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**Reconnecting Eurasia:
a new logistics state, the China-Europe freight train, and
the resurging ancient city of Xi'an***

Xiangming Chen

Abstract

Large-scale transport systems project expansive geographical reach via far-reaching connectivity and spillovers. This phenomenon, however, is understudied for its impact on economic and spatial relations across geographic scales and economic domains and the mechanism carrying and transmitting that impact. Despite its short existence, the China-Europe Freight Train (CEFT) has already created a long geographical reach and major impact on the transport landscape spanning China, Central Asia, and Europe. This paper argues that a new logistics state in China at the local level is driving and sustaining the CEFT from below relative to the national government and market forces. Using the ancient city of Xi'an as a characteristic embodiment of a logistics state, this paper demonstrates how the logistics state-driven CEFT has multiplied routes and redirected trade flows between China and Europe, reorganized inter-city and cross-border production and supply chains from China to Europe, stimulated a new geography of globally-oriented and nationally-rebalanced local consumption in China, and fueled major new development in an ancient and economically lagging city. The paper concludes on critical complications and implications from the Chinese local logistics state for the CEFT's sustainability and future research.

KEYWORDS Geographical reach; logistics state; China-Europe Freight Train; Eurasia; Xi'an

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Introduction

China's multimodal entry and role in various global and regional economic systems introduces new opportunities and challenges to both the structure and geography of these systems and beyond. While this significant "China impact" is multifaceted and multiscalar, it stems from two basic linked factors that make China central to and instructional for research on large-scale geoeconomic change. First, as the world's second largest economy, China projects a long reach and wide footprint that connect and affect global production networks and supply chains. Second, from its geographical location with lengthy land borders, China is favorably positioned to forge many cross-border trade and infrastructure connections. The impact of these two factors is magnified by a pair of China's most salient features: a powerful and purposeful state and a diverse domestic geography. The interaction between this quartet of factors constitutes an understudied context for understanding China's powerful role in reconnecting the vast Eurasian transport landscape, via the China-Europe Freight Train (CEFT), a locally initiated project integral to the Belt and Road Initiative (BRI).

While the Chinese state is more powerful in shaping China's domestic regional transformation than its global influence, it has reincarnated itself spatially and institutionally as it has leveraged opportunities and challenges that span local, regional, and global economic spaces. Across actions of the post-reform Chinese state, one central theme persistently threads through a full range of policymaking--i.e., the constant balance between top-down and bottom-up initiatives and coordination. Nothing is a more compelling illustration of the complex balancing of this center-local divergence/convergence than the Belt and Road Initiative (BRI), of which the CEFT is a crucial dimension and driver.¹ While the BRI was launched as a national strategy in

2013, the CEFT has been a largely local government initiative since 2011 predating the BRI. As the CEFT has generated a strong cross-border impact from multiple new logistics hubs within China, it has (re)entered the orbit of national policy coordination under the BRI, a local rescaling of geoeconomics back to the national.

From this divergence/convergence in state action as a theoretical point of departure, this paper centralizes the emergence of a new logistics Chinese state in the context of conventional research on logistics. This sets up the paper's primary goal of conceptualizing and analyzing how the Chinese logistics state is shaping four linked domains of a new Eurasian landscape of freight transport through locally initiated and operated CEFTs, thus filling the gap about the critical role of the local state in the scholarship on logistics.

The rest of the paper is organized as follows. The next section reviews the rescaled Chinese state against the main thrust of research on logistics as the scholarly foundation for conceptualizing a new logistics state through the illustration of the city of Xi'an. This guides the development of a framework for analyzing how the local logistics state impacts within-China and transnational (Eurasian) connectivity, production, consumption, and local urban development through the CEFT while accounting for the secondary and supplementary effects of the national government and market forces. Section 3 provides an overview of the CEFT's large scope and rapid growth. Section 4 unpacks how the CEFT has impacted four geoeconomic domains, separately and collectively, through a case study of the city of Xi'an as one of China's premier CEFT logistics hubs. The last section fleshes out the primary complications and conclusions.

Logistics and the (Chinese) state

This literature review situates the paper's primary goal and contributions at the interface between research on logistics and the (Chinese) state in relation to logistics. Logistics largely escaped geographical research back in the 2000s, with the limited work on this topic focused on freight movement through airports and seaports (Hesse and Rodrique 2004; O'Connor 2010; Rimmer 2014). Despite its growing critical importance for the global economy, logistics remains understudied from a broad interdisciplinary perspective leaving it to management and transportation scholars who tend to focus narrowly on logistics within and between firm supply chain management and miss its structural and spatial ties to production, consumption, and territorial development. Recognizing it as a missing link, Neil Coe (2014) elevated the study of logistics to a multi-actor value-generation network for understanding the shifting global economy. Further noting that logistics began to interest human geographers and cognate researchers only in the last 10 years or so, Coe (2020) clarified how logistics matter a lot to cities and regional development, global production networks (GPNs), labor, infrastructure, and power.

Neglected geographical research on the broader importance of logistics may be attributed to the prevalent focus on transport geography. While often used interchangeably, transport and logistics are different but strongly linked. Transportation is the function of moving products from one location to another while logistics deals with the integration of storage, transport, handling, and packaging of goods. Given its broader coverage and content, logistics subsumes the inward and outward transport and delivery of goods not just from point A to point B but also from the manufacturer to the end user.² Hesse (2020) sees logistics as coordinating material flows in time and space and thus capable of changing the relationship between flows and places. Although heavy research on cargo flows has provided a rich picture of logistics at such familiar hubs or

gateways as airports and seaports (Rimmer 2014), it left a gap in understanding logistics' broader geographical connectivity and impact regarding rail freight, especially large-scale logistics systems like the CEFT.

Past research tended to view logistic as a derived demand from production (Hesse and Rodrigue 2004). As production becomes more globally integrated, logistics goes beyond being just part of the cost and instead can redirect investment and realign production by improving the speed and coordination of transporting, warehousing, and delivering finished products across places and regions (Wang and Ducruet 2014). As globalization leads to more differentiated and converged consumption preferences (Dicken 2011), logistics can alter the spatial distribution of consumption by accelerating and redirecting cross-border trade flows and product delivery. New research is called for to reverse the causal sequence from production and consumption to logistics by probing how logistics affects production and consumption and their nexus.

Market dynamics and private firms remain the primary mechanism and actor carrying the logistics sector's broader and stronger geographical and economic impacts. With its grown importance, however, logistics has attracted and drawn greater government involvement, albeit primarily at the local level. This government intervention, in advanced Western economies such as the United State, takes the form of some local authorities competing to lure new logistics facilities like a UPS or Amazon warehouse/distribution center to their jurisdictions. Often intended to help revitalize a deindustrialized city and create new jobs, this strategy generally ends up locating a given logistics facility on a greenfield site with some local financial incentives such as tax exemption (Hesse 2020). Adding a new logistics facility may or may not pay off economically depending on the balance between limited job creation due to heavily automated warehousing, delayed return on investment given the upfront costs of construction and tax

concession, and any fit with existing economic activities. Gateway cities, naturally and functionally positioned to be logistics hubs, use the urban branding strategy to secure this status, which in turn drives linkage-based development in their hinterlands or subordinate places (Scholvin 2021). With logistics as a more productive urban function, local governments are tempted to complement or circumscribe market dynamics by using certain administrative and financial interventions to fit logistics into their development plans.

More involved as it may have become, the (local) state in the Western context remains limited and uneven in investing in and producing beneficial results from the logistics sector, relative to private logistics firms, especially global giants like FedEx and Amazon that wield a disproportionately large logistical impact. This review sets up a scholarly backdrop and reference point against which to bring the Chinese state into research on logistics in the larger context of China's state-driven development and global engagement.

A large literature has characterized the Chinese state as “developmental, entrepreneurial, and infrastructural” among other labels. This body of work has focused on three critical dyads of center-local, domestic-international, and planning-market regarding how the state acts to shape major facets of China's overall development and global engagement. Taking a highly selective approach, I identify critical thematic threads running through the evolving Chinese state to introduce a new logistics state and to undergird a framework for understanding its local role in driving the CEFT.

The East Asian developmental state predated the post-reform Chinese state, and remains a persistent but insufficient frame of reference. First, the state in the rapidly industrializing East Asian economies such as Korea and Taiwan lacked a more engaged and interventionist relationship with the market (Amsden 1989; Wade 1990). Second, caught in a national

“territorial trap,” the East Asian developmental state has elided a multiscale view on subnational dynamics driven by direct local-global ties that bypass national planning and top-down decision-making (Hwang 2016). Both critiques have revealed a lack of analytical fit between the extension of the East Asian developmental state and the post-reform Chinese state.

