

RESEARCH ARTICLE

The National New Area as an Infrastructure Space: Urbanization and the New Regime of Circulation in China

Tim Oakes

University of Colorado Boulder, Boulder, CO, USA

Corresponding author: Tim Oakes Email: toakes@colorado.edu

Abstract

This paper proposes an infrastructure analytic for exploring the urbanizing landscapes of China’s “national new areas.” In an effort to develop a less city-centred approach to the transformations underway in these spaces, I consider the new area as an “infrastructure space” in which the conventional distinctions between rural and urban have become increasingly meaningless. Such an approach draws our attention to the ways large-scale infrastructures of connectivity are driving a decentred form of urban development in which the livelihoods of residents are shaped by access to networks more than proximity to city centres. Based on case-study research of urbanizing villages and the rapid transformation of rural livelihoods in Gui’an New Area in Guizhou province, I suggest that an infrastructure analytic sheds light on the ways national new areas can be understood as particular events in an unfolding *regime of circulation* that has come to dominate urban forms worldwide.

摘要

本文提出了一种基础设施分析方法，用于探索中国国家级新区的城市化景观。为了建立一种有别于城市中心化的方法来理解这些空间中正在进行的转型，我将新区视为“基础设施空间”。我认为，该空间中，传统的城乡区别逐渐失去意义。这种方法让我们关注到，大规模连通性基础设施正在推动一种分散化的城市发展形态，相比于临近城市，网络接入对居民生计的影响更为深远。基于对贵州省贵安新区城市化村庄和农村生计快速转型的案例研究，我认为基础设施分析阐明了国家新区可以被理解为流转模式的代表事件，该发展模式已逐渐成为世界范围内城市化发展的主导方式。

Keywords: national new areas; infrastructure; infrastructure space; rural urbanization; infrastructural urbanism; circulation
关键词: 国家级新区; 基础设施; 基础设施空间; 农村城市化; 基础设施城市主义; 流转

Over the past decade, national new area (*guojiaji xinqu* 国家级新区) urban development zones have emerged as an important part of China’s spatial governance, modernization and innovation efforts. Since the beginning of the Xi Jinping 习近平 era in 2012, 15 national new areas have been established. As with other special economic and technical development zones at various levels throughout China’s hierarchy of territorial administration, national new areas have been analysed as spaces of state rescaling in which new scales of governance are created in order to address policy issues such as rural–urban inequality, excessive urban construction and inefficient public goods provision, or to promote innovative development and environmental protection initiatives.¹ New areas demonstrate how shifting scales of territorial administration have been central to governance reform and development initiatives in China.

¹ Li 2015; Wang 2016; Noesselt 2020; Zeuthen 2020; Zhang, Xu and Chung 2020.



Because new areas are often established in peri-urban and largely rural regions, and because they typically entail large amounts of land – sometimes combining parts of several counties and/or districts – they are also important spaces within which to analyse state-led urbanization in rural areas. In this sense, new areas offer a setting for understanding what Smith has referred to as the “mismatch” between China’s urban administrative categories and the socio-spatial processes of urbanization on the ground.² More to the point, new areas can be understood as spaces where formal state-led urbanization displaces informal or “bottom-up” urbanizing processes. Throughout China, new forms of rural, or *in situ*, urbanization have been creating transitional landscapes that blur the conventional distinctions between rural and urban. These landscapes compel us to reconsider our analytical tools for understanding such spaces, and they suggest that the Chinese state’s narrative of transition from rural to urban is inadequate for understanding the complex socio-spatial processes going on.

Given the infrastructure-heavy nature of state-led urbanization in China, this paper proposes an infrastructure analytic for exploring the blurred rural/urban landscapes of China’s national new areas. In an effort to develop a less city-centred approach to the transformations underway in these spaces, I consider the new area as an *infrastructure space*, in which the conventional distinctions between rural and urban have become increasingly meaningless. Such an approach draws our attention to the ways large-scale infrastructures of connectivity are driving a decentred form of urban development in which the livelihoods of residents are shaped by access to networks more than proximity to city centres. The concept of infrastructure space was proposed by architectural theorist Keller Easterling, who suggested that a kind of infrastructural governance was at work in such spaces.³ Easterling argued that the material properties of and practices generated by infrastructures impose their own conditions on the practices of government in these spaces. Drawing on this idea, I suggest that an infrastructure analytic sheds light on the ways national new areas can be understood as particular events in an unfolding *regime of circulation* that has come to dominate urban forms worldwide.⁴

The infrastructure space discussed in this paper is Gui’an New Area 贵安新区, China’s eighth national new area, established in Guizhou province in 2014. Gui’an was conceived as an experimental zone of big data digital services, artificial intelligence and virtual reality innovation, tech-enabled poverty alleviation, and eco-city, smart-city and “sponge-city” development.⁵ Although the central core of the area has seen significant construction, much of Gui’an’s territory remains a rural landscape of fields, villages, rivers and forested hills. This landscape has been overlaid with a recently constructed “three horizontals and four verticals” (*san heng si zong* 三横四纵) grid of multi-lane roads, as well as digital infrastructures and a new high-speed rail line (Figure 1). Though still lightly used, the grid offers an entirely new scale of connectivity, enabling relatively quick access to a national network of urban nodes and new opportunities for pursuing wealth. Yet the grid also fragments rural communities, repurposes older agricultural lifeways as tourism and recreation services, and introduces new logics of mobility that fundamentally reshape everyday life. The infrastructural governance imposed by the grid has complicated the rural-to-urban transition promised by the government as an inevitable outcome of development. Instead, living within the networked territory of Gui’an’s infrastructural grid has produced an experience of unsettled circulation and precarious suspension.

Theorizing the relationship between China’s urban-based networks of commerce, migration and trade on the one hand, and the more spatially fixed territories of state administration on the other, has long been a central concern for interpreting China’s historical and contemporary political,

2 Smith 2021.

3 Easterling 2014.

4 Tadiar 2016; Hesse 2020.

5 Pan 2020.

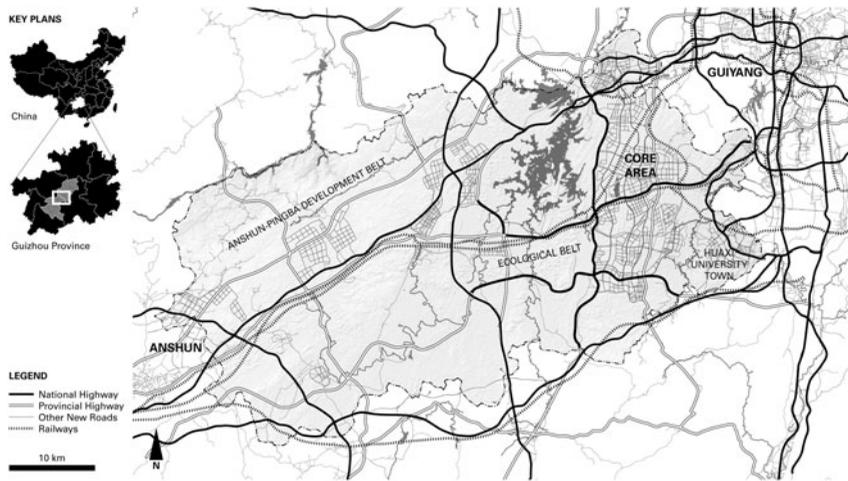


Figure 1. Connective Infrastructures of Gui'an New Area

Notes: Map by Dorothy Tang and Angus Oakes.

economic and social development.⁶ An infrastructure analytic, it is argued here, contributes a networked-territory approach in which China's patterns of urbanization are profoundly shaped by *both* state-imposed scales of territorial administration *and* by shifting infrastructural networks of connectivity. Scholars have observed versions of these patterns – in which connective infrastructures interact with territorial-based institutions and policies – that tend to produce decentred forms of urbanization both within and beyond China.⁷ I argue for an infrastructural analytic for interpreting such decentred spatial patterns of urbanization less in terms of rural-to-urban transition and more as a new spatial form that exists uncomfortably somewhere between the urban and rural.

