament that countries relying on foreign labour and aiming for a knowledge-based economy are facing. Thus, our findings point to evolving global capitalism's production of high-skilled but temporary and contingent labour.

The future role of transnational education zones is yet unclear. In Dubai and Qatar, the elusive quest for a knowledge-based economy is ongoing but is hampered by the fact that offshore campuses and transnational education zones tend to decouple teaching and research (Kleibert et al., 2021a), thus limiting opportunities for knowledge transfer beyond the zones. Both government administrators and campus managers identified the relatively low research and innovation output as a major problem, which questions the expected relationship between offshore campuses and the fuzzy notion of the knowledge-based economy. Moreover, the offshore campus model itself is a risky endeavour (Kleibert et al., 2021b), with campuses regularly closing due to financial issues. As our research shows how logics of containment engrained in the DNA of transnational education zones reinforce migrants' temporal and segregated existence, they may limit their long-term contribution to the knowledge-based economy. Thus, while the exceptional character of the zones can modulate the underlying contradictions of simultaneous circulation and containment of knowledge and knowledge workers, it cannot fully resolve them.

Yet, the very fact that migrants in Dubai and Qatar are actively encouraged to enrol in higher education may be reflective of an overall change. Recent policy initiatives point in that direction. For instance, as several media sources reported, the UAE announced recently not only that it will extend the eligibility of its 10-year 'golden visas' to all PhD holders and 'top performing graduates' (Quinn, 2021) but also amended a law that allows the authorities to nominate investors, scientists and other high-skilled professional for UAE citizenship. However, more research on individual experiences of students and professionals is required to better understand how the education delivered in transnational education zones impacts the social relations in the Gulf states that build on segmentation by class and race, as was highlighted by other scholars (Rensimer, 2021; Vora, 2015a).

In the meantime, more transnational education zones are under development in the region. Kuwait is planning to open a 'Knowledge City' with an offshore campus by the Technical University of München at its centre and Oman builds a 'technology hub' which involves British universities as partners, while Egypt develops a 'Knowledge Hub' comprised of offshore campuses. Besides these distinctly transnational projects, further 'education cities' comprised of domestic universities, such as Sharjah University City (also in the UAE), or Sabah Al-Salem University City in Kuwait exist. More research will be required on whether similar rationales, logics and mechanisms can explain the rise of the new generation of education projects. Moreover, as place-branding is an important part of transnational education zones, future research could focus on the policy mobilities within and beyond the Gulf to trace how the concept of transnational education zones travels, becomes embedded within different places and tied to global city discourses and urban development strategies.

Declaration of conflicting interests

The authors declared no potential conflicts of interest with respect to the research, authorship and/or publication of this article.

Funding

The authors disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: This research was funded by the Leibniz Association as Leibniz Junior Research Group 'Constructing Transnational Spaces of Higher Education' in the 2018 competition.

ORCID iDs

Tim Rottleb https://orcid.org/0000-0002-2477-2836

Jana M. Kleibert https://orcid.org/0000-0002-1889-1978

Notes

- We use the terms 'Arab Gulf' and 'Gulf' in this paper synonymously to describe the geographic area of the Arabian Peninsula and the term 'Gulf states' to describe the countries of the Gulf Cooperation Council (GCC), Bahrain, Kuwait, Oman, Oatar, Saudi Arabia, and the United Arab Emirates.
- 2. Fostered not only through regional political agreements and historic economic processes, but also through 'a particular, unique, and concrete expression of the tendencies that came to shape the broader global economy' (Hanieh, 2011: 101), Khaleeji capital is a regional capital formation that has emerged from the internationalisation of social relations across the Gulf. The term relates not merely to an increase in flows of capital and commodities across the Gulf but describes the interconnectivities of national capital factions that perceive accumulation from the perspective of the GCC as a whole instead of from within the borders of their respective national states (Hanieh, 2011).
- 3. The total population of the UAE is about 9.9 million.
- 4. In particular in Dubai, Indian merchants played a crucial historic role in the city's economic and political development (Al-Sayegh, 1998).
- 5. Four interviews were conducted through video calls, three of them following the implementation of travel restrictions in the wake of the Covid-19 pandemic.
- 6. Until the 1980s, oil and gas still accounted for up to 55% of Dubai's GDP, but in 2017 it had dropped to <2% (Knowledge and Human Development Authority, 2017: 7).
- 7. Instead, universities located in Dubai's zones undergo a quality assurance process conducted by Dubai's Knowledge and Human Development Authority. Afterwards, they can choose to become recognised through a specialised accreditation scheme of the emirate only available to campuses located in DKP or DIAC, needing no federal re-accreditation.