The concept of the entrepreneurial state alludes to the Chinese state’s role as fostering productive export-oriented industrialization and involving private foreign and domestic companies clustered in China’s coastal cities through administrative decentralization and financial incentives. Fierce competition among entrepreneurial local governments and firms created overaccumulation and overcapacity with growing inequality and serious underconsumption (Hung 2008). In partial response, local governments used financial vehicles such as urban construction bonds to monetize land development to cope with depressed exports triggered by the global economic crisis in 2008 (Wu 2019). This entrepreneurial state works through the market by combining quasi-government agencies like the urban development corporation and the market instrument of land mortgage (Wu 2020).

The Chinese state has also taken on an infrastructural dimension through its greater global orientation and connectivity, especially via the BRI. With the “Go West” policy in 2000 to accelerate development in the lagging western region and to engage Central Asia, President Xi Jinping announced the BRI in 2013, with great geographical symbolism in Kazakhstan about its crossroads location on the ancient Silk Road and the BRI’s Silk Road Economic Belt today. Ye (2020) labels the BRI’s inside-out approach state-mobilized globalization, which has galvanized both national government agencies and subnational governments including the approval of the Urumqi Duty-Free Zone for strengthening trade with neighboring Central Asia. While highlighting mobilization sheds a spotlight on the varied power of the Chinese state, it still

demands more clarity on why and how the BRI is fundamentally a loose scheme that has brought together diverse domestic interests and actors who interpret top-level policies differently and compete against each other on implementation (Jones and Zeng 2019). This prompts another look at how the local Chinese state would differ from scattered inefficiency presumed under “fragmented authoritarianism” (Lieberthal 2004) relative to the national government.

A brief tracing of the evolving Chinese state refocuses attention on the question of how it responds to opportunities and challenges emanating from the blurred center-local, domestic-international, and planning-market dichotomies. With a close reference to research on logistics reviewed earlier, I conceptualize another variant of the Chinese state—a “logistics state”—that drives the CEFT to impact the entire transport/logistics landscape of Eurasia from the local level.

A new logistics state

The CEFT has revealed a reincarnated and enlarged role of the local Chinese state relative to the central government and market mechanism leading to the formation of a new logistics state. Using the city of Xi’an as a demonstration, Figure 1 diagrams out the governing structure, geographical anchor, financing channel, and operating connections of the city government acting as a logistics state. Proposed by the Xi’an municipal government and sponsored by the Shaanxi provincial government, the Xi'an International Trade and Logistics Park (ITLP) was approved by the national government in 2008. Planned for 120 square kilometers with built-up area of 90 square kilometers and located about 15 kilometers in the northeast from Xi’an’s old walled city, the ITLP aimed to create three integrated zonal functions: 1) the Xi’an Comprehensive Bonded Zone; 2) the Xi’an rail container center; and 3) the Xi’an inland road port. In 2009, the ITLP

established and financed the Xi'an International Inland Port Investment & Development Group (ITL Group) as a large state-owned enterprise (SOE) and the ITLP's operating arm. The ITL Group owns more than 45 controlled and joint-stock subsidiary companies under five functional subgroups (see Figure 1), with around 1,500 employees and total assets reaching 35 billion yuan (\$5.4 billion).³

[Figure 1 near here]

In this organizational structure, the municipal government is the de facto operator of the ITLP and thus ensures keeping the CEFT front and center for Xi'an's development. As an example, a former Vice Mayor of Xi'an also served as the Party Secretary in charge of the ITLP during 2017-19. Other Chinese cities have done similar things as Xi'an. The new local logistics state is the ultimate driver of the CEFT as a global logistics network, supporting the argument that global logistics would not function without the state developing local logistics (Rimmer 2014).

Through the International Logistics subgroup (Figure 1), the ITL Group launched the first train to Almaty, Kazakhstan in 2013. From the outset, Xi'an idealized this initiative with a re-imagination of its ancient Silk Road position for implementing the CEFT by invoking the metaphor of the "Iron Silk Road." The Xi'an government named its CEFT after the old city name of "Chang'an" (Forever Peace), which was used for the capital of several Chinese dynasties until it was renamed Xi'an (Western Peace) in 1369. In making another backward reference, the Xi'an government used a throw-back image of three Bactrian camels walking alongside a locomotive as the fitting logo for the "Chang'an Express" (see Figure 1), which is a

historically reimagined urban branding strategy used by gateway cities to sustain or reassert themselves (Scholvin 2021).

While the CEFT is municipal initiative through the ITLP and ITL Group, the Xi'an government has consistently received strong logistical support from the provincial government (Figure 1). On December 12, 2016, the then Party Secretary of Xi'an's Party Committee chose to go the ITLP for his first field tour. He followed it with 11 subsequent personal tours until he was replaced in 2019. On the first day of work after the Chinese New Year in 2019, the new Party Secretary of Shaanxi province toured the ITLP to signify top provincial support for Xi'an's signature project. Supported by the provincial leadership, the new Party Secretary of Xi'an made the ITLP his first stop on September 5, 2019 when he reiterated Xi'an's three main economic functions as a CEFT "hub, gateway, and flow space."⁴ This message is a powerful representation of Xi'an as a local logistics state.

While strongly backed by the provincial government, the Xi'an government is subordinate to the national government in the vertical administrative hierarchy while acting with considerable autonomy as a new local logistics state. This differs considerably from the still market-dominated logistics sector in Western advanced economies where local governments are both more independent of higher-level authorities and largely dependent on cooperation with large logistics firms. Figure 2 displays the leading role of China's new local logistics state vis-a-vie the national state and the market agents of large and small logistics firms in shaping the CEFT's multiple impacts.

[Figure 2 near here]

The national state plays the primary role in financing and building nationwide transport infrastructure including Western market economies. The British state became the first modern infrastructure state in the early 18th century when it built a national network of roads to connect all towns and villages as far north as Scotland (Guidi 2012). The U.S. federal government did something similar but on a much larger scale when it built the national highway system in the 1950s. Since the 1990s, the Chinese government has planned, financed, and constructed a national system of freight and passenger train routes including extensive inter-city high-speed train lines. This is crystalized in China's ambitious longer-term plan unveiled in 2016 to complete a system of eight vertical (north-south) and horizontal (east-west) high-speed train trunk routes covering much of the country except a large portion of its western region. In its newest national plan for creating a vertical transport system unveiled in February 2021, the Chinese government aims to accelerate the construction of around 20 international comprehensive transport hubs including Xi'an and around 80 national comprehensive transport hubs.⁵

In starting the CEFT as a transnational logistics development, however, the roles of the national and local governments were reversed in initiating and projecting influence (Figure 2). The CEFT originated from the local level in 2011 when the government of Chongqing municipality in southwestern China sent the very first cargo train to Duisburg, Germany. This local initiative not only stimulated other major cities to join the CEFT but has sustained a strong inter-city competition for investing in local logistics and shipping freight globally. Given China's large and diverse context, local initiatives and local experimentation are important for the formulation of national policy (Bai and Maskin 2021). Leading logistics firm have got involved in the CEFT as complementary players, with small logistics providers as lesser participants. The

relative importance of these actors runs from the municipal government to small logistics providers, although the actors besides the local government contribute to the CEFT operation (indicated by the different arrows heading down and up in the center box, Figure 2).

Xi'an's leading role in creating a robust CEFT hub has received national coordination and support for pushing the BRI and CEFT forward as a linked project. In October 2019, the Ministry of Transportation incorporated Xi'an into its plan for a competitive nation-wide logistics system as a special top-tier inland port for driving and channeling cargo flows across China's northwestern region and beyond. In July 2020, the national government invested 200 million yuan (\$28.5 million) to consolidate the CEFT hub functions in five cities, Chengdu, Chongqing, Urumqi, Xi'an, and Zhengzhou (Henan Province), in order to make these favorably located, successful logistics hubs and their routes and the overall network more efficient.⁶ While relatively small, this investment signaled the national government's vision for and interest in improving the CEFT's overall performance largely powered by local governments' logistical initiatives and activities. More symbolically regarding Xi'an, Xi Jinping personally encouraged Xi'an to become the top CEFT hub in northwestern China to serve the BRI during his inspection tour of Shaanxi province in 2020.⁷

The framework also specifies two sets of internal relations. Through different mechanisms or means, the state and market actors are involved with shaping the CEFT's impact: 1) connectivity via new rail routes; 2) production in terms of movement of manufacturing facilities; 3) consumption through extended and accelerated delivery of goods; and 4) urban development in upgraded or new logistics-induced facilities as local assets. To illustrate 4), by concentrating new logistics activities, mostly outside the city core due to their demand for spacious sites, the (local) state can create a spatial clustering of key and auxiliary functions to foster urban

(re)development (Cumbers and MacKinnon 2004). Figure 2 also identifies a loop of mutually reinforcing reinforcements passing through the four corners as they fall under the CEFT's impact stemming from the relative actions of the local government and other actors.