Methodological and Conceptual Notes

This paper is based on ethnographic fieldwork carried out in Gui'an during summer visits between 2017 and 2019. Four different villages in the new area were selected for participant observation, and fieldwork was carried out with the assistance of local scholars whose identities and affiliations shall remain anonymous. Pseudonyms are used for all locations described throughout the paper. In addition, 32 interviews were carried out with Gui'an New Area planners, administrative cadres, tourism promotion officials, local scholars and village leaders. Master plan documents for Gui'an New Area were provided by administrative staff on a limited basis, but most documents consisted of statements, press releases, plans and initiatives made publicly available – though sometimes only temporarily – on the Gui'an New Area website.

In this paper, Gui'an New Area serves as a case study of a much larger phenomenon throughout China. I hope to suggest an analytical approach that is relevant to processes of infrastructure development throughout much of China's rural–urban interface. Gui'an New Area is one of 19 national new areas, but similar infrastructure spaces have been constructed at multiple territorial scales (such as provincial- and prefectural-level new areas, new town developments at various municipal scales, special economic zones, and science and technology development zones). Such spaces comprise a significant portion of China's territory. National new areas alone constitute 20,229 square kilometres, while the roughly 40 sub-national new areas likely constitute at least twice this amount

⁶ Skinner 1985; Lavelly 1989; Cartier 2002.

⁷ McGee 2014; Ramondetti 2022.

of land. The patterns discussed in Gui'an will thus have variations that obtain throughout much of the country.

The approach taken here draws some inspiration from the views of Jessop, Brenner and Jones on theorizing socio-spatial relations.⁸ Invoking four distinct spatial lexicons of territory, place, scale and network, they argue that as analysis moves towards the increasingly place-based description of grounded phenomena, it should involve the dynamic articulation of at least two of those four spatial lexicons. This paper attempts such an articulation. While the first half of the paper tends to emphasize network and territory in its discussion of territorial administration in tension with infrastructure networks, the second half also features place and scale, as we consider the everyday lives of people living in Gui'an New Area.

The study of infrastructure has received a great deal of attention in the social sciences and humanities over the past decade, though less so in China studies, despite China being a “paradigmatic infrastructure state.”⁹ Many definitions of infrastructure have been offered.¹⁰ Larkin most famously conceived of infrastructure as “matter that enables the movement of other matter,”¹¹ while Graham and Marvin defined it as “the connective tissue that knits people, places, social institutions and the natural environment into coherent urban relations.”¹² The infrastructures discussed in this paper are primarily roads and highways. The analytic pursued here derives from Larkin’s observation that infrastructures are both things and relations between things. This means that infrastructures can be both *material objects of inquiry* (i.e. highways and railroads) and *socio-technical assemblages* of many different kinds of objects, both human and non-human. An infrastructure analytic involves tracing out those relations and exploring their political, economic and cultural effects. At the same time, a focus on infrastructures helps develop a less “city-centric” study of the urban.¹³

Three distinct infrastructural concepts are used throughout this paper. First, as noted earlier, *infrastructure space* was proposed by Easterling to identify spaces where *de facto* forms of infrastructural governance emerge before they can be officially legislated by the states that house them.¹⁴ Easterling sought to rethink special economic zones and other development enclaves as new kinds of urban spaces defined less by the formal state systems that administered them and more by the infrastructural assemblages that collected there. I use the concept not to suggest that China’s state system has been displaced by infrastructural governance but to highlight how an infrastructural focus can help us see China’s national new areas as a new kind of operational landscape where something other than a conventional transition from rural to urban is happening.

Second, the concept of *infrastructural urbanism* is used to denote the ways infrastructures drive urbanization processes in China. In Gui’an and many other new areas and development zones throughout China, infrastructure provision precedes urbanization. This derives from a fundamental belief among state actors that “infrastructure expansion propels broad-based economic growth and needs to run ahead of actual demand for it.”¹⁵

Third, the concept of *circulation* is used to describe the primary effect of infrastructural urbanism in national new areas like Gui’an. That is, if infrastructure space is conceived as a kind of operational landscape where – as will be discussed later in the paper – platforms thrive and performance criteria can be measured and evaluated, then infrastructures of circulation are necessary for these platforms to work.¹⁶

8 Jessop, Brenner and Jones 2008.

9 Bach 2016; Oakes 2019.

10 See Carse 2016 for a useful genealogy.

11 Larkin 2013.

12 Graham and Marvin 2001, 43.

13 Coward 2015, 96.

14 Easterling 2014.

15 Lampton, Ho and Kuik 2020, 57.

16 Tadiar 2016.

In the sections that follow, I first review studies of both rural urbanization and administrative state rescaling as I develop a territorial-network approach to the socio-spatial processes in China's national new areas, using the concepts of infrastructure space and infrastructural urbanism. This review is followed by a description of Gui'an as an infrastructure space and an account of the experiences of Gui'an New Area's rural residents who find themselves living within a rapidly transforming landscape. The paper's final sections offer a brief empirical account of life as it has been shaped by the infrastructural governance of Gui'an's gridded landscape. Here, circulation is more directly discussed as the basis for the experience of suspension that dominates everyday life in the new area.

