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Grid reaction: comparing mobility restrictions during COVID-19 and SARS

Biao Xiang[1]

Abstract

The Chinese government reacted to the COVID-19 pandemic by imposing blanket monitoring over the entire population through 'grids' of residential communities. This measure of securitizing mobilities is new as compared to what the government did during the SARS outbreak in 2003. This is due to changes in patterns of mobility and in governance.

Keywords

grid reaction, chain reaction, COVID-19, SARS, China

Theme

Securitizing Mobility

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[1] Max Planck Institute for Social Anthropology, Germany. xiang@eth.mpg.de. An earlier version of this article, titled 'From Chain Reactions to Grid Reactions', was published in *Somatosphere* on 8 March 2020. This version is edited in language but is not revised in content. The analysis is based on the observation about what happened in China in January and February 2020.

Compared to the severe acute respiratory syndrome (SARS) outbreak in 2003, the outbreak of the COVID-19 pandemic in China was distinct, insofar as the country's population mobility in 2020 is not only unprecedentedly prevalent and frequent, but also, has become a prerequisite for the economy and many people's livelihoods. The circulation of goods and the movement of people are arguably more important today than assembly lines in factories in sustaining economic growth.

The meaning of mobility has changed

The meaning of mobility has changed, as has its relation to public health. Striving to contain the SARS virus in 2003, the Chinese government singled out rural-urban migrants as *the* priority target. At least eight urgent directives about migrants were issued by the central government and 16 by the government of Beijing municipality in April and May 2003. In 2020, however, migrant workers are hardly mentioned. Most measures fighting the COVID-19 pandemic target the entire population.

There were justifiable reasons why the government targeted migrants in 2003. Rural-urban migrants contributed 14.81% of all SARS cases at the peak of the epidemic[2]. An estimated 12.6% of all migrants nationwide left cities in the wake of the outbreak[3] and they became the main source of rural infections. In Hebei province in North China, for instance, 90% of SARS victims were returned migrants.[4] A Beijing Academy of Social Sciences researcher commented:

> 'The spread of the epidemic caused by the fleeing of migrants from Beijing due to the outbreak, and the explosive growth of SARS cases inside of Beijing caused by the concentration of migrants, for the first time brings the issue of migrants' health to public attention in an extremely extraordinary way.'[5]

Chain reactions

How exactly was the SARS epidemic related to population mobility? My fieldwork at that time suggests that despite narratives put forth in media and policy documents, few migrants left the city because of health concerns. [6] Migrants were much less sensitive to the epidemic threat than their urban middle-class counterparts. The mobility of migrants was a result of a *chain reaction*. In late April 2003, after a two-month cover-up, and under strong pressure from the international community and domestic urban residents, the Chinese government acknowledged the epidemic as a national emergency. Public entertainment venues and construction sites were considered high-risk areas and were shut down overnight. Beijing closed about 70% of all restaurants in May,[7] which put up to

[2] Ministry of Health, China. Quezhen binli an zhiye fenbu ('Distribution of confirmed cases by occupation'). *Chuanranxing Feidianxing Feiyan Yiqing Dili Xinxi Xitong (Geographic Information System on Infectious Atypical Pneumonia).* Available online at: http:168.160.224.167/sarsmap. Last accessed 16 July 2003.
[3] Agriculture Survey Team, National Bureau of Statistics, cited in Ma Xiaohe. 2003. Jiji caiqu youxiao cuoshi fangzhi feidian zaocheng nongmin shouru xiahua ('Take proactive measures to prevent farmers' income loss'). *Research Report Series of Macro Economic Research Academy,* Economic Development Committee of China. Available online at: http://www.amr.gov.cn/macro_economic/index.jsp?subframeid=1. Last accessed 6 January 2004.
[4] Asahi Shimbun. 17 June 2003. *SARS outbreak in Hebei*.
[5] Feng, Xiaoying. 2003. Feidian yu liudong renkou guanli moshi gaige lujing de xuanze (SARS and the choice of reform paths for migrant population management model). *Chengshi Wenti (Urban Issues)* 4(114): 9–12.
[6] Xiang, Biao. 2003. SARS and migrant workers in China. *Asian and Pacific Migration Journal* 12(4): 467-499.
[7] Yang Bin. 2003. Feidian kenan daozhi Beijing canyinye 5000 jia chuju ('Atypical pneumonia may force 5,000 restaurants out of business'). *Sinanews*. 4 June 2003.

237,300 migrant jobs in jeopardy.[8] Jobless, migrants had to go home. They became the most affected victims of the virus, economic disruption, and social stigma. *Chain reaction* means that the connection between the epidemic and migration was mediated by social stratification.[9]

Grid reactions

In comparison, the COVID-19 pandemic has triggered *grid reactions*. Residential communities, districts, cities and even entire provinces act as grids to impose blanket surveillance over all the residents, minimize mobilities, and isolate themselves. Grid reactions refer to a method of disease control which divides the society into clearly demarcated, mutually exclusive but collectively exhaustive spatial blocks. Each block actively controls its residents' mobilities and polices visitors' movements. In emergency times, each block may divide itself into smaller units in order to reinforce control.