Before proceeding to focus on how the logistics state exerts its influence in the context of Xi'an (Figure 2), it is necessary to zoom out to the broadest scale of Eurasia for an overview of how the CEFT has reached across much of the continent through rapid growth.

Reconnecting Eurasia via the CEFT's scope and growth

Eurasia is the world's oldest and longest route of overland trade connections relying on camels and horses that date back to the ancient Silk Road or even earlier. It has become more (re)connected during the 21st century trade by freight train as a mode of transportation. At the turn of the 20th century, British geographer Halford Mackinder not only saw the landmass of Eurasia as the pivot of history and influence, from the planet's central location, on geopolitical dynamics (Chen and Fazilov 2018), but foresaw trains cover this continent, although direct China-Europe freight services did not exist as recently as 2008 (Hillman 2020). China's overland rail connection with Europe had long been linked to the Trans-Siberian Railway via northeastern China and Mongolia. On September 1, 1990, China inaugurated the newly built freight line of 476 kilometers from Urumqi to Alashankou (Alatau Pass) on the border with Kazakhstan. The completion of the last segment of what China calls the New Eurasian Land Bridge creates a direct rail link to Europe from its port city of Lianyungang to Amsterdam through Eurasia. Not only did the New Eurasian Land Bridge become the official label for one of the six BRI

economic corridors,⁸ it laid the foundational track for the CEFT to reconnect the entire Eurasia via the world's longest freight service today.

To provide a general statistical picture of the CEFT's connective prowess via its accelerated growth, I have compiled information from three complementary sources: 1) news reports and local government accounts; 2) evidence in published research (in both English and Chinese); and 3) official data at the national and local levels. This approach has allowed both piecing together and cross-checking the data used, which is then augmented by field work in and focused analysis of the city of Xi'an to supplement the macro-level account via an in-depth case study of how the local logistics state drives the CEFT, in the next section.

From 2011 to 2020, the CEFT grew to 73 routes that link over 50 cities within China to 92 European cities in 21 countries and regions plus a number of others in Central Asia.⁹ These cities represent all points of access and connection including nodes, central or secondary, of the freight network. The routes carry and channel diverse and complex cargo flows among the cities forming the CEFT network. Given the challenge in mapping all the inter-city ties in this huge and still fluid network, Figure 3 displays the three main CEFT routes or corridors: Eastern, Central, and Western.

[Figure 3 near here]

The largest number of CEFTs run along the Western route that largely aligns with the New Eurasian Land Bridge between Lianyungang and Amsterdam. The Eastern and Northern routes align with the BRI's China-Mongolia-Russia Corridor, while the alternative lines of the Western route run along the BRI's China-Central Asia-West Asia Corridor. The Eastern route connects

some coastal cities and older industrial cities in Northeast China to Russia via Mongolia, while the Northern route connects northern China to Russia through Mongolia. Figure 3 also identifies China's four exit/entry border points (Alashankou, Horgos, Erlianhot, Manzhouli) for these routes. After exiting China, the Eastern and Northern routes join inside Russia, run along the Trans-Siberian Railway route, and merge into the Western corridor via Moscow. While all these routes run on existing tracks in the countries along the routes, it took China, Kazakhstan, and Russia to sign a first trilateral agreement about streamlined border clearance in 2010 to allow the maiden train run from Chongqing to Duisburg in 2011.¹⁰ Other countries have since followed suit in coordinating the cross-border movement of many more freight trains.

From inside China, this train network fans out to Europe linking a variety of cities at both ends (see Table 1). Table 1 lists a number of the CEFT routes with basic information about them. While some of the cities are relatively well known, others are much less so. Among this list are the world's longest and second longest cargo train lines running over 12,000 kilometers across eight countries between the Chinese city of Yiwu and Madrid and London. These lines not only highlight the CEFT as among the world's longest freight train routes but also directly link the top global financial center of London and the world's largest small merchandise sourcing center of Yiwu. These two very different key nodes of the global economy would not be logistically connected without the CEFT's long reach.

[Table 1 near here]

Driven from the Chinese end, the CEFT involves a number of large Chinese cities located in central and western China, as points of departure and return destinations. Of the dozen or so

major CEFT cities in China, nine are intermodal hubs and the other seven have the added production bases (see Figure 4 below). This spatial expression of the CEFT is logically consistent with China's goal of accelerating the development of major interior cities and enhancing their roles in stimulating the less developed inland and border regions. Almost all the most important cities in central China (Changsha, Wuhan, Zhengzhou) and western China (Chengdu, Urumqi, Xi'an) are prominent players in the CEFT (more on Xi'an later). The participation of other important cities (Hangzhou, Suzhou) in coastal provinces, including the premier coastal city of Shanghai, points to a wider geography of connections between interior land-based logistics hubs and export-oriented port cities.

[Figure 4 near here]

Figure 4 echoes Figure 3 in showing four small border cities (Alashoukou, Horgoes, Erlianhot, Manzhouli) as crucial exit/entry points that have turned few remotely located places into important gateways of the CEFT network, although Manzhouli was historically the most prominent land port among the four with the largest population today. With the smallest population of the four at less than 30,000, Alashankou has led all four in processing 19,841 freight trains through May 23, 2021 since seeing the very first train from Chongqing to Duisburg in 2011. Alashankou now links 22 CEFT lines from a variety of cities across China to many cities spread within 13 European and Central Asian countries including Belarus, Spain, and Turkmenistan. In the pandemic year of 2020, 5,027 freight trains carrying 456,000 containers passed through Alashankou, accounting for 41.8% and 47.1% of all CEFT trains and their containers.¹¹

The CEFT's long distances and vast geographies aside, it has grown rapidly over the past decade. While there were only 17 trips in 2011, the number of trips grew faster with the launch of the BRI in 2013, soaring from 80 to 308 in 2014 (see Figure 5). The number of trains jumped to 6,363 in 2018, which almost equaled the total number of trips for the previous seven years. The year 2020 marked a dramatic and somewhat unexpected turning point for the CEFT. While the Covid-19 outbreak at the beginning of 2020 slowed the CEFT's strong growth through 2019, the quick suppression of the virus in China reversed the temporary slowdown and accelerated growth through 2020. By year-end, the 12,406 CEFT trips grew 6.3 times over 2016 and exceeded the record year of 2019 by 51% (see Figure 5). The 1.13 million containers carried by these trains grew 56% over that for 2019. The end of 2020 saw the cumulative number of CEFT trips reach 33,600, which had carried almost three million containers worth of \$160 billion in traded goods.¹² This accelerated growth occurred at some expense of declined air and sea shipping during the pandemic year of 2020 when the CEFT also carried 939,000 pieces of PPE and 7.6 tons of other pandemic-mitigation items from China to Germany and Poland with redistribution to other European countries and cities.¹³ During January-June, 2021, 7,377 CEFTs carried 707,000 TEUs, increases of 43% and 52% over the same period of 2020.¹⁴

[Figure 5 near here]

As the CEFT has grown, it has run more balanced bi-directionally. Prior to 2014, every trip headed from China to Europe. But the return or backhaul trips began to grow in 2016 and accounted roughly for one-third of the combined trips. Of all 3,673 trips in 2017, 1,225 (33.4%) trains went from Europe to China (Jakóbowski et al 2018). In 2018, the 2,690 eastbound trains

equaled 73% of the 3,670 westbound trains (Tjia 2020). Put differently, the Europe-to-China trains accounted for 42% of all trips. By another metric, while 94% of the westbound trains were fully loaded in 2018, 71% of the eastbound trains carried a full load of containers. In 2019, eastbound CEFT trains rose to 45% of the total in both directions.¹⁵ This indicated an effective end of the “one-way street” with all trains heading to Europe before 2014.

Despite its “miraculous” growth, the CEFT has remained considerably uneven in its geographical distribution of top-tier hubs and lower-level feeder cities and their varied carrying capacities. In 2020, of the over 50 Chinese cities involved in the CEFT network, 29 cities sent more than 100 trains while just five of them accounted for over 1,000.¹⁶ The inter-city variation in the CEFT’s departure, arrival, and carrying capacity inside China points to the important role of the municipal government in shaping the CEFT. It steers us back to the local logistics state that drives the CEFT and its effects on connectivity, production, consumption, and urban development (see Figures 1 and 2).