Urbanization Beyond the City

It has long been observed that urbanization in China is driven not simply by rural-to-urban migration but by *in situ* urbanization in rural areas as well.¹⁷ This has involved the reclassification of rural administrative territories as urban, as well as urbanizing processes of development in the countryside. These have included informal urbanizing processes “from below,” such as the rise of township and village enterprises (TVEs) beginning in the late 1980s,¹⁸ and state-initiated projects and programmes such as the Construct a New Socialist Countryside campaign in the early 2000s,¹⁹ and in the Xi Jinping era, the Targeted Poverty Alleviation strategy with its the village resettlement and consolidation programmes, urban–rural integration projects and rural entrepreneurship initiatives.²⁰ As Zhu has observed, reclassification of rural administrative territories as urban was initially driven by the urbanizing processes unleashed by rural reforms, particularly in China's coastal provinces.²¹ Early growth in TVEs was especially significant, with new agglomerations emerging virtually overnight. These were China's first “instant cities,” and they grew up around the infrastructures of export production and assembly – makeshift factories in rapidly plotted industrial zones – that characterized this early phase of peri-urban and rural development. By 1992 there were over 9,000 industrial development zones throughout China, marking a highly decentralized and, from Beijing's point of view, chaotic and inefficient landscape of economic reform.²²

Rural to urban reclassification was a mechanism for reasserting state control over the rapidly urbanizing countryside. New state-level zones also emerged for this reason as well.²³ National new areas offered an experimental scale outside of the state's normal hierarchy of territorial administration, and this rescaling was meant, in part, to bring order to chaotic urbanization as well as address certain experimental governance objectives such as industrial innovation, urban–rural integration, rural poverty alleviation and ecological sustainability.²⁴ Li has called new area development a practice of state rescaling meant to “insert state-directed visions into local development.”²⁵ Similarly, Noesselt has observed how Xiong'an New Area 雄安新区 can be understood as an experimental site for “governance modernization.”²⁶ In their study of high-speed rail development in the Pearl River Delta, Zhang, Xu and Chung argue that regional-scale planning represents an effort to seize back control of major infrastructure projects from municipalities.²⁷ New areas might thus be

17 Zhu 2017; Kan and Chen 2021.

18 Ren 2013.

19 Meyer-Clement 2020.

20 Xue et al. 2021

21 Zhu 2017.

22 Wang 2016, 193.

23 Kan and Chen 2021.

24 Wang 2016, 199.

25 Li 2015, 88.

26 Noesselt 2020.

27 Zhang, Xu and Chung 2020.

seen as a spatial strategy to correct for the mismatch between the state's hierarchy of territorial administration and the realities of China's geo-economy. Central state actors have often sought new configurations of territorial administration in order to produce new governance frameworks for economic and social change.²⁸ Yet the shift to what Ren has referred to as a "city-centred" form of state-led urbanization was driven primarily by the revenue-generating and state-building objectives of local governments, along with their economic growth targets.²⁹ This "urbanization of the local state"³⁰ meant that local levels would continue to push rapid urbanization, contributing to what some scholars came to identify as a growing "sickness" of "irrational" urbanization in China.³¹

One outcome of these efforts to reassert state control over the urbanizing countryside has been an increasingly constrained space of agency within which villagers can act. As rural urbanization was being pushed by the state, the extension of urban planning as a rationalizing and ordering force in the countryside began with the 2007 promulgation of China's Urban and Rural Planning Law, which called for every administrative village in the country to commission and implement a 20-year master plan for redevelopment. Bray argues that a highly centralized planning regime fragments villages into functional categories more suitable to state management than the messy rural livelihoods that existed before.³² Smith similarly notes that the rationalizing power of urban planning (what he refers to as *de jure* urbanization) in Chongqing tends to reduce peri-urban villages to functional categories of provision for the urban way of life into which they've been enrolled: industrialized farms, amusement parks, nature reserves, beautified and tidy villages.³³ They function, in short, as "rural simulacra," inhabited by a new urban underclass, dominated by the political and economic discipline of the party-state. Villagers nevertheless find ways to make the best of their constrained situations, and Smith proposes "disjunctural urbanization" as a framework for highlighting how actors on the ground produce new conditions of possibility out of the contradictions of their lives. Similarly, Lora-Wainwright has noted the tendency for studies to treat villagers as either passive victims or contentious protesters, often missing more subtle forms of agency in which villagers maximize their interests in sometimes illicit and hidden ways.³⁴

Given the powerful forces involved, scholars have struggled to conceptualize the urbanizing spaces of rural China, especially those in peri-urban regions just beyond the city, in ways that do not simply reduce these spaces to the abject other of state-capitalism. With the transformation of the countryside into something resembling an urban operational landscape, rural urbanization in China echoes the "planetary urbanization" thesis advocated by Brenner, Schmid and others.³⁵ With its focus on mutually recursive links between capitalist agglomerations and broader transformations of territory, landscape and environment, along with its blurring of rural and urban distinctions, the planetary urbanization thesis offers a framework for decentering the city in urban studies. But it also raises conceptual challenges for how we understand those blurred spaces where rural livelihoods have been displaced, residents remain marginalized as urban outsiders, and yet continue to find ways towards meaningful action. Planetary urbanization has been criticized as a totalizing framework that subsumes rural ways of being into the capitalist political economy of the urban; there's no "outside" of the urban.³⁶ Echoing this criticism, and noting that the current historical moment in China offers insights into rural transformations around the world, Chen, Zinda and

28 Lin 2011; Cartier 2015.

29 Ren 2013.

30 Hsing 2010.

31 Sorace and Hurst 2015; Woodworth and Wallace 2017.

32 Bray 2013.

33 Smith 2021.

34 Lora-Wainwright 2014.

35 Brenner 2014; Schmid 2018.

36 Jazeel 2017.

Yeh issue a plea for more recognition of rural agency: “In an era that appears to be dominated by urban-centric capitalist relations, the rural is a crucial site for understanding social and environmental changes and the broader political economies in which they are enmeshed.”³⁷

In sum, rural urbanization in China involves processes and landscapes that compel us to think beyond the city as both the spatial centre and temporal endpoint of urbanization. Here, an infrastructure analytic may be productive in bringing into focus dynamics of mobility and connectivity as key features of these spaces where urban and rural are increasingly blurred. That is, while a state-led *de jure* urbanization of rational planning is exercised territorially, urban development is also being driven by infrastructure constructions that establish entirely new *de facto* conditions on the ground. Connective infrastructures define both new constraints on rural lives as well as the possibilities by which rural lives might become more meaningful. Thus, a key aspect of the contradictory qualities of rural urbanization in China involves the tension between territorial control – manifest through state-led urban planning, urban–rural integration and other projects noted above – and connectivity, which is necessary for economic growth and market development but is also potentially subversive of territorial orderings. Infrastructural urbanism, in other words, suggests a rethinking of the spaces of the urban in terms of a tension between network and territory.