References

Acuto M (2010) High-rise Dubai urban entrepreneurialism and the technology of symbolic power. *Cities* 27(4): 272–284.

Al-Sayegh F (1998) Merchants' role in a changing society: The case of Dubai, 1900–90. *Middle Eastern Studies* 34(1): 87–102.

AlShehabi O (2015) Histories of migration in the Gulf. In: Hanieh A, AlShehabi O and Khalaf A (eds) *Transit States: Labour, Migration and Citizenship in the Gulf.* London, England: Pluto Press, 3–38.

Arnold D (2017) Export processing zones. In: Richardson D, Castree N, Goodchild MF, Kobayashi A, Liu W and Marston RA (eds) *International Encyclopedia of Geography: People, the Earth, Environment and Technology*. Malden, MA; Oxford; Chichester, West Sussex: John Wiley & Sons, Ltd, 1–7.

Arnold D and Pickles J (2011) Global work, surplus labor, and the precarious economies of the border. Antipode 43(5): 1598–1624.

- Bassens D, Derudder B and Witlox F (2010) Searching for the Mecca of finance: Islamic financial services and the world city network. *Area* 42(1): 35–46.
- Buckley M (2014) On the work of urbanization: Migration, construction labor, and the commodity moment. *Annals of the Association of American Geographers* 104(2): 338–347.
- Buckley M and Hanieh A (2014) Diversification by urbanization: Tracing the property-finance nexus in Dubai and the Gulf. *International Journal of Urban and Regional Research* 38(1): 155–175.
- Campbell S (2018) Border Capitalism, Disrupted: Precarity and Struggle in a Southeast Asian Industrial Zone. Ithaca and London: Cornell University Press.
- Easterling K (2014) Extrastatecraft: The Power of Infrastructure Space. London and New York: Verso Books. Elsheshtawi Y (2019) Real estate speculation and transnational development in Dubai. In: Molotch HL and Ponzini D (eds) The New Arab Urban: Gulf Cities of Wealth, Ambition, and Distress. New York: New York University Press, 235–255.
- Erfurth M (2019) International education hubs as competitive advantage: Investigating the role of the state as power connector in the global education industry. In: Parreira do Amaral M, Steiner-Khamsi G and Thompson C (eds) *Researching the Global Education Industry: Commodification, the Market and Business Involvement.* Cham: Palgrave Macmillan, 181–202.
- Ewers MC (2013) From knowledge transfer to learning: The acquisition and assimilation of human capital in the United Arab Emirates and the other Gulf States. *Geoforum* 46: 124–137.
- Ewers MC (2017) International knowledge mobility and urban development in rapidly globalizing areas: Building global hubs for talent in Dubai and Abu Dhabi. *Urban Geography* 38(2): 291–314.
- Ewers MC and Malecki EJ (2010) Leapfrogging into the knowledge economy: Assessing the economic development strategies of the Arab Gulf States. *Tijdschrift voor Economische en Sociale Geografie* 101(5): 494–508.
- Farole T and Akinci G (2011) Special Economic Zones: Progress, Emerging Challenges and Future Directions. Washington, DC: The World Bank.
- FIAS (Foreign Investment Advisory Service) (2008) Special Economic Zones: Performance, Lessons Learned and Implications for Zone Development. Washington, DC: The World Bank Group.
- Gardner AM (2011) Gulf migration and the family. Journal of Arabian Studies 1(1): 3–25.
- Geddie K (2012) Constructing transnational higher education spaces: International branch campus developments in the United Arab Emirates. In: Brooks R, Fuller A and Waters JL (eds) *Changing Spaces of Education: New Perspectives on the Nature of Learning*. Abingdon: Routledge, 39–58.
- Government of Dubai (2014) *Dubai Plan* 2021. Available at: https://www.dubaiplan2021.ae/c/document_library/get_file?uuid=14167c30-550d-546c-5b72-587a3d1e5c7a&groupId=1028358 (accessed 20 October 2021).
- Hanieh A (2011) Capitalism and Class in the Gulf Arab States. New York: Palgrave Macmillan.
- Hanieh A (2018) Money, Markets, and Monarchies. Cambridge: Cambridge University Press.
- Harvey D (2001) Spaces of Capital: Towards a Critical Geography. New York: Routledge.
- Harvey D (2019) Spaces of Global Capitalism: A Theory of Uneven Geographical Development. London, Brooklyn, NY: Verso.
- Henderson C (2017) The UAE as a nexus state. Journal of Arabian Studies 7(1): 83-93.
- Hsu JY, Gimm DW and Glassman J (2018) A tale of two industrial zones: A geopolitical economy of differential development in Ulsan, South Korea, and Kaohsiung, Taiwan. *Environment and Planning A* 50(2): 457–473.
- Jessop B (2016) Putting higher education in its place in (East Asian) political economy. *Comparative Education* 52(1): 8–25.
- Jessop B (2017) Varieties of academic capitalism and entrepreneurial universities. *Higher Education* 73(6): 853–870.
- Jöns H and Hoyler M (2013) Global geographies of higher education: The perspective of world university rankings. *Geoforum* 46: 45–59.
- Kanna A (2010) Flexible citizenship in Dubai: Neoliberal subjectivity in the emerging "city-corporation". *Cultural Anthropology* 25(1): 100–129.