The resurgence of Xi’an as a CEFT logistics hub

Few Chinese cities have become as dominant as the city of Xi’an as CEFT hubs. Besides this reason, I chose Xi’an for an in-depth case study for three other important reasons: 1) the city’s prominent historical position on the ancient Silk Road for reimagining the CEFT today; 2) its geographical location in China’s geometrical center for the most efficient operation and consolidation of the CEFT (Figure 4); and 3) its illustrative embodiment of a local logistics state (Figure 1 above). I draw from field research in Xi’an and secondary information from news reports and government and business WeChat platforms covering the CEFT locally. The goal is

to use a strategic case to demonstrate a broader scope and specific mechanisms of the local logistics state that has produced the CEFT's local and trans-local impacts on four areas of development (see Figures 1 and 2) within China and across Eurasia. The eastern starting point of the ancient Silk Road, Xi'an has been a prominent historical, cultural, and economic center in China for over two millennia. It served as the capital for 13 dynasties. While known much more for its historical and cultural legacies like the Terracotta Soldiers than its economic prowess, Xi'an reached the status of one of the world's few top cities during the Han dynasty (206 BC–220 AD) and Tang (618-907 AD) dynasty, the early and peak periods of the Silk Road, respectively.

Fast forward to the contemporary context for this study, Xi'an fell behind its historic peers such as Hangzhou and Nanjing in the coastal region and lagged further behind coastal powerhouses like Shanghai and Shenzhen. Shenzhen benefited particularly from being the major destination for people and companies that had left inland cities like Xi'an in the 1980s. Xi'an has regained some of its lost fortune since around 2000 after China's "Go West" policy and later the BRI. This favorable turn for Xi'an, and other central and western cities, positioned them well to use the CEFT as a logistics strategy to foster catch-up development (Chen 2020). The CEFT has become a locally attractive opportunity for Xi'an and other interior cities to take advantage of their favorable central and western locations for sending, receiving, and redistributing goods on freight trains to and from Europe and Central Asia. This, in turn, has turned around prosperous coastal cities to re(connect) with cities like Xi'an through the CEFT for shipping their exports faster to Central Asia and Europe by freight train (Figure 4).

Forging freight connectivity

Xi'an has earned its prized status as China's largest (in)land port for domestic-international freight shipping on the CEFT over a few short years. Riding on the "Chang'an Express," Xi'an has risen to a top-tier CEFT city over eight years since 2013. In 2020, 3,670 trains left and returned to Xi'an, ahead of Chengdu (2,800) and Chongqing (2,177) as the second- and third-ranked cities, respectively, accounting for almost one-third of China's total number of CEFTs.¹⁷ By August 11, 2021, a total of 10,000 freight trains had departed Xi'an since 2013, which accounted for one-quarter of all 41,008 freight trains that had ran between China and Europe since 2011.¹⁸

This rapid growth has translated into a growing number of cross-boundary freight routes from and back to Xi'an. As the operating arm of the local logistics state (Figure 1), the ITL Group has increased its freight train service from one to Almaty, Kazakhstan to 15 routes reaching scores of cities in 44 European, Central Asian, and West Asian countries. These cities include Duisburg, Hamburg, Neuss, Rostock (all in Germany), Tilburg (the Netherlands), Kouvola (Finland), Riga (Latvia), Milan, Budapest, Minsk, Moscow, Warsaw, and Istanbul, among others. Duisburg stands out among these cities. As the first European city receiving freight trains from China, Duisburg has become the busiest destination in Europe receiving 35-40 trains every week. This has help revitalize Duisburg from its weakened historical position as Europe's largest inland river port and its deindustrialized recent past. In November 2019, a freight train went from Xi'an to Prague across the Caspian Sea, by Turkey's capital city of Ankara, and through Marmaray tunnel below the Bosphorus Strait, marking a rare land-sea-land intermodal run along the CEFT's southern corridor off its Western route (see Figure 3). This new

line gained more use in early 2021 when the inaugural return train from Istanbul arrived in Xi'an after 15 days and thus launched the bi-directional Xi'an-Istanbul service.

To extend some of these established lines further, the ITL Group worked with DHL in November 2019 to launch the fastest rail service from Xi'an to Hamburg and Neuss, an important logistics hub on the Rhine River, cutting transit time from 17 to 10-12 days along the "German Express" route.¹⁹ Deutsche Bahn (DB) has cooperated with the ITL Group in using the "German Express" to add a service to Vilnius, Lithuania before reaching Poland and Germany. Another of the world's top logistics firms, Nippon Express sent its first freight train from Xi'an to Duisburg in November 2018. The train carried 41 containers filled with high-resolution LCD panels, high-end printers, and other high-valued products, setting the single-train record in freight value at \$17 million for 2018. In March 2019, Nippon Express got its clients like Olympus and Honda to use the "Chang'an Express" for shipping their exports from Xi'an.²⁰ The participation of DHL, DB, and Nippon Express, three of the top global logistics companies (Coe 2014), confirms Xi'an's draw as a top CEFT hub. As more routes were added over time, the number of train trips from Xi'an rose from 194 in 2017 to 1,235 in 2018, 2,133 in 2019, and 3,670 in 2020, a 19-fold increase from 2017.²¹ The Xi'an government also has set up a score of logistics offices abroad to better serve 40 or so countries along the CEFT routes. Widening freight connectivity to Europe reflect the geographical reach of Xi'an operating as an aggressive logistics state through the ITL Group (see Figure 1).

Located in China's geometrical center and at the meeting point between its central and western regions (see Figure 4), Xi'an can ship containers to 85% of the national territory within 48 hours of receiving them on trains from Europe. This allows Xi'an to have collected more cargo from 29 of China's 32 province-level administrative units (excluding Shaanxi Province

itself) and regional centers with exports for Europe, consolidated them, and then shipped them to other markets. From March-July 2019, the ITL Group secured agreements with the cities of Bengbu (Anhui Province), Xiangyang (Hubei), Shijiazhuang (Hebei), and Changzhou and Xuzhou (Jiangsu) to receive their export cargoes for transshipping to Central Asia or Europe. Going beyond these cities in China's central and coastal provinces (Figure 4), the ITL Group has received containerized cargo from port cities such as Shanghai and Xiamen and shipped them via sea-land(-sea) intermodal links all the way to Europe's heartland.²² With the complementary business activities of subgroups 1 and 3 (see Figure 1), the ITL Group has built up the large storage space and trans-shipping capacity to handle a lot of throughput freight cargo at the ITLP. This enlarged cargo catchment has further elevated Xi'an's CEFT hub status.

Adding a new dimension to these cross-country and transcontinental routes, Xi'an has targeted port cities of Lianyungang, Ningbo, and Qingdao to lure and ship Japanese and Korean transit goods overland that otherwise would move from these ports to Europe by sea.²³ In the opposite direction, the ITL Group has "gone east" by sending freight cargoes from Europe overland to Lianyungang and Qingdao from where they would be shipped to Japan and Korea as the final destinations. This land-land-sea multimodal movement is consistent with Shaanxi province shipping 65% of its total traded goods via the coastal city of Qingdao.²⁴ From China's geographical center, Xi'an has a competitive edge in consolidating and rerouting CEFTs from other Chinese cities over Chengdu and Chongqing, two other top cities in western China ranking behind Xi'an in the number of departing and arriving trains. While located along the main CEFT route from Xi'an to Xinjiang and further west to Central Asia and Europe, Lanzhou is only a sub-consolidation center due to its small economic gravity for cities in the surrounding areas and its proximity to Xi'an (Zhao et al 2019).

At the starting stages of launching new routes to expand connectivity, especially those direct European lines, hub city governments like Xi'an, supported by provincial government, provided subsidies that varied between \$2,000-4,000 per container, which equals almost half or more of the actual per container cost in 2017 as an effective mechanism for greater freight connectivity (see Figure 1). The Xi'an government even pushed the subsidy up to cover a substantial portion of the shipping cost (Tjia 2020). Assuming that the average subsidy per container was \$2,500, the total fiscal burden for all the provinces and cities involved was estimated to be about \$200-300 million annually (Jakóbowski et al 2018). While these subsidies are difficult to sustain (more in last section), they were critical to the CEFT's early progress in starting a sufficient number of routes that has already produced measurable effects specified in Figure 2.

Reconfiguring production locations and connections

Xi'an has reconfigured some transnational flows of trade and production (Figure 2) in several ways. In September 2019, the ITL Group dispatched the first "LG block train," which carried exclusive liquid-crystal display (LCD) panels and electrodes to the factory owned by the large Korean manufacturer located in the Polish city of Sławków. Instead of around 40 days by sea, these containerized parts on a dedicated freight train arrived in the destination in 10-12 days. This was made possible by the train running on the wide-gauge track through Kazakhstan, Russia, and Ukraine into Poland after the only switch from the standard to the wide gauge in the exit city of Alashankou (Figure 3). Since July 2019, LG has already sent over 1,000 containers of parts to its factory in Sławków on the "Chang'an Express" after shipping them from Korea to the Chinese port city of Qingdao for being trucked to Xi'an.²⁵ This saving in time and cost for LG

reflects its favorable response to the incentivizing and facilitating efforts of the Xi'an logistics state to attract more direct or indirect flows through its gateway.

Xi'an second logistical effect on production is more direct as its freight connectivity has lured more manufacturing companies to (re)locate locally in order to ship products and parts to European markets more quickly and cheaply. In 2018, the founder of *Siying*, an electronics manufacturing company in Shenzhen, originally from Xi'an, moved his entire factory back to his hometown after realizing that he could ship products to Central Asia faster (from around 40 to around 15 days) to lower costs and thus expand production. Since relocation, this company has reduced the cycle of its order placement and supply chain coordination from around 90 to 30-40 days, almost tripled its output, hired more local workers, and expanded its markets from Kazakhstan, Kyrgyzstan, and Turkey to France and Germany. Located in the ITLP, a grain and oil company *Aijue*, in cooperation with an agricultural university in northwestern China and an agricultural university in northern Kazakhstan, has established an agricultural demonstration zone covering 740 acres to grow high-quality wheat, flax, and rapeseeds. *Aijue* also built a 50,000-ton storage facility and 300,000-ton grease processing plant in Kazakhstan with an investment of \$185 million. This multifaceted initiative of *Aijue* has created a supply chain linking Kazakhstan as an agricultural production powerhouse and Xi'an as a hub for importing and redistributing grains and other agri-business products.²⁶

Beyond these two cases, the ITLP has attracted a score of advanced electronics companies into its manufacturing/assembling zone with over one \$154 million in new investment.²⁷ This infused investment has raised the output of "made in Xi'an," leading Xi'an's foreign trade to grow at an average annual rate of 14.8% during 2016-20 and raising its trade ratio to GDP from 10% in 2015 to 14.4% in 2020.²⁸ Through the synergy from its subgroups 1, 2, and 3 working

together under one corporate umbrella (see Figure 1), the ITL Group has helped Xi'an both draw manufacturing investment and create new production and supply extending from the local economy, thus reinforcing the connectivity-production nexus (see Figure 2).

Stimulating and redistributing consumption

Going along with its impact on production, the CEFT has stimulated and redistributed consumption in and across large interior cities like Xi'an and others (see Figure 2). As an example, Volvo has benefited greatly from running a new regular train between Xi'an and Ghent, Belgium (see Table 1). In June 2018, a CEFT train departed from Ghent and arrived at Xi'an Vehicle Port with 160 European-made Volvo XC90 SUVs and V40 hatchbacks, after 16 days. These more expensive models sell very well in China, the world's largest market for Volvo cars. One year later, a CEFT loaded with 160 XC60 SUVs arrived in Ghent from Xi'an. Made at Volvo's plant in Chengdu, the XC60 were sold in 25 European countries, including France, Italy and Germany.²⁹ In March 2020, five trains carried 690 XC60s from Xi'an to Ghent. During the first three months of 2020 when China was dealing with pandemic and its economic slowdown, 27 trains from Xi'an carried 3,377 XC60s (averaging 125 cars per block train) to the European markets through a fast and secure system from truck to train without exposing the new cars to potential virus contamination.³⁰ In 2020, the "Chang'an Express" carried around 3,000 higher-end Audis from Bremerhaven, Germany to Xi'an from where they were redistributed to other cities in China. The 13-day overland trip allows car buyers in interior Chinese cities to get their imported Volvos and Audis much faster and more directly than waiting for these vehicles to be delivered from China's major ports by truck or train after the long maritime journey.³¹ This

reflects the recent rapid growth in the rail transport of passenger cars worth \$3.47 billion in 2020 as the EU's largest consumer export to China.³² To enable Xi'an to specialize in transport logistics for imported cars, the ITLP has built multi-level parking of 80,000 square meters for 2,350 cars and flat parking covering 60,000 square meters through subgroup 3 of the ITL Group (Figure 1). This transit warehousing facility has helped push Xi'an up to China's top center for receiving and redistributing imported cars, accounting for over 80% of all imported cars via China's inland ports by September 2020.

Going beyond imported cars, Xi'an has promoted local and extra-local consumption by bringing European goods to its own consumers and pushing these goods out via freight forwarding and e-commerce platforms (see Figure 2). Through its subgroup 5 (Figure 1), the ITL Group has created "Ulife" as Xi'an's premier direct-sale store integrating both offline and online sales of imported goods from over 40 countries, especially some time-sensitive goods. They include German kitchenware, Dutch dairy products, Italian clothing, French cosmetics, Spanish olive oil, Georgian red wine, Polish sausages, and Uzbekistani green peas.³³ This mix reflects both the European and Central Asian origins and departing places of the eastbound freight trains to Xi'an. It makes it easy for Ulife to attract local buyers into its physical store and to promote these goods on its e-commerce portal, especially on China's biggest shopping day of November 11 and during its most popular holidays like the National Day and Spring Festival. Of many imported products, red wine has emerged as the focal item featuring Xi'an as a logistics-driven consumption hub. Since May 2017, the ITLP has served as a major base for imported red wines by organizing large-scale fairs, wine-tasting events, and special promotions to local restaurants. Similar to imported cars, Xi'an has gained another specialization in importing and redistributing red wines as a top CEFT logistics center.

Besides being China's main hub for imported grains, cars, and wines, Xi'an has become a more comprehensive center for channeling traded consumer goods within and beyond China. In 2020, more than 20 provinces, with uneven access to overland exports, used the "Chang'an Express" to export and import their goods via consolidation and redistribution via Xi'an. More than half of the imported goods for Shaanxi Province passes through Xi'an, which also re-ships over 65% of its imports to the rest of China. More than 75% of the cargo carried by the "Chang'an Express" come and go beyond Shaanxi Province.³⁴ As China has become a bigger consumer, whose share of global consumption rose from 9% during 2000-05 to 23% during 2013-18 (McKinsey & Company 2021), Chinese consumers have been buying more foreign-brand goods, especially luxury brands, with over half of this spending coming from second- or lower-tier cities led by such cities as Xi'an and Chengdu.³⁵ This bodes well for Xi'an to continue its role in stimulating and channeling domestic consumption of global imports carried by the CEFT.

Logistics-driven urban development

In driving and redirecting production and consumption flows within and beyond China, the Xi'an government as a logistics state has built a strong localized logistics complex. Anchored to the ITLP and spearheaded by the ITL Group, the municipal government has stimulated a spatial clustering and multiplication of facilities and activities that are complementary to transport logistics (see lower left box of Figure 2). Without any large plots of land to (re)develop in its urban core, the Xi'an government has planned and sited the ITLP as a large logistics complex on the city's outskirts. The complex comprises the Xi'an Comprehensive Bonded Zone (CBZ), the

largest of its kind in northwestern China covering 50,000 square meters, the Xi'an Development Zone (XDZ), and the E-Commerce Service Zone (ECSZ). The CBZ meets the need of duty-free warehousing for the CEFT cargo. The XDZ has drawn a clustering of manufacturing companies, especially in electronics, a traditionally strong local industry that had lost its way during China's coast-oriented development. The ECSZ offers digital platforms to increase the efficiency of customs inspection and clearance, business reporting and the delivery, and document processing for the CEFT.³⁶ Through subgroup 4 under the ITL Group (Figure 1), this logistics complex has recently added a new hotel, a new 3D cinema, and a few nice restaurants and cafes that provide lodging and entertaining outlets to the growing number of visiting corporate executives and business travelers, all located in the ITLP. Most recently, the ITLP has become the host to a newly finished athletic complex as the official venue for the 14th National Games held in September 2021, which will serve all Xi'an residents after the games.