This tension was manifest in the New Urbanization Plan (NUP), launched in 2014. In an effort to level out the benefits of urbanization towards the interior and away from the growing territorial power of municipal governments which had been fed by a steady diet of rural land conversions throughout the early 2000s, the NUP sought to enhance the global connectivity of China’s interior cities by bolstering key transportation corridors and railway networks. It also established 19 urban clusters (*chengshi qun* 城市群) that serve as nodes for these corridors and networks. While the NUP had limited impact on reducing land conversions, and indeed created new incentives for these, it significantly reshaped the connective fabric of urban China on a national scale.³⁸

An emerging outcome of the NUP and its emphasis on urban clusters and connective networks has been, according to some, a decreased emphasis on the hierarchical nature of city-centred urban development. Governa and Sampieri refer to “infrastructuring,” where new urban developments alleviate the “hyper-concentration” of central cities and mix rural, urban and suburban spaces into a discontinuous whole.³⁹ The NUP, they argue, has promoted the growth of a flattened, more diffuse surface of infrastructural urbanism. Similarly, large-scale infrastructure development throughout what is now called the Zhongyuan City Cluster 中原城市群 (ZCC) in Henan has uniformly taken over the land.⁴⁰ In the ZCC, the city-centred project of Zhengdong 郑东, a provincial-level new district on the outskirts of Zhengzhou 郑州 that was initiated in 2001, has been superseded by the more dispersed Zhengbian New Area 郑汴新区 (also provincial-level). Whereas Zhengdong was a highly planned, modernist city project, Zhengbian consists instead of a series of localized projects in a big sprawling space. The master plan focuses not on a comprehensive and elegant city, as was the case with Zhengdong, but simply on infrastructure: grids of roads, highways, high-speed rail lines, rivers, canals, parks, drainages, pipelines and wires. This contrast between Zhengdong and Zhengbian tells us much about how processes of urbanization have shifted from centripetal to centrifugal tendencies, resulting in a “rhizomatic and polymorphic” urbanization pattern that creates a highly diverse yet also relatively non-hierarchical landscape of urban development, where intensive agriculture mixes with recreation mixes with industry mixes with housing, all within a pre-established infrastructural grid. Thus, if national new areas can be thought of as spaces of governance modernization,⁴¹ then this is being achieved as a kind of infrastructural

37 Chen, Zinda and Yeh 2017, 84. See also Gillen, Bunnell and Rigg 2022.

38 Chu 2020.

39 Governa and Sampieri 2020, 375.

40 Ramondetti 2022.

41 Noesselt 2020.

governance prioritizing horizontal mobility – or circulation – within a gridded network, rather than gravitational mobility around a single urban core.

National new areas are spaces where massive infrastructural grids not only precede urban in-filling but measure the experimental social aspirations invested in the space as well. While infrastructures define an experimental space, they also introduce an ontology of connectivity and movement stretching into the hinterlands of urban agglomerations. Coward suggests a new political ontology for this kind of infrastructural urbanism, where one's sense of a meaningful life is defined by connectivity. "The loss of connectivity (or a threat of such loss) is thus seen as a threat to life itself. This ontopolitics is thus constitutive of a political dynamic of inclusion and exclusion: connection and disconnection." Politics in such a situation "is less a question of who counts, than a question of who connects."⁴²

The Infrastructure Space of Gui'an New Area

Gui'an as a space of state rescaling

Gui'an New Area covers a vast area of 1,795 square kilometres in central Guizhou province. It is a relatively sparsely populated region, with some 730,000 residents in 2017. Another million people are to be added between 2020 and 2030. While the current population is still predominantly rural, planning documents drawn up when the new area was established aimed for 70 per cent urban and 30 per cent rural by 2020. By 2030 these proportions are to be 87 per cent and 13 per cent respectively. This will mean cutting the rural population of the region in half; by 2030 the plan aims to demolish nearly 200 of Gui'an's 366 natural villages. Densely urbanized space is, however, meant to be limited to a relatively small footprint, with the 2030 target for urban construction land (*jianshe yongdi* 建设用地) set at 230 square kilometres, or merely 13 per cent of the total land area. While this may be an unrealistic target given the state's appetite for revenue-generating land conversion, it does indicate the government's aspiration for Gui'an to be a model of "ecological civilization." The new area's branding emphasizes this by referring to Gui'an (in English) as "scenery town, pastoral city" (a loose translation of the branding in Chinese: *shanshui zhi du, tianyuan zhi cheng* 山水之都, 田园之城). As if to emphasize Gui'an as an infrastructure space, this phrase is embedded in every storm drain cover throughout the new area.

Gui'an rescales the administrative territory of central Guizhou with an aim to create an integrated governance zone that encompasses portions of Guiyang and Anshun municipalities. The new area rearranges administrative space into "one core and two areas" with 12 "sub-areas" including eight new towns and four "special communities." The core focuses on Big Data and AI development and includes the new Huaxi University Town where most of Guiyang's major universities have built new campuses. This core is also where a massive new high-speed rail station has been built. High-end leisure-residential developments occupy much of the built-up area. Beyond the core, the two "areas" include a "special manufacturing area" of new industrial clusters on the outskirts of Anshun, and a "culture and ecology preservation area" featuring cultural, heritage and handicraft tourist villages, as well as forest reserves and protected wetlands. The new area's four "special communities" are all located in this preservation area.

This kind of rescaling has reduced the rural parts of Gui'an to the same kinds of rationally planned platforms of "rural simulacra" that Smith observed in Chongqing.⁴³ Gui'an is planned to allow for coordinated rural and urban development involving "ecological governance" and the development of "metropolitan agriculture" and "tourist agriculture." To date, these are manifest for the most part in the peri-urban villages around Guiyang renting out vegetable plots to middle-class urbanites, with villagers offering to cultivate these plots for an additional fee, as well as

42 Coward 2015, 97.

43 Smith 2021.

providing some “peasant-family happiness” (*nongjiale* 农家乐) entertainment for those same urbanites. Agricultural output value has increased significantly as villages shift towards tea, high-value vegetables, fruit trees and grapes. In keeping with the “scenic” branding of the new area, by 2018 about 20 villages throughout the region had been refurbished as part of the broader “beautiful countryside” (*meili xiangcun* 美丽乡村) project. These were almost exclusively villages visible from the area’s new grid of roads.

The new area is meant to enable a level of coordinated and integrated urban planning that would not have been possible across the region’s different and competing administrative territories. As Kan and Chen point out, “The creation of zones remaps administrative territory and establishes new jurisdictions: it carves out a nested space of exception and gives its managing authority special powers and privileges.”⁴⁴ When it was established, Gui’an enjoyed an administrative status equal to that of Guizhou province. After several years of fitful growth, however, leadership was changed and the new area’s status was subsumed within Guiyang municipality. This has resulted in a complex and highly contested relationship between the new area administration and the various territories over which it enjoys ostensible planning authority. Each of Gui’an’s sub-areas offers a new urban initiative to spur local development throughout the new area.

Infrastructural fragmentation and uneven network access

Infrastructure construction has turned much of Gui’an into a fragmented landscape of broad avenues laid indiscriminately over agricultural fields, villages, lanes and pathways. Many of the fields lay fallow as farmers abandon their demolished villages and find more lucrative work in nearby industrial clusters or Huaxi University Town. Some fields have become construction sites. These abandoned and rubble-strewn fields offer a contrasting backdrop to the meticulously maintained and verdant roads, invariably landscaped with attractive shrubs, flowers and trees. Instead of tending their fields, many of the villagers now labour on these roadway gardens, keeping them pruned, weeded and watered. The fields are interspersed with industrial or commercial clusters which have sprouted up around highway intersections. These clusters also typically contain high-rise commercial housing blocks, though a large amount of the new housing in the area is for the relocation of villagers whose houses have been demolished. Some of these relocation compounds are already run-down with an abandoned feel to them due to a lack of residents. In many cases villagers have chosen to move closer to Guiyang’s urban core rather than into relocation housing, since new area development has lagged behind the state’s commitment to providing relocation housing prior to village demolition. This is a reversal of the more common problem that has dogged many “demolition-relocation” projects throughout China.