Grid reactions in China have their institutional basis. In the Chinese administrative system, a grid is a cluster of households, ranging from 50 in the countryside to 1,000 in cities. Grid managers (normally volunteers) and grid heads (cadres who receive state salaries) make sure that rubbish is collected on time, cars are parked properly, and no political demonstration takes place. During the outbreak, grid managers visit door to door to check everyone's temperature, hand out passes which allow one person per household to leave home twice a week, and, in the case of collective quarantine, deliver food to the doorstep of all families three times a day.

A grid reaction, just like the COVID-19 virus itself, is highly contagious. Once the central government declared the war on the virus, localities across the nation adopted strict measures, even in remote places with no reported infections. In no time, the entire nation put itself under gridlock. *Grid reaction* is not about community grids only; it refers to an all-out, undifferentiated, war-like strategy. Turning entire hospitals into COVID wards and building barricades around villages are part of the grid reaction, too.

Hyper-mobility

Total (im)mobilization is regarded as necessary partly because of unprecedented mobility levels in China. Over 3.6 billion Chinese travelled by train and 660 million by air in 2019, compared to 0.95 billion and 87 million respectively in 2003; the number of private motor vehicles increased from 13 million in 2003 to 206 million[10].

Mobility has increased also because work is casualized. Between 2008 and 2016, the informal sector generated 10 million jobs a year, while stable employment in state-owned enterprises and foreign-owned enterprises increased much more slowly and, in fact shrank, by nearly 2 million

[8] My estimate based on Xinhua News Agency. 19 June 2003. Diaocha xianshi: zhonggou yin feidian fanxiang nongming bacheng reng zai dengdai guangwang ('Survey shows 80% of returned migrants due to atypical pneumonia still wait and see').

[9] Xiang, Biao. 2003.

[10] CEIC Data. 2020. China: Transport and Telecommunication. Available online at: https://www.ceicdata.com/en/country/china. Last accessed 25 February 2020.

between 2015 and 2016.[11] The labour dispatch service[12] was legalized in 2008,[13] and by 2011 it accounted for 13.1% of all the jobs nationwide.[14] Dispatch agencies move workers from one project site to another. Many others, apart from rural-urban migrants, are now moving between places and jobs. This also means that the government can no longer rely on employers as a mediator in monitoring employees. Feasible measures have to target the population in entirety.

Grid reaction can be deeply disruptive

Firstly, just like chain reaction, grid reaction induced unintended movements that may further spread the virus. The Wuhan lockdown triggered flights from the city, which is said to have turned Wenzhou into an epicentre outside of Hubei.[15] Inside Hubei, the shortage of medical resources resulting from the lockdown compelled patients to move from hospital to hospital seeking care, often on foot because of the suspension of transport. As grids are based on physical boundaries, grid reaction has also fuelled alarming place-based stigma. Persons originally from infected places, regardless of how long they had been away, were locked in at home by neighbours and were even attacked online. Reports also show rising conflicts between residents and officials due to forced quarantine.

Disruptions in the economy are the most obvious. As China's economy in 2020 is four times that of 2003—and, more importantly, plays a central role in global supply chains—any glitch in circulation has far-reaching consequences. But it must be emphasized that those who rely on mobility for their livelihood may suffer the most. Taxi drivers, delivery workers, logistics staff and service sectors cannot work without moving, and will have no customers without others on the move. Many of them live on daily wages. Standing still for a prolonged period could be devastating.

Thus, a catch-22 scenario: prevalent mobility leaves the government with few options other than a grid reaction, but at the same time it renders such response unbearably disruptive. When Chinese society becomes more mobile, responses to risks appear cruder and clumsier. How can an economy based heavily around mobility be organized in a more sustainable and equitable matter? This is a fundamental challenge for researchers and policymakers in the coming decades.

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[11] Qian, Jiwei. 2020. Under-coverage of Social Insurance in China's Informal Economy. *EAI Commentary* 9: 8. Available online at: https://research.nus.edu.sg/eai/wp-content/uploads/sites/2/2020/06/EAIC-09-20200203-2.pdf. Last accessed 25 February 2020.

[12] According to the International Labour Organization, 'labour dispatch' refers to 'the practice of hiring employees through an employment service agency as opposed to direct employment'. Available online at: https://www.ilo.org/wcmsp5/groups/public/---ed_dialogue/---sector/documents/publication/wcms_246921.pdf. Last access 3 January 2021.

[13] Dezan Shira & Associates. 2018. Labor Dispatch in China: Definition, Scope, and Limit. *China Briefing*. 19 March 2018. Available online at: https://www.china-briefing.com/news/labor-dispatch-in-china-definition-scope-and-limit/. Last accessed 25 February 2020.

[14] National Federation of Trade Unions Research Team on Labor Dispatch. 2012. Dangqian woguo laowu paiqian yonggong dizwei diaocha ('A survey on the current employment status of labor dispatch in China). *Zhongguo Laodong (China Labour)* 5: 35.

[15] Yao Gaoyuan (Mayor of Wenzhou, Zhejiang province). 2020. Interviewed for *1 + 1 column*, *China Central TV News*. 2 February 2020. Available online at: https://www.youtube.com/watch?v=aHh2jiScjIE. Last accessed on 25 February 2020.