This spatial development of Xi'an into a new international logistics hub would not be possible without the CEFT as the transport/logistic driver, the ITLP as the physical anchor, and the ITL Group as the strategic operator. In 2019, the FTZ attracted over 30 manufacturing and processing companies from coastal cities and over 360 trading companies. It worked with the CBZ in absorbing around 50 commercial and logistics firms.³⁷ The ECSZ has brought in over 300 border-crossing e-commerce companies including regional distribution center of the top e-commerce companies JD.com, which now ships time-sensitive goods from Europe directly to Chinese consumers. Since JD handles all customs procedures, retailers, and suppliers, with the Xi'an-Germany Express Train functioning as a "mobile warehouse," this logistical setup allows consumers to order goods on JD.com's platform in China as they are logged and loaded onto trains in Germany bound for Xi'an.³⁸ Under this "CEFT+cross-border e-commerce"

arrangement, two trains left Xi'an for Europe weekly in February 2021 carrying preordered e-commerce cargo that originated from the coastal region.³⁹ Xi'an has thus gained another specialization befitting the "Silk Road E-commerce."

By clustering all logistics facilities in the ITLP away from the old city, the Xi'an government has acted both as a logistics and an infrastructural state. The ITLP has fostered a close spatial interaction among firms along the full logistics spectrum to actualize the scale and density of special co-location and economic agglomeration. The ITL Group has integrated customs clearance, warehousing, transit shipping, and real estate development into a whole under one corporate roof (Figure 1). This logistics complex constitutes a new growth pole for Xi'an and a return to the anchoring local from where the resurging ancient city has forged expansive transcontinental freight routes and reconfigured production and consumptions flows along and beyond these routes (Figure 2).

Complications and conclusions

This paper has proposed the logistics state as a reincarnation of the Chinese state at the local level for understanding the CEFT's role in reconnecting Eurasia. It has also empirically analyzed this phenomenon and its wide-ranging impacts across the China-Eurasia borders and locally in the resurgence of Xi'an from its ancient Silk Road anchoring position to a new global and national land port and logistics hub. This approach has revealed two complications that could not been fully examined due to space constraint but anticipate two conclusions highlighting the paper's primary contributions.

In competing to open more freight routes to Europe and Central Asia, the logistics state behind China's main CEFT cities has provided major subsidies for this initiative and faces the challenge and dilemma in sustaining it with sufficient cargo and profits in the long run. These subsidies are difficult to sustain due to the CEFT's overall market size and huge expansion relative to the overwhelming dominance of sea shipping in China-EU trade. For one, China's huge trade surplus with the EU (reaching \$181 billion in 2020)⁴⁰ helps prevent trains in both directions from running fully symmetrical, although it became more balanced most recently (see earlier). Differential carrying capacity is another factor. One freight train from China to Europe carries a maximum of 100 containers, while the biggest container ships carry almost 20,000 containers. As the travel time for China-Europe trains has come down from around 35 in 2006 around 10-15 days now, the average freight train cost still remains about 50% higher than to sea shipping, although this gap has narrowed since the pandemic due to the much more affected sea shipping. The CEFTs also have to change between standard gauges (China and Europe including Poland) and wider (Russia and Central Asia) tracks at the exit/entry border crossings between China and Kazakhstan and China and Mongolia (Figures 4), as well as at the Belarus-Poland border. This technical barrier contributed to some congestion and slowdown at Alashankou and Horgos during the pandemic-fueled surge in CEFTs in the first half of 2020, although clearing this pair of border crossings has since become less time-consuming due to greater efficiencies in track switching and border clearance.

Freight trains carried only 0.9% of the China-Europe trade by weight and 2.1% by value in 2016 (Hillman 2018). In 2018, the CEFT accounted for only 2.3% of China's exports to Europe and 3.1% of China's imports from Europe, while about 90% of China-Europe trade in weight and 60% in value went by sea (Tjia 2020). Aided by a shift of maritime cargo to overland rail

shipping due to the pandemic, the share in Europe's total imports from China by train rose from <1% in 2011 to 4% in 2020.⁴¹ This does not obviate the long-term challenge to sustaining the established and emerging freight routes forming an altered Eurasian transport landscape that features a massive network of both overland and intermodal routes and extensions. Taking another backward view, the EU-China trade volume on rail more than doubled with annual growth of 26.9% from 2016 to 2020.⁴² The CEFT carries a lot more potential for expansion as a middle option of long-distance freight transport that is faster than sea and cheaper than air. To facilitate the CEFT's transition to profitability and sustainability, China's Ministry of Finance has required that subsidies for the CEFT cargo trains should not exceed 50% of domestic railway costs and be reduced by 10% a year compared to the 50% level in 2018, with the prospect that all subsidies will be phased out by 2022.⁴³ This central-government decision is a top-down attempt to manage the local state's earlier initiative and autonomy (see Figure 2). Alternatively, by designating five CEFT hubs including Xi'an for China, the national government has intended to strengthen the already flourishing CEFT centers through a little top-down planning and coordination. This state intervention, as mentioned in Section 2, is absent in Western advanced economies where some strongly autonomous local governments contend and cooperate with market competition and private companies in trying to build clustered logistics facilities.

The second complication is associated with the positive outcome that the CEFT network has elevated a number of medium-sized and smaller cities to higher and more important rungs of the national and global urban hierarchies from their secondary, peripheral, or isolated locations and positions. Besides the resurgence of Xi'an from its prominent position and role for the ancient Silk Road, the CEFT has elevated a smaller city of Yiwu—the world's largest sourcing center for small commodities—as a specialized global city via its CEFT links with the global financial

center of London (see Table 1). As more European cities such as Łódź, Neuss, and Verona have entered the CEFT network as new logistics hubs despite their smaller sizes and weaker economic positions, they have widened the range of connective points and secondary flows that stretch and strengthen the European end of the CEFT network. As more train cargo flows among these new logistics centers within and between China and Europe, it turns them into intermediate hubs instead of central places with conventional dominance in urban networks (Hesse 2010).

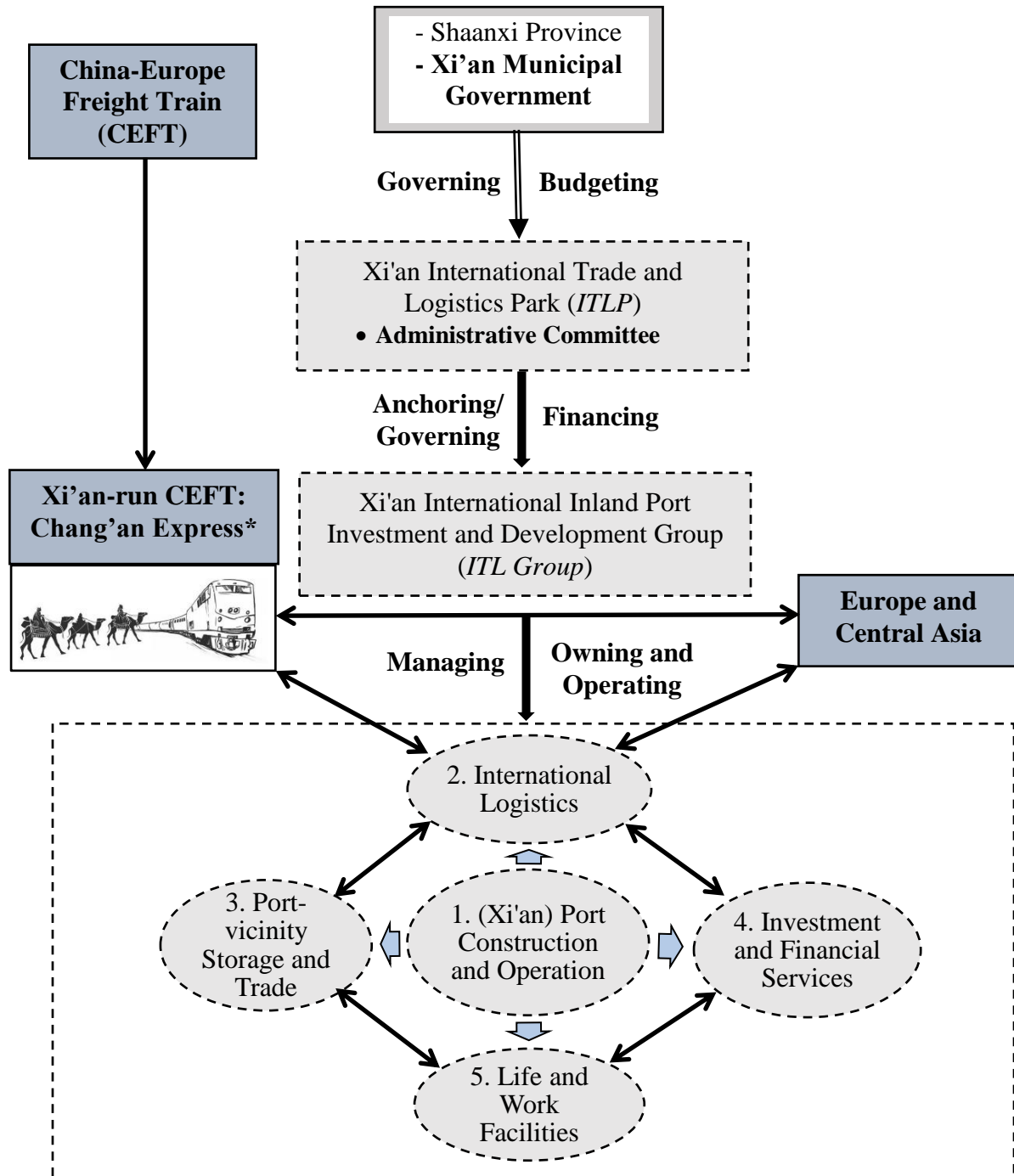
To the extent that the CEFT has disrupted the existing global hierarchy through horizontal freight connections among more lower-tier cities, it alerts us to an analytical complication where logistics hubs with an intermediate role could atrophy into by-passed places (Zook 2002) if they only host point-to-point freight lines (Hesse and Rodrigue 2004) without generating broader local multipliers and regional spillovers. As Eurasia has become more connected by freight trains, some Central Asian cities and countries risk being pass-through places (Hillman 2020) given their locations sandwiched between the two densely connected ends of the CEFT network in China and western Europe.