Although the grid of new roads has introduced local residents to an entirely new scale of interaction with the outside world, it has also fragmented and unsettled their local geographies. Specialization and market niches have come to define the spaces separated by the grid. One village converted itself into a virtual-reality theme park. Another served as a summer destination for retirees escaping the heat in places like Chongqing and Wuhan. Most, however, were simply housing a new class of service labour, providing manual workers wherever they were needed throughout the new area, including Huaxi University Town, where higher-education campuses were staffed and maintained by former villagers and where students consumed a steady diet of villager-prepared noodles, barbeque and other snacks. A consistent topic of conversation with villagers was that many of them no longer felt compelled to travel to distant and hostile cities for work. Indeed, the grid had put their villages within the Guiyang labour market, accessible by a daily commute. Many villagers commented that because of the new roads they could work in the city and return to the village to take care of elderly parents and children in the evening.

44 Kan and Chen 2021, 10.

On the other hand, the roads were not always accessible to villagers. In some cases, villagers constructed “hacker” roads, literally cutting through the guardrails to gain access to a grid that had been planned with little thought to its accessibility for locals. In addition, the grid cut through rural communities, making governance more challenging for local cadres. One administrative village with eight natural villages found itself divided into four separate parcels by two expressways and an interchange connecting them that consumed more than half of the arable land. Walking from one village to the next entailed jumping the guardrails and darting across the six-lane highway. Villagers had appealed to the government to build underpasses, which had apparently never been considered when the highways were being built. A local cadre told me that they had no say in the planning of the highways and had to make do. Most of the villagers I asked indicated that they were happy to be living so close to a new state-of-the-art expressway, but accessing their fields was now too dangerous. They would focus on accessing the network instead. Indeed, they had built a hacker road informally connecting to the interchange. This was now far more important than the increasingly weed-filled fields that lay on the other side of the highway. As Lora-Wainwright has found in a different context, most villagers support large-scale infrastructure development, despite the violence it visits upon their lives.⁴⁵

Fragmentation of land by newly built expressways and boulevards, demolition of most of the villages in the new area, and master planning that has turned the remaining villages into zones of specialized service provision have fundamentally reconfigured the landscape of Gui’an and radically altered livelihood practices and possibilities. Most villagers have responded by translating the new landscape they inhabit into a space of practice and possibility. Most don’t look back. If the grid wasn’t built for them, they have done whatever is necessary to make it work. The hacker roads are an obvious manifestation of this commitment, even while signalling the loss of a previous way of life. Interlocutors suggested that the practice was pervasive and tolerated by local leaders. One cadre told me that hacker roads are necessary so that the government knows where to build additional roads as economic growth ensues.

The straightness and width of the new roads in Gui’an were also seductive for villagers, who often responded with entrepreneurial ventures in anticipation of the traffic that would surely follow. Roadside inns, resorts, shopping malls, theme parks and other attractions sprouted up along the grid of highways and boulevards. These were often financed in part, I was told, by the compensation packages that villages received. During my fieldwork, many of them were already struggling, and many others had been shuttered as the anticipated customers failed to materialize. In interviews, planners told me that these developments were problematic since they often failed to adhere to the visual design principles that the government was trying to promote for the Gui’an brand. They were also a waste of compensation funds. “But there’s nothing we can do,” one interlocutor said. It serves as one example of the way infrastructures establish *de facto* situations on the ground that exceed the plans that have been laid out for them.

Circulation and suspension: the lived experience of infrastructure space

This section explores what I argue has become the dominant lived experience for residents of Gui’an New Area. That experience is conditioned by *circulation*, as residents’ livelihood strategies respond to the infrastructural networks they find themselves living within. But circulation is *lived* primarily as a condition of suspension. The term suspension, in English, has at least two distinct but related meanings. One is the idea of something hanging, temporarily immobile or even frozen in time.⁴⁶ The other, however, derives from mobility rather than blockage. This is the idea of particles in solution, a state of being dispersed in fluid, that is, *suspension in circulation*.⁴⁷ Both offer compelling

45 Lora-Wainwright 2014, 683.

46 Gupta 2015.

47 Choy and Zee 2015.

metaphors for living in infrastructure space. In Chinese, as Xiang has argued, the term *xuanfu* 悬浮 describes a lived experience of temporary precarity, particularly for migrant workers. He notes that while the condition is structurally compelled, it is also self-inflicted. “It partly explains why we see tremendous entrepreneurial energy in daily life in China but few bottom-up initiatives for social and political change. The Chinese public constantly feel that they are on the edge of major changes, given the accumulated contradictions; but again and again, life moves on and things remain the same.”⁴⁸ In Gui’an, I found that people live lives suspended between local and national scales, between rural and urban, and between being fixed in place and constantly on the move. Infrastructures of circulation that undergird the new area make it possible for this condition to continue indefinitely.

A “messy disjuncture” of contrasting spatial and temporal scales has come to define the new landscapes of Gui’an New Area.⁴⁹ This is most obviously found in the way multiples scales of transportation infrastructures have been layered on top of each other in recent years. Gui’an’s grid of highways and boulevards is engineered for a different scale of life compared to the older dendritic network of winding lanes and pathways that it has displaced. One day I was comparing notes on Gui’an landscapes with a young professional who had been working in the new area for a couple of years. He commented on how you can read the history of the area by looking at the different layers of transportation infrastructures. He was fascinated by how each articulated with the other in complex ways: the oldest system of footpaths, then small dirt and later paved roads, trains, then expressways, and now high-speed rail lines. Each one displaced, partially, what was there before, he said, “but now you have a chaotic accumulation of these transportation types, and they don’t really fit together. All over China villages face this problem of suddenly being cut off from the world because of the shift in infrastructure; it’s a serious problem.” He felt, however, that the government in Gui’an was aware of the problem. “That’s why they don’t do anything when villagers build their own on-ramp onto an expressway.”

Hacker roads are built to transcend these contrasting scales and temporalities of life in the new area. They are necessary if villagers wish to scale-up their livelihoods and live in the new time and space for which the grid was built. Yet at the same time, villagers are offered contradictory messages about their position in the gridded landscape. The narrative of the “beautiful village” for instance insists that the villagers live in a state of frozen suspension while the rest of China moves about in circulation. In the village of Gaozhai there’s a signboard titled “My Nostalgia” (*wode xiangqiu* 我的乡愁), featuring a quote by Xi Jinping from a speech in Guangdong in 2017: “The village cannot decline in the face of urbanization.” The signboard offers an exhortation to villagers to inhabit a suspended space of rural nostalgia, as if they too had left their homes and longed to return. It also suggests that the need to “keep the countryside looking like the countryside,” which has been elevated to a basic planning principle informing urban–rural integration in Gui’an, is a need driven by urban nostalgia.⁵⁰ The Gaozhai signboard features black and white photos of old village activities: a school class portrait, children playing traditional games outdoors, a man ploughing a paddy with a water buffalo, a man riding a bike, villagers butchering a pig. One villager scoffed at the images, telling me, “These pictures – they’re not even from Gaozhai.”

