

Handling emergency in Mega-cities: a case of south China under snow storm in 2008

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Abstract:

Agglomeration of huge number of population and resources give mega-cities both the opportunity to develop while at the same time the risk of facing social turbulences. When tested with unusual occasion, e.g. climate disaster or public hygiene crisis, mega-cities were a bit different from normal model in handling such problems. On one hand, mega-cities have to cope with a larger number of population which must be well organized to prevent humanity crisis; on the other hand, mega-cities are able to mobilize more manpower and material resources than small and medium size cities, what's more, it's also able to utilize new techniques to enhance its efficiency. The severe snow storm that attacked south China in January and February 2008 could be taken as a typical case. Based on analysis of the process, this paper reveals how Mega-cities would handle emergencies.

1, Introduction

On Feb. 8 the journal Science published a special issue on urban questions, among which the scale of city is mentioned several times. It is interesting to note that some researchers are claiming for more attention to be paid on small and medium size cities for at least two reasons (Mark R. Montgomery, 2008). First, they are prevailing in number compared to big or mega-cities; second, normally the administrators of such cities are less experienced dealing with urban problems. Hence, in the respect of facing urban problