A bullet train or a paved road?

The first Chinese high-speed rail (HSR) connection opened in 2007, but by the end of 2013 the country had over 12,000 km of high-speed tracks (the biggest network in the world and about half of all HSR tracks in operation worldwide). Service levels among China's high-speed trains[1] are high; passengers play games on their phones and consume luxury foodstuffs sold on board, as they near their destination at 300 km/h. The perfectly air-conditioned, mostly quiet HSR environment stands in stark contrast to the bustling carriages of regular Chinese trains, in which passengers chat over card games and share life stories, eating instant noodles and sunflower seeds (not for sale on HSR). Influencing traveling cultures is only one of many ways in which the construction of the world's most advanced high-speed railroad (HSR) network is changing China, a country in which access to travel is closely tied to socio-economic development. So far, scholarly attention has been limited, but whether it is the economic impact of HSR on remote regions, emerging forms of tourism, or the nostalgia surrounding the disappearing slow trains, the approach of the HSR era in China brings with it many topics worthy of further research.

Tabitha Speelman

LOOKING INTO THE LOCAL CONTEXTS OF HSR REFORM seems especially significant, as the top-down initiative does not allow much room for such enquiries itself. Based on a 2004 central government blueprint, and part of a larger state agenda to shrink China into an increasingly uniform and accessible area, HSR is said to realize a well-off society in all of China, presenting the plan's execution and this happy outcome as both desirable and inevitable. So what does this top-down strategy look like from below? In the summer of 2012 I spent two months along a number of HSR routes in the Chinese provinces of Jiangsu and Guizhou exploring this question. In this contribution I share some of my ethnographic research into the social impact of HSR in these two provinces, showcasing the variety of development speeds in contemporary China.[2] I conclude that, while HSR is the 'shiny name card' of Chinese modernity, which you want to be seen using (fig.1), and although it perhaps illustrates the strengths and speed of reform under authoritarian rule, it also demonstrates some of the weaknesses of such a hasty, centralized undertaking, most notably the neglect of the diversity of needs and opinions on the ground.

China's HSR development

In 1995, government spending on transportation (0.6% of GDP) was one of the lowest in the world. However, HSR development took off at an incredible speed after the Middle and Long-term Railway Development was ratified on 1 July 2004. In 2008, a four trillion RMB stimulus package, which the central government designed to combat the financial crisis, triggered an even bigger 'Liu Leap Forward' *(Liu Yuejin)*, named after strategy mastermind and former railway minister Liu Zhijun. The plan was to build a network in which all provincial capitals (except for Lhasa and Urumqi at twelve hours) would be within eight hours travel of Beijing (fig.2). China's total railway length, for both passengers and freight, will be increased from 70,000 to 120,000 km by 2020, of which at least 16,000 km should be the much more expensive passenger-only HSR rail, a longer stretch of HSR than in any other country.

According to the 2008 blueprint, HSR would limit the negative impact of the global financial crisis and even out unequal regional development. It was presented as an economic game-changer, freeing up existing tracks for more freight capacity and driving regional integration by enabling fast and convenient passenger connections. The optimism surrounding the HSR strategy reached a peak in 2010. In media coverage from that year, a 'HSR-themed' language emerged, including terms such as a 'HSR network,' 'HSR era,' 'HSR territory,' 'HSR strategy,' and 'HSR empire'. But the project has also had its share of controversy, including the 2011 deadly train crash near Wenzhou that incited a nationwide debate on the speed and safety of China's current development. After the crash, authorities attempted to bury one of the crashed train carriages before confirming that all victims had indeed been rescued from the wreckage. In addition, there was the scandal of rampant corruption within the now dissolved Ministry of Railways, leading to the suspended death sentences of minister Liu Zhijun and deputy chief engineer Zhang Shuguang.

Fig 1: Passengers getting their picture taken with a bullet train.

Fig 2 (inset): The 'eight-hour strategy' (http://tinyurl.com/chinapictorial)

Even though the turmoil slowed down its execution, it did not significantly alter the ambitious development plan. With the backing of the new leadership under president Xi Jinping and premier Li Keqiang, investment picked up again in 2013, and soon domestic and international media once more hailed Chinese high-speed rail as a 'success story'.

In its efforts to boost its soft power and present an attractive, non-threatening image to the world, the leadership has invested much in 'rail diplomacy' *(tielu waijiao)*.[3] Over 50 countries have expressed interest in Chinese HSR and deals or political agreements have been signed with at least 8 countries (although in some countries, including Thailand and Myanmar, Chinese rail has been rejected by the local population, delaying action). HSR development in recent years tends to be seen as a successful example of some of the more, and less, subtle mechanisms of China's adaptive authoritarianism, that ultimately allows it to 'get stuff done'. Within a few years, the HSR project developed from a symbol for everything that was wrong with China's regime – from disregard for human life to the squandering of public funds – into an example of the stable, modern and safe image the new leadership would like to exude.