Indeed, the signboard’s black-and-white images don’t resemble in any way everyday life in Gaozhai. There’s not a water buffalo in sight, and almost no one in Gaozhai farms anymore. Fields have been converted into a scenic wetland of lotus flowers and wooden causeways, offering visitors a photogenic view of the village from afar. But most of the villagers work at the Foxconn campus, easily accessible now that Gaozhai has built a hacker road linking to the highway that has taken up much of the village land. Others commute to jobs in Huaxi University Town, now a mere 30-minute drive away. Many have rented out their village houses to entrepreneurs who

48 Xiang 2021, 234.

49 Xu 2019.

50 Wilczak 2017.

have turned them into restaurants and guesthouses. Some of these are advertised as unmanned hotels (*wuren jiudian* 无人酒店), reinforcing Gui'an's emphasis on a digitally powered process of urban-rural integration with a nod to Alibaba's famous unmanned Future Hotel in Hangzhou.⁵¹ The village itself appears suspended between the hi-tech future that Gui'an promises to bring and a nostalgic past that never existed.

Meanwhile, village cadres were well aware of their role in fulfilling the Gui'an pastoral brand. When I asked the village head if Gaozhai would eventually end up like a "village-in-the-city" (*chengzhongcun* 城中村) surrounded by tall urban towers, or whether Gaozhai's remaining fields would become a corporate campus for Tencent or China Mobile, he responded emphatically. "No," he said. "The government has a plan for tourism development here, and so we have to protect our land, and keep things peaceful and quiet here – not like the city." Gaozhai would, in other words, remain suspended in a state of pastoral authenticity, providing a nostalgic landscape materializing the Gui'an brand: scenic city, pastoral town.

Because they live in a national new area, villagers in Gui'an receive generous compensation packages when their houses are demolished or when their land is taken over by a highway, a scenic lake, railway station or industrial plant. Conversations among locals in Gui'an often turned to stories of villagers gambling away their compensation, or buying expensive, impractical cars in order to look successful. Another common topic was how Gui'an was rife with schemers and fraudsters swarming into the area and taking advantage of naïve villagers. Local cadres described efforts to help villagers find more appropriate uses for their compensation. It is telling that many of these involve plugging into the circulatory aspects infrastructure space. Travel was a popular option. Villages had organized group tourist excursions to Beijing, Shanghai and other places. More common was investing in a truck or van, and transportation and hauling services were ubiquitous. Others invested in a sedan and spent their days driving around the new area, on call for the ride-hailing platform Didi Chuxing.

As Sugimoto has argued, the lived experience of relocation housing in China is highly unsettling for many who remain in a suspended state while their promised housing is delayed and delayed again.⁵² The Chinese term for relocation housing (*anzhifang* 安置房), meant to convey a calming sense of safety and security, has in fact become equated with insecurity and anxiety instead. Unlike the dominant pattern observed by Sugimoto, though, relocation housing in Gui'an has not been delayed. But with their ghost-town feel, these dismal and isolated compounds still stand as edifices of unsettlement. The refusal of villagers to resettle there, coupled with their efforts to pursue mobility-based strategies for generating wealth, speaks to the ontopolitics of connection and disconnection that governs infrastructural urbanism.⁵³ Gui'an is a space defined by the suspended mobility, circulating as necessitated by new labour requirements.

Suspended circulation has become a norm for millions of displaced and dispossessed people in contemporary China. "To be mobile," Driessen has commented, referring to Chinese labour migrants living in suspension in Ethiopia, "is a coveted way of life, a cultural imperative, and a means of crafting a fulfilling future."⁵⁴ Such mobility, she points out, is driven by insecurity and dispossession and the "social pressure" of securing a stable new life. "Only by migrating are they able to stake claim to social presence in a rapidly developing Chinese society. In order to achieve a feeling of belonging as well as a sense of dignified personhood, they are compelled to be and remain on the move."⁵⁵ This is also the condition of suspension that has been brought to the

51 Tai Lei 泰勒, "Ma Yun de wuren jiudian laile: yige fuwuyuan dou meiyou, jiqiren song can, shualian ruhzu" (Jack Ma's unmanned hotel is here: there's no staff, robots deliver meals, and you check in with a face scan), *STCN.com*, 4 November 2018, <https://web.archive.org/web/20190214035743/http://news.stcn.com/2018/1104/14638724.shtml>.

52 Sugimoto 2019.

53 Coward 2015.

54 Driessen 2019, 2.

55 Ibid.

residents of Gui'an New Area.⁵⁶ What has changed is that this condition is no longer one that a villager enters by leaving the countryside for some distant urban centre (or some construction project abroad), but is now constituted within the infrastructural space that villagers find themselves living in. And yet it is an uneven space of connectivity due to a grid that has been indiscriminately laid upon the land. Much of that land remains disconnected from the grid, rendering access a matter of relatively wealth and poverty. While temporal unevenness clearly exists, this paper has tried to illustrate how infrastructure-led development in China is one that redefines lives according to network access. This ontology compels us to consider an alternative scalar analysis, one that focuses more on the spatial practices of those who understand that their livelihoods depend on this access. Those spatial practices form in a dynamic tension between network and territory.

Conclusion: Reconceiving the Urban–Rural Juncture

Considering the national new area as an infrastructure space in which a new form of urbanism driven by circulation has emerged compels us to return to the question of rural urbanization in China and how an infrastructure analytic might help us rethink the spaces in which rural urbanization is happening. China's national new areas echo a number of broader global urban trends. These include the surprisingly robust pursuit of greenfield urbanism,⁵⁷ the global growth of “massive suburbanization”⁵⁸ and the development of “logistics cities” as an increasingly dominant model for urban planning.⁵⁹ In this model, urban landscapes are being defined more by network connectivity than by the gravity of a dominant centre. Writing about such landscapes, Hesse notes, “the spatial fix-point of the organization of everyday life is no longer the city centre, but are the individually shaped networks of activities which may stretch over the entire urban region and beyond.”⁶⁰

These trends point us towards the conceptual – and political – conundrum of urban frontiers. Is China experiencing its own variation of the broader structural processes of global capitalism as its rural areas undergo profound transformation? Does “rural urbanization” allow for meaningful analysis of this transformation? What should we call these spaces? Hinterlands?⁶¹ Surrounds?⁶² Zhao has made the compelling argument that we should not be searching for linguistic equivalence when we try to categorize and analyse these spaces of urban–rural juncture.⁶³ They are not all variations, in other words, of some universal process of, say, “suburbanization.” The blurred rural–urban spaces of China, Zhao argues, are not local variations of a process that has a single (English) terminology. Rather, following Robinson, there are multiple “elsewheres” through which we need to be thinking about such spaces.⁶⁴ Drawing on the term *jiehebu* 结合部, which describes the rural–urban interface in Beijing, Zhao seeks to displace master narratives in urban studies with terminologies that are at once more local and more cosmopolitan.