While this pair of complications constitutes important topics on a future research agenda, they point to two linked essential conclusions featuring this paper's primary contributions. First, the paper has brought the state fully back into research on the economic geography of logistics. The literature on transport logistics remains dominated by a primary focus on micro-level market forces and private firms, with the incorporation of GPNs (Coe 2014). The local state, primarily in the Western context has appeared in recent studies of logistics as a focus of analysis (see Section 1). This paper has elevated the importance of the state for the logistics sector by unpacking the complex role of the Chinese state in shaping the CEFT as a new large-scale freight network reconnecting Eurasia. More importantly, the paper has revealed China's local government,

exemplified by the city of Xi'an, as the primary player driving the CEFT relative to the secondary and reinforcing roles of the national state and market forces. The gradual convergence of the local state's logistics initiative and national government coordination has strengthened the logistics state from below by introducing a broad vision and regulatory order from above. Furthermore, the paper has delved into China's local logistics state and brought to light its inner governing, financing, and operating mechanisms. This logistics state sustains a strong developmental orientation, albeit at the local level (Hwang 2016), toward competing against other cities in building logistics facilities (rail yards, trade zones) and launching CEFT routes and services for accelerating economic development. The logistics state also carries salient features of the entrepreneurial state and the "investor state" (Chen and Rithmire 2020) by financing and operating large SOEs like the ITL Group in Xi'an as globally-oriented logistics actors.

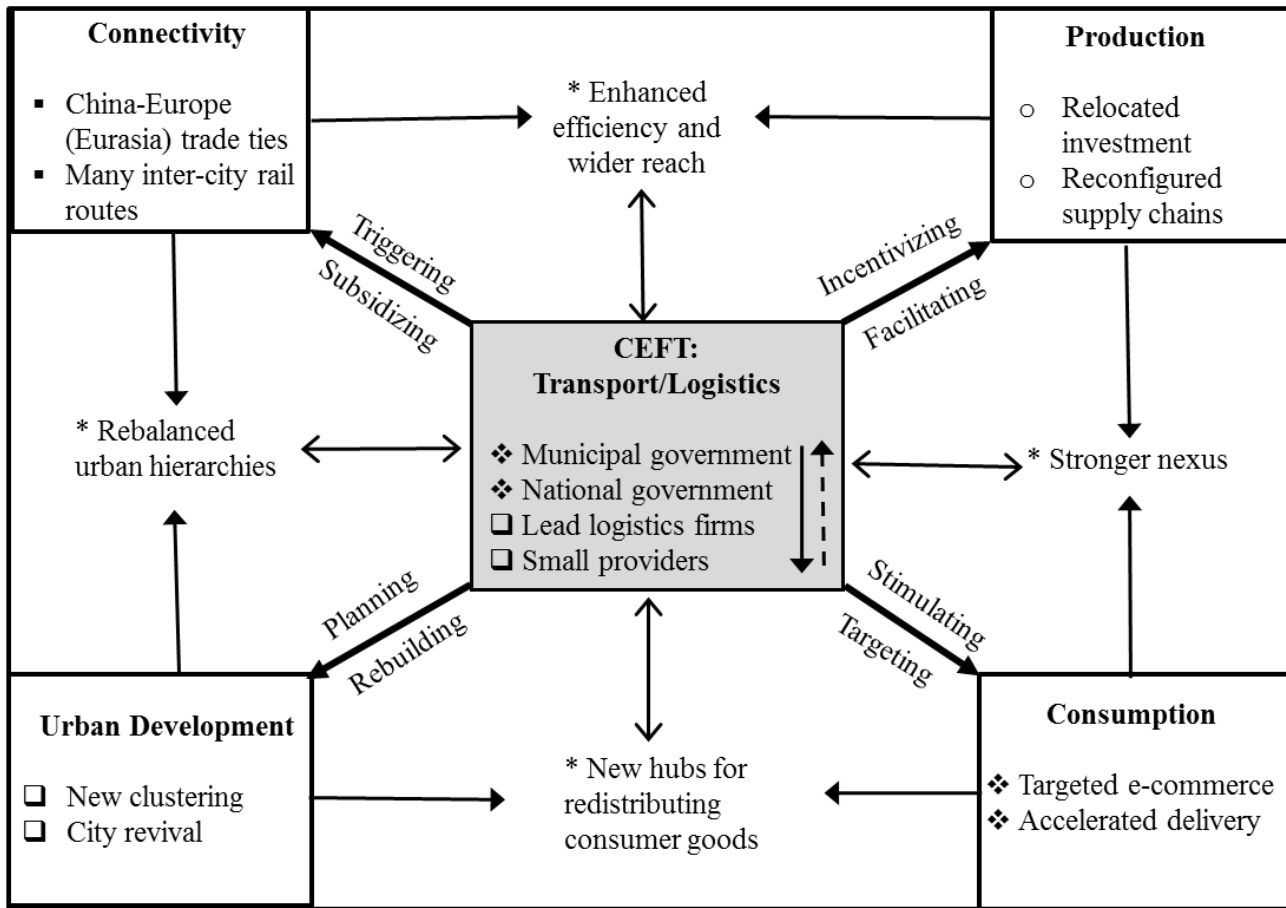
Finally, the paper has demonstrated the powerful role of China's local logistics state in producing simultaneous crossover impacts on transport connectivity, production, consumption, and local urban development (see Figure 2) as illustrated by the case of Xi'an. This impact has taken partial form in the resurgence of declining or lagging cities like Xi'an and Duisburg from their once prominent geographical and economic positions, reminding us of cities' fluid positionality in time and space in today's global economy (Sheppard 2002). As the CEFT brings more such cities including smaller and peripherally located cities forward and upward through newly established logistics links across Eurasia, it looks promising to sustain itself as the primary driver of a new Eurasian transport network.

Figure 1: The governing structure, geographical anchor, financing channel, and operating linkages of a globally-oriented (local) logistics state, Xi'an, China and its strategic focus on the China-Europe Freight Train (CEFT)



Note: *Chang'an Express uses three Bactrian camels and a running train as its logo and brand.
Source: Drawn by author based on the websites for the ITLP and the ITL Group and a local field visit.

Figure 2: The China-Europe Freight Train (CEFT) as a local state-powered transport/logistics system



Source: Conceived by author.

Figure 3: The China-Europe Freight Train's main routes



Source: Modified from Jakubowski et al (2020: Figure 1).