Welcoming HSR

In Jiangsu, just five years ago, a trip between Shanghai and Nanjing would take at least five hours; now, with most of the 200 daily connections taking less than an hour, residents are the envy of public transportation passengers around the world.

Local accounts of high-speed rail reform in China

In Congjiang (Guizhou), however, no railway connection yet exists, taking it at least 20 hours to get to Guangzhou. After the planned connection is in place, the trip will take no more than a couple of hours. Many residents have never even seen a train, but residents now find that their backyard is the construction site of both a high-speed rail connection and a national expressway.

The contrasts between the regions are exemplary for the interrelatedness between socio-economic development, geographical conditions, and transportation reform. Jiangsu's GDP per capita ranks second in the country, while Guizhou is China's poorest province. Although their differences far predate 1978, the development gap between Jiangsu and Guizhou grew much bigger during the reform period, and as a 2012 central government document on stimulating Guizhou's development noted, the gap is currently still growing. The HSR blueprint, however, aims to transform both regions, and the challenges this creates are at times remarkably similar.

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Jiangsu

In Jiangsu, the rapid replacement of slower and cheaper rail connections by HSR, has in fact disadvantaged parts of the population. While regular train tickets are heavily subsidized, HSR ticket prices have been set according to commercial standards and are about triple the price. Students – who previously benefited from train ticket discounts – and migrant workers, especially, are affected by the cancellation of cheaper services. As a Nanjing graduate student put it: "I can now hardly afford the really necessary travel I have to do to see my parents and attend weddings, let alone fulfil the dreams I had when I was young about seeing more of the country during my spare time as a student. Now I just go to the library and read American novels, by ways of my long-distance travels."

In a relatively affluent province like Jiangsu, HSR does, however, clearly have a market. A growing middle class who travel for work and leisure, and many of whom used to travel by air, is discovering HSR. While the popularity of HSR among these travellers has had a serious negative impact on China's domestic air travel, it has also been a source of optimism among transportation economics analysts assessing HSR's long-term potential. And indeed, 74% of my Jiangsu interviewees confirmed that HSR access makes them travel more, and that it makes them want to travel to more places in China.

But while respondents would generally praise HSR's speed and convenience, many also complain about the speed of recent developments that 'just happen to us' and are hard to keep up with. Inconveniences faced by Jiangsu travellers included the remote locations of newly-built HSR stations and the lack of integration of different modes of transportation. Due to the high costs of expanding inner-city stations, new HSR stations are often built outside the city centre, ideally in between the old city and emerging suburbs or technological parks. However, with lots of space and light, these stations stand in sharp contrast to the darker, more crowded conventional stations (fig.3).

In such a rapidly changing environment, negotiating the route which best suits one's needs and purchasing power remains very important. Forming a subtle form of resistance to the way regular rail and HSR are set op as mutually exclusive, many passengers do in fact use both systems and are willing to go out of their way to take the few slow connections that are still on the timetable. Migrant workers find HSR too expensive, but will use it when they have 'urgent business' *(jishi)*, a term that tends to get used for sudden sickness or other mostly negative sudden occurrences. College students and white-collar workers I talked to in both 2012 and 2014 only use HSR when the boss pays, and – if they can get tickets – prefer slow trains for personal trips.

Fig.3: Above – Regular rail station in Zhenjiang, Jiangsu (author's picture); Left – HSR station in Zhenjiang (author's picture)

Guizhou

In Guizhou, conversations about HSR remain in the realm of expectation and speculation, as the HSR connection is still under construction. In the geographically isolated region, infrastructure development is considered a game changer, and successfully completed projects tend to be major accomplishments *(zhengji)* for local officials. In 2012, Congjiang was filled with a 'finally it is our turn' sense of excitement about the coming train connection, without residents having a clear idea of how HSR differs from regular rail. For once, the mountainous corner of the minority zone would not be 'left behind', with residents clearly displaying what Zhang Li, describing massive urban restructuring in Kunming, calls "a double sense of lateness", a need to catch up with both the rest of the country and the rest of the world.[4] As a migrant worker who had just returned from Guangzhou explained, for most Congjiang residents, rail is something entirely new, a curiosity. As he put it: "I think everyone will take it, at least once. Young people especially really need this kind of excitement *(cijigan)*". Other residents, too, mentioned that they looked forward to watching the trains come by.

Up until today, traveling decisions in Guizhou are based as much on availability as on cost. Migrant workers who work in China's coastal areas – Congjiang's most experienced group of travellers – noted the estimated 300-400 RMB ticket price would be prohibitive to about 90% of the Congjiang population: locals living on an annual income of 2000-3000 RMB. However, since current long-distance bus prices are also high, the migrant workers themselves would consider using HSR to get to work in Guangzhou. White-collar workers in Shenzhen and Beijing also noted that a HSR connection would make it much easier to return to their Guizhou familial home during their short holidays.