Zhao recalls McGee's earlier approach to this conundrum. McGee's neologism – the *desakota* – was important for calling into question many of the assumptions of conventional Western urban theory, with its ideas of rural–urban migration, and agricultural-to-industrial transition, all premised on a clear distinction between the categories of “urban” and “rural” (though there were always important exceptions to this, such as Garreau's work on the “edge city” and Sieverts's “*zwisechstadt*”).⁶⁵ The *desakota* drew on local vernaculars for understanding urban frontiers without squeezing that

56 See also Zhan 2021.

57 Moser and Côté-Roy 2021.

58 Güney, Keil and Üçoglu 2019.

59 Chua et al. 2018.

60 Hesse 2020, 18.

61 Aribindoo 2020.

62 Simone 2022.

63 Zhao 2020.

64 Robinson 2016.

65 Garreau 1991; Sieverts 2003; McGee 2014.

understanding into the boxes of Western concepts. And yet the term has itself become somewhat universalized as a case study in planetary urbanization. Since the onset of rural urbanization in China, scholars have been asking whether China has been witnessing the formation of “*desakotas* with Chinese characteristics.”⁶⁶ As a descriptive concept, the *desakota* helps us to conceptualize rural urbanization in China in ways that decentre the city and raise questions about meaningful analytical categories for such spaces. Tang and Chung have argued, however, that the *desakota* is under-theorized and that its application to China can be misleading.⁶⁷

Simone has recently argued that what is now happening throughout the urban–rural interface in much of the Global South cannot, in fact, be adequately expressed, even with local vernacular terms like *jiehebu* or *desakota*.⁶⁸ Settling on an ambiguous marker – “the surrounds” – Simone suggests that the landscapes of contemporary urbanization “exceed the salience of available vernaculars of analysis and intervention.” Such spaces are inherently unsettled, eluding “coherent narratives of development and prospective futures.”⁶⁹ He continues:

These proliferations of housing, commercial, industrial, logistical, recreational, entrepreneurial, and governmental projects are less subsumed into overarching logics of capital accumulation or neoliberal rationalities than they are “strange accompaniments” to each other. Nothing quite fits according to design.⁷⁰

The infrastructure analytic pursued in this paper is not meant to provide a definitive conceptual apparatus with which to settle the conundrum of how we might best theorize China’s urban frontiers. But it is meant to provide analytical tools with which to better understand these spaces as socio-technical assemblages that both constrain and enable the variegated agencies of those who live within them. China’s national new areas, it is proposed here, can be productively studied not just as administrative territories of policy innovation but as infrastructure spaces where territorial governance is exercised in tension with networks of connectivity. The outcome of this tension, I have argued, is a lived condition of suspension as people make the best of the infrastructural regime of circulation that has displaced a previously more settled pattern of life. While I have suggested that, conceptually, we might call these new areas infrastructure spaces, the broader point that Simone reminds us of is that a vernacular for such spaces has yet to precipitate out of the suspended experience of life being worked out here.

Acknowledgements. I am grateful for research assistance from the Swiss Research Center at Guizhou Normal University, especially Zuo Zhenting and Ma Jing. Additional research assistance was provided by Yang Zhu, Li Qiaoyang, Darcy Pan and Liu Lili. Thanks to The Henry Luce Foundation which funded the China Made project at the University of Colorado Center for Asian Studies, and to the Hong Kong Institute for Humanities and Social Sciences which hosted the Second China Made Workshop, where this paper was first presented. Thanks to Andrew Kipnis, Alessandro Rippa, Carolyn Cartier, Max Hirsh, Darren Byler and the rest of the workshop participants for helpful comments on earlier drafts.

Competing interests. None.

References

- Aribindoo, Pushpa.** 2020. “New geographies of the hinterland.” In Jonathan Bach and Michel Murawski (eds.), *Re-centering the City: Global Mutations of Socialist Modernity*. London: UCL Press, 211–233.
- Bach, Jonathan.** 2016. “China’s infrastructure fix.” *Limn* 7. <http://limn.it/chinas-infrastructureal-fix/>.
- Bray, David.** 2013. “Urban planning goes rural: conceptualizing the ‘new village’.” *China Perspectives* 3, 53–62.
- Brenner, Neil** (ed.). 2014. *Implosions/Explosions: Towards a Study of Planetary Urbanization*. Berlin: Jovis.