- Katodrytis G and Mitchell K (2015) The Gulf urbanisation, Architectural Design 85(1): 8-19.
- Keshavarzian A (2010) Geopolitics and the genealogy of free trade zones in the Persian Gulf. *Geopolitics* 15(2): 263–289.
- Khalili L (2021) Sinews of War and Trade: Shipping and Capitalism in the Arabian Peninsula. London/ New York: Verso.
- Kleibert JM (2015) Islands of globalisation: Offshore services and the changing spatial divisions of labour. Environment and Planning A 47(4): 884–902.
- Kleibert JM, Bobée A, Rottleb T, et al. (2021a) Transnational education zones: Towards an urban political economy of 'education cities'. *Urban Studies* 58(14): 2845–2862.
- Kleibert JM, Rottleb T, Schulze M, et al. (2021b) Strategy first: Ten questions to answer before starting an international campus. IRS Dialog 2: 1-14, Available online: https://www.econstor.eu/handle/10419/ 235471 (accessed 20 November 2021).
- Knight J (2018) International education hubs. In: Meusburger P, Heffernan MJ and Suarsana L (eds) Geographies of the University. Cham: Springer, 637–655.
- Knowledge and Human Development Authority (2017) *Higher Education in Dubai* 2017. Report, Dubai: Government of Dubai.
- Koch N (2014) The shifting geopolitics of higher education: inter/nationalizing elite universities in Kazakhstan, Saudi Arabia, and beyond. *Geoforum* 56: 46–54.
- Koch N (2018) Green laboratories: University campuses as sustainability "exemplars" in the Arabian Peninsula. Society & Natural Resources 31(5): 525–540.
- Koch N and Vora N (2019) Laboratories of liberalism: American higher education in the Arabian Peninsula and the discursive production of authoritarianism. *Minerva* 57(4): 549–564.
- Kosmützky A (2018) Tracing the development of international branch campuses: From local founding waves to global diffusion? *Globalisation, Societies and Education* 28(1): 1–25.
- Lefebvre H (1991) The Production of Space. Oxford/Cambridge: Basil Blackwell.
- Miller-Idriss C and Hanauer E (2011) Transnational higher education: Offshore campuses in the Middle East. *Comparative Education* 47(2): 181–207.
- Ministry of Development Planning and Statistics (2018) Qatar Second National Development Strategy 2018-2022. Doha. Available online: https://www.psa.gov.qa/en/knowledge/Documents/NDS2Final.pdf (accessed 24 January 2022).
- Mohammad R and Sidaway JD (2016) Shards and stages: Migrant lives, power, and space viewed from Doha, Qatar. *Annals of the American Association of Geographers* 106(6): 1397–1417.
- Moisio S (2018) Geopolitics of the Knowledge-Based Economy. New York: Routledge.
- Neveling P (2015) Free trade zones, export processing zones, special economic zones and global imperial formations 200 BCE to 2015 CE. In: Ness I and Cope Z (eds) The Palgrave Encyclopedia of Imperialism and Anti-Imperialism. Basingstoke: Palgrave Macmillan, 1007–1016.
- Olds K (2007) Global assemblage: Singapore, foreign universities, and the construction of a "global education hub". *World Development* 35(6): 959–975.
- Ong A (2006) Neoliberalism as Exception: Mutations in Citizenship and Sovereignty. Durham: Duke University Press.
- Onley J (2007) The Arabian Frontier of the British Raj: Merchants, Rulers, and the British in the Nineteenth-Century Gulf. Oxford: Oxford University Press.
- Organisation for Economic Co-operation and Development (OECD) (2013) How is international student mobility shaping up? *Education Indicators in Focus*. No 14. Paris.
- Qatar Foundation (2021) Higher Education Strategy. Doha. Available online: https://assets.ctfassets.net/ 2h1qowfuxkq7/5n8tjK6pnKY0FJf2xuXu9b/f9eb1b1798e4b914e949a8a576c51586/QF_Higher_Education_ Strategy_-_English.pdf (accessed 27 October 2021).
- Quinn C (2021) Dubai to attract intl students with new visa options, intl campuses. The PIE News, 17 February. Available online: https://thepienews.com/news/dubai-to-attract-intl-students/ (accessed 20 October 2021).
- Rensimer L (2021) Negotiating educational choices in uncertain transnational space: South Asian diaspora in the United Arab Emirates. *British Journal of Educational Studies* 69(5): 599–620.
- Sidaway JD (2007) Enclave space: A new metageography of development? Area 39(3): 331-339.