Ironically, while HSR has not yet had the chance to increase mobility opportunities, it has already for some years reduced them, as the main local road out of Congjiang has deteriorated into an accumulation of dust and rocks due to the simultaneous construction of the HSR and a highway. While, in 2012, no one was pleased with the situation, there was a strong sense that the temporary discomforts are inevitable for future progress. After all, as I frequently heard, "All beginning is hard", and "things are already so much better than they used to be". As a Congjiang government accountant put it: "Everyone knows that what they promise and what actually happens are two very different things. ... But it is always better for something to happen than to be left out again".

At the same time, there were worries about the rail connection's long-term impact. Would the new passenger line (a preferred freight connection was cancelled in light of the national HSR strategy) really benefit the local economy? Or would it only be of use to the Shenzhen and Guangzhou companies that were starting to enter the region? As the line is scheduled to open in December 2014, these questions can now soon be revisited.

Normalized worries

In the summer of 2012, concerns about ticket price, station accessibility, and passenger safety – the 2011 Wenzhou train crash still fresh on people's minds – stood out in the answers of my respondents. I also frequently came across newly built unused stations and empty trains. In 2014, HSR has clearly made progress with regard to integrating itself into the transportation system. Ridership has increased, with 70% of seats filled in 2013, and is increasingly diverse.[5] However, many of the same concerns persist, including a negative impact on the deepening rich-poor gap and a perceived lack of efforts to make citizens stakeholders in the project.

Whether it is poor compensation for land and homes lost to HSR construction or corruption that trickles all the way down, the vast majority of respondents criticized the overall project. Many brought up the consequences of corruption for construction safety, noting that they would prefer to sacrifice some speed in exchange for safety guarantees. Their concerns were confirmed by a local employee at the No. 18 HSR construction company in Guizhou. She told me, "the hands that grab a little at every level so that we have no money left to buy quality materials to build tracks". However, faced as they are with a vast range of safety concerns (from food safety to collapsing bridges), these worries do not stop Chinese passengers from using HSR trains. On the contrary, for urban populations in more developed parts of the country, such as Jiangsu, HSR is currently in the process of rapid normalization. With only 1-4 years of history in most places, the way people assess the relationship between time, price and distance is changing already. As Chen Yulin, a transportation studies scholar at Southwestern Transportation University, put it: "I am finding that people are getting used to paying more for faster train services. After all, the former train ticket prices were exceptionally low. ... The value people place on saving time is shifting. I see this in my own life as well." Rising salaries, especially those of migrant workers – up 14.3% in 2013 – are also making HSR increasingly affordable. There is also talk of HSR eventually offering student discounts. In 2014, I found that the integration of HSR with other transportation modes had improved due to expanding urban subway systems; however, while this process is prioritized in larger cities, smaller cities do not see the same level of integration.

This unequal development runs throughout the strategy's implementation. While the relationship between spatial change and social development has mostly been researched in the field of urban development, my fieldwork shows that transportation reform initiatives, such as HSR, can also serve as an example of the increasing "spatialization of class" taking place all over today's China.[6] In doing so, it reinforces existing inequalities that often follow rural-urban divides. Recent studies in the field of transportation science confirm this. A 2014 study of accessibility indicators in 337 Chinese cities found that HSR most benefits cities with more than 3 million residents located 50 km or less from HSR stations. The authors conclude that a more developed HSR network will eventually result in increased balance, but "regional disparities ... will still be greater than before the construction of the HSR".[7]

Taking the train in China today makes this extremely visible: either you belong at an old-style station, with its broken plastic chairs, variety of snacks and signs with Hu Jintao's 'Eight Honours and Eight Shames', or you have made it onto the Harmony Express, for which you wait on grey metal seats whilst looking at advertisements for suburban 'paradise-style' apartments. This separation of social groups in different physical realms of travel seems to be an intentional, or at least inevitable, part of HSR's branding.

Conclusion

Local experiences of China's HSR development display a variety of opinions on the (perceived) need for HSR, both before and after the opening of HSR lines. They stand in contrast to the "centralizing aesthetic" the top-down strategy that tends to result in an all-encompassing plan that disregards detail and internal diversity.[8] A closer look reveals that, while HSR might be becoming increasingly normal for those who can afford it, the rapid replacement of slow trains with bullet trains is also reinforcing and even deepening social inequalities. In this and many other ways, HSR development in China, seemingly primarily an issue of spatial restructuring, extends into cultural, social, and ideological territory, deserving of critical attention beyond the more technical fields of transportation studies and engineering.

Tabitha Speelman graduated with an MA in Chinese Studies from Leiden University in 2013 and was an IIAS fellow from August-October 2014. She is currently based in China, working as a correspondent for Dutch daily newspaper Trouw (tabitha.speelman@gmail.com).

References

1 Although 'train' *(huoche)*, is an overarching term for everything that rides on tracks, in China regular rail and high-speed rail tend to be experienced as two different modes of transportation. I therefore distinguish between 'HSR (track/rail)' *(gaotie)* and 'regular rail' for all other types of trains. HSR, usually referring to any commercial train service with an average speed of 200km/h or higher (UIC 2012). For more information on different types of trains, see Seat 61: www.seat61.com/China.htm

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