66 Marton 2000; Guldin 2001.

67 Tang and Chung 2002.

68 Simone 2022.

69 Ibid., 4.

70 Ibid.

- Carse, Ashely. 2016. "Keyword: infrastructure: how a humble French engineering term shaped the modern world." In Penelope Harvey, Casper Jensen and Atsuro Morita (eds.), *Infrastructures and Social Complexity*. London: Routledge, 27–39.
- Cartier, Carolyn. 2002. "Origins and evolution of a geographical idea: the macroregion in China." *Modern China* 28 (1), 79–143.
- Cartier, Carolyn. 2015. "Territorial urbanization and the party-state in China." *Territory, Politics, Governance* 3 (3), 294–320.
- Chen, Jia-Ching, John Zinda and Emily Yeh. 2017. "Recasting the rural: state, society, and environment in contemporary China." *Geoforum* 78, 83–88.
- Choy, Timothy, and Jerry Zee. 2015. "Condition – suspension." *Cultural Anthropology* 30 (2), 210–223.
- Chu, Yin-wah. 2020. "China's new urbanization plan: progress and structural constraints." *Cities* 103, 1–10.
- Chua, Charmaine, Martin Danyluk, Deborah Cowen and Laleh Khalili. 2018. "Introduction: turbulent circulation: building a critical engagement with logistics." *Environment and Planning D: Society and Space* 36 (4), 617–629.
- Coward, Martin. 2015. "Hot spots/cold spots: infrastructural politics in the urban age." *International Political Sociology* 9 (1), 96–99.
- Diessen, Miriam. 2019. *Tales of Hope, Tastes of Bitterness: Chinese Road Builders in Ethiopia*. Hong Kong: Hong Kong University Press.
- Easterling, Keller. 2014. *Extrastatecraft: The Power of Infrastructure Space*. London: Verso.
- Garreau, Joel. 1991. *Edge City: Life on the New Frontier*. New York: Doubleday.
- Gillen, Jamie, Tim Bunnell and Jonathan Rigg. 2022. "Geographies of ruralization." *Dialogues in Human Geography* 12 (2), 186–203.
- Governa, Francesca, and Angelo Sampieri. 2020. "Urbanisation processes and new towns in contemporary China: a critical understanding from a decentered view." *Urban Studies* 57 (2), 366–382.
- Graham, Stephen, and Simon Marvin. 2001. *Splintering Urbanism: Networked Infrastructures, Technological Mobilities and the Urban Condition*. London: Routledge.
- Guldin, Gregory E. 2001. *What's a Peasant to Do? Village Becoming Town in Southern China*. Boulder, CO: Westview Press.
- Gupta, Akhil. 2015. "Suspension." Society for Cultural Anthropology, 24 September. <https://culanth.org/fieldsights/suspension>.
- Güney, K. Murat, Roger Keil and Murat Üçoglu (eds.). 2019. *Massive Suburbanization: (Re)building the Global Periphery*. Toronto: University of Toronto Press.
- Hesse, Markus. 2020. "Logistics: situating flows in a spatial context." *Geography Compass* 14 (7), e12492. <https://compass.onlinelibrary.wiley.com/doi/epdf/10.1111/gec3.12492>.
- Hsing, You-tien. 2010. *The Great Urban Transformation: Politics of Land and Property in China*. Oxford: Oxford University Press.
- Jazeel, Tariq. 2017. "Urban theory with an outside." *Environment and Planning D: Society and Space* 36 (3), 405–419.
- Jessop, Bob, Neil Brenner and Martin Jones. 2008. "Theorizing sociospatial relations." *Environment and Planning D: Society and Space* 26 (3), 389–401.
- Kan, Karita, and Juan Chen. 2021. "Rural urbanization in China: administrative restructuring and the livelihoods of urbanized rural residents." *Journal of Contemporary China* 31, 626–643.
- Lampton, David, Selina Ho and Cheng-Chwee Kuik. 2020. *Rivers of Iron: Railroads and Chinese Power in Southeast Asia*. Oakland: University of California Press.
- Larkin, Brian. 2013. "The politics and poetics of infrastructure." *Annual Review of Anthropology* 42, 327–343.
- Lavelly, William. 1989. "The spatial approach to China's history." *Journal of Asian Studies* 48 (1), 100–113.
- Li, Lingyue. 2015. "State rescaling and National New Area development in China: the case of Chongqing Liangjiang." *Habitat International* 50, 80–89.
- Lin, George C.S. 2011. "Territorialization of state power through land development in southern China." *Cross-currents: East Asian History and Culture Review* 1 (1). http://cross-currents.berkeley.edu/sites/default/files/e-journal/articles/g_s_lin_0.pdf.
- Lora-Wainwright, Anna. 2014. "Grassroots perspectives on relocation: threats and opportunities." *positions* 22 (3), 661–689.
- Marton, Andrew. 2000. *China's Spatial Economic Development: Restless Landscape in the Lower Yangzi Delta*. London: Routledge.
- McGee, Terry G. 2014. "The emergence of *desakota* regions in Asia: expanding a hypothesis." In Neil Brenner (ed.), *Implosions/Explosions: Towards a Study of Planetary Urbanization*. Berlin: Jovis, 121–137.
- Meyer-Clement, Elena. 2020. "Rural urbanization under Xi Jinping: from rapid community building to steady urbanization?" *China Information* 34 (2), 187–207.
- Moser, Sarah, and Laurence Côté-Roy. 2021. "New cities: power, prestige, and profit." *Geography Compass* 15 (1), 1–15.
- Noesselt, Nele. 2020. "A presidential signature initiative: Xiong'an and governance modernization under Xi Jinping." *Journal of Contemporary China* 126, 838–852.
- Oakes, Tim. 2019. "China Made: infrastructural thinking in a Chinese register." *Made in China* 4 (2), 64–71.
- Ramondetti, Leonardo. 2022. *The Enriched Field: Urbanising the Central Plains of China*. Basel: Birkhauser.
- Pan, Darcy. 2020. "Storing data on the margins: making state and infrastructure in Southwest China." Paper presented at the Second China Made Workshop, University of Hong Kong, 8 January.

- Ren, Xuefei.** 2013. *Urban China*. Cambridge: Polity.
- Robinson, Jennifer.** 2016. "Thinking cities through elsewhere: comparative tactics for a more global urban studies." *Progress in Human Geography* 40, 3–29.
- Schmid, Christian.** 2018. "Journeys through planetary urbanization: decentering perspectives on the urban." *Environment and Planning D: Society and Space* 36 (3), 591–610.
- Sieverts, Thomas.** 2003. *Cities without Cities: An Interpretation of the Zwischenstadt*. London: Spon.
- Simone, AbdouMaliq.** 2022. *The Surrounds: Within and Beyond Capture*. Durham, NC: Duke University Press.
- Skinner, G. William.** 1985. "The structure of Chinese history." *Journal of Asian Studies* 44 (2), 271–292.
- Smith, Nick.** 2021. *The End of the Village: Planning the Urbanization of Rural China*. Minneapolis: University of Minnesota Press.
- Sorace, Christian, and William Hurst.** 2015. "China's phantom urbanisation and the pathology of ghost cities." *Journal of Contemporary Asia* 46 (2), 304–322.
- Sugimoto, Tomonori.** 2019. "安置 anzhi." China Made: Keywords for Infrastructure and Media, 11 August. <https://chinamadeproject.net/安置-anzhi/>.
- Tadiar, Neferti X.M.** 2016. "City everywhere." *Theory, Culture and Society* 33 (7–8), 57–83.
- Tang, Wing Shing, and Him Chung.** 2002. "Rural–urban transition in China: illegal land use and construction." *Asia Pacific Viewpoint* 43 (1), 43–62.
- Wang, Lili.** 2016. "Becoming Urban the Chinese Way: The Politics of Urban Planning and Urban Change in Nanjing, China." PhD diss., Ohio State University.
- Wilczak, Jessica.** 2017. "Making the countryside more like the countryside? Rural planning and metropolitan visions in post-quake Chengdu." *Geoforum* 78, 110–118.
- Woodworth, Max, and Jeremy Wallace.** 2017. "Seeing ghosts: parsing China's 'ghost city' controversy." *Urban Geography* 38 (8), 1270–1281.
- Xiang, Biao.** 2021. "Suspension: seeking agency for change in the hypermobile world." *Pacific Affairs* 94 (2), 233–250.
- Xu, Daphne.** 2019. "Chinese Speed." MA thesis, Massachusetts Institute of Technology.
- Xue, Yongji, KuoRay Mao, Nefratiri Weeks and Jingyi Xiao.** 2021. "Rural reform in contemporary China: development, efficiency, and fairness." *Journal of Contemporary China* 128, 266–282.
- Zeuthen, Jesper Willaing.** 2020. "Rescaling China's rural–urban frontier: exception as norm in the access to development." *China Information* 34 (2), 208–228.
- Zhan, Yang.** 2021. "Suspension 2.0: segregated development, financial speculation, and waiting among resettled peasants in urban China." *Pacific Affairs* 94 (2), 347–369.
- Zhang, Mengmeng, Jiang Xu and Calvin King Lam Chung.** 2020. "Politics of scale, bargaining power, and its spatial impacts: planning for intercity railways in the Pearl River Delta, China." *China Quarterly* 243, 676–700.
- Zhao, Yimin.** 2020. "Jiehebu or suburb? Towards a translation turn in urban studies." *Cambridge Journal of Regions, Economy and Society* 13, 527–542.
- Zhu, Yu.** 2017. "In situ urbanization in China: processes, contributing factors, and policy implications." *China Population and Development Studies* 1 (1), 45–66.

Tim Oakes is Professor of Geography and Faculty Director at the Center for Asian Studies, University of Colorado Boulder. He is project director for China Made: Asian Infrastructures and the "China Model" of Development. He writes about rural development, urbanization and cultural governance in contemporary China.