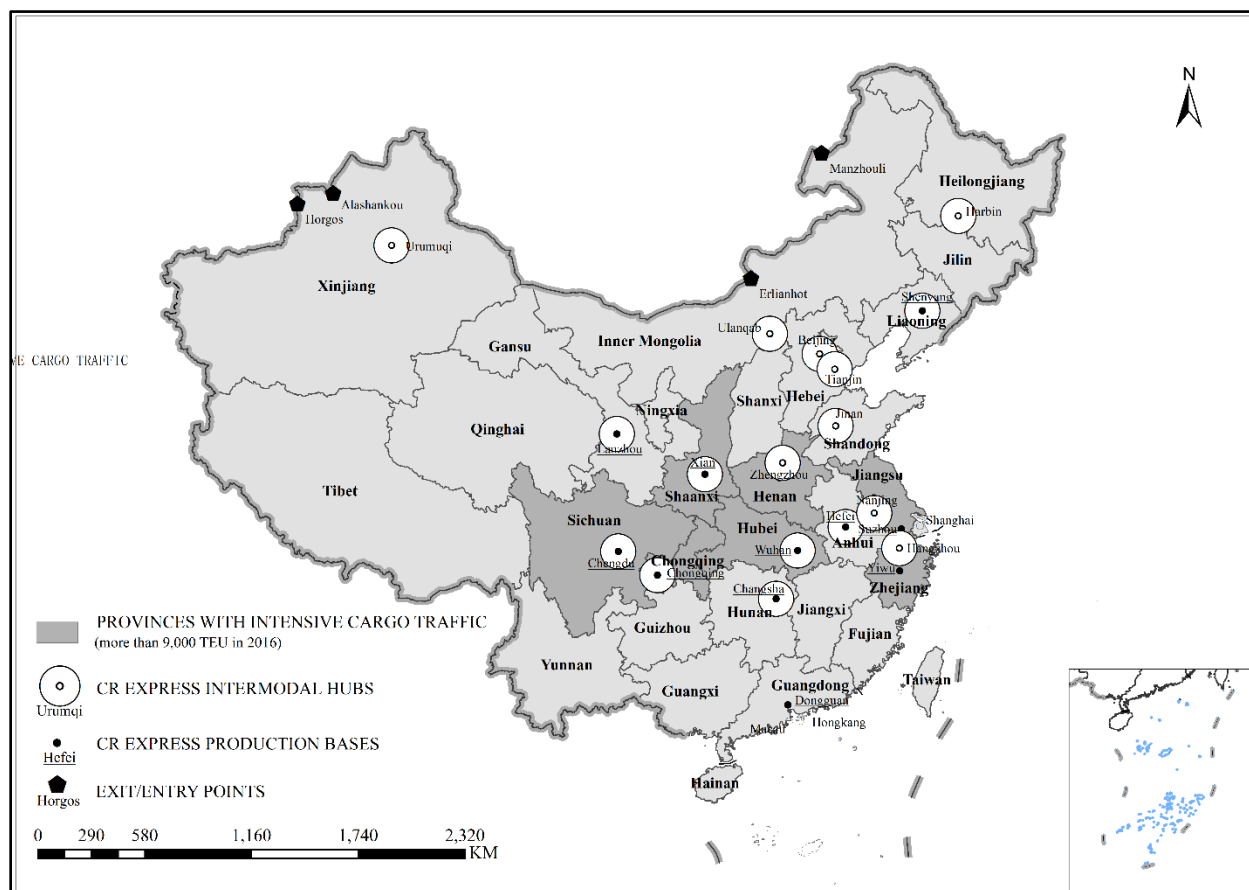
Table 1: Trans-continental rail routes between China and Europe

Line	Departing City	Destination City	Launch Date	Distance	Travel Time	Main Cargo
1. Chongqing-Duisburg	Chongqing, China	Duisburg, Germany	March 19, 2011	11,000 kilometers	15 days	IT products (i.e. laptops)
2. Chengdu-Łódź	Chengdu, China	Lodz, Poland	April 26, 2013	9,965 kilometers	14 days	IT products
3. Zhengzhou-Hamburg	Zhengzhou, China	Hamburg, Germany	July 18, 2013	10,245 kilometers	15 days	Consumer products (e.g. clothing)
4. Suzhou-Warsaw	Suzhou, China	Warsaw, Poland	September 29, 2013	11,200 kilometers	15 days	IT products (from near Shanghai)
5. Wuhan-Lyon	Wuhan, China	French cities	April 7, 2016	11,300 kilometers	15 days	Auto parts, wine, sports good
6. Shenyang-Duisburg	Shenyang, China	Duisburg, Germany	September 9, 2017	9,300 kilometers	17 days	Industrial products
7. Yiwu-Madrid	Yiwu, China	Madrid, Spain	November 18, 2014	13,052 kilometers	21 days	Small merchandise
8. Yiwu-London	Yiwu, China	London, Britain	January 1, 2017	12,000 kilometers	18 days	General merchandise (garments, bags)
9. Xi'an-Ghent	Xi'an, China	Ghent, Belgium	May 29, 2018	10,000 kilometers	16 days	Volvo cars (different models)
10. Harbin-Hamburg	Harbin, China	Hamburg, Germany	June 13, 2015	9,820 kilometers	15 days	Products from northeastern China
11. Guangzhou-Moscow (Vorsino)	Guangzhou, China	Moscow, Russia	August 8, 2016	11,500 kilometers	15 days	Consumer electronics (from southern China)

Source: Adapted and updated from Chen and Fazilov (2018, Table 1).

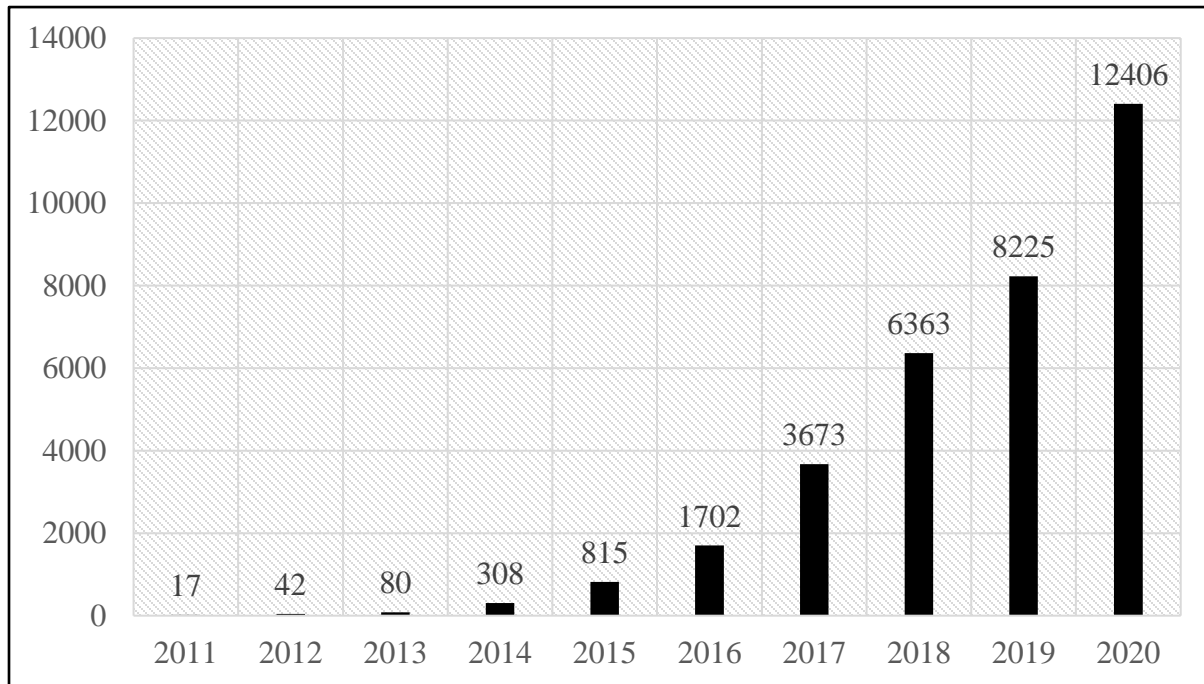
Notes: Lines 1, 2, 3, 4, 5, 6, 7, 8 and 9 exit Alashankou or Horgos (Figures 2 and 3) on Xinjiang's border with Kazakhstan and go through Kazakhstan, Russia, Belarus, Poland, and Germany, and Line 7 moves on to France and Spain, Line 8 to France and Britain across the English Channel and Line 9 to Belgium. Line 10 and 11 exit China via the land port of Manzhouli in Inner Mongolia (Figures 2 and 3) and connects to the Trans-Siberian Railway via Chita before reaching Biklyan in central Russia, and Line 10 continues on to Germany like the other lines and Line 11 continues on to Moscow.

Figure 4: China's provinces and cities as logistics hubs, bases, and exit/entry points for the China-Europe Freight Train



Source: Modified from Jakóbowski et al (2018: Map 1).

Figure 5: Growth of the China-Europe Freight Train, 2011-2020



Source: Graphed China Railway data first reported in *The South China Morning Post*, 20 August, 2019, data from China State Railway Group Co.; accessed from https://mp.weixin.qq.com/s/NeFH0kLHP_Ak01dSONoNvA, 3 July, 2020 and data from [news@yidaiyilu.gov.cn](https://news.yidaiyilu.gov.cn); accessed from <https://mp.weixin.qq.com/s/OJv6RkinQXCRw0ApC3VNww>, 21 March, 2021.

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Notes

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