Sidhu R, Collins F, Lewis N, et al. (2016) Governmental assemblages of internationalising universities: Mediating circulation and containment in East Asia. *Environment and Planning A: Economy and Space* 48(8): 1493–1513.

- Sigler TJ (2013) Relational cities: Doha, Panama City, and Dubai as 21st century entrepôts. *Urban Geography* 34(5): 612–633.
- Steiner C (2010) From heritage to hyper-reality? Tourism destination development in the Middle East between Petra and the Palm. *Journal of Tourism and Cultural Change* 8(4): 240–253.
- Stephenson GK and Rajendram S (2019) "This barrier between": The ethnic divisions of higher education in Malaysia and the United Arab Emirates. *Higher Education* 77(5): 889–903.
- Vora N (2014) Between global citizenship and Qatarization: Negotiating Qatar's New knowledge economy within American branch campuses. *Ethnic and Racial Studies* 37(12): 2243–2260.
- Vora N (2015a) Expat/expert labour camps: Redefining 'labour' within gulf migration. In: Hanieh A, AlShehabi O and Khalaf A (eds) *Transit States: Labour, Migration and Citizenship in the Gulf.* London, England: Pluto Press, 170–197.
- Vora N (2015b) Is the university universal? Mobile (re)constitutions of American academia in the Gulf Arab states. *Anthropology & Education Quarterly* 46(1): 19–36.
- Ziadah R (2019) Circulating power: Humanitarian logistics, militarism, and the United Arab Emirates. *Antipode* 51(5): 1684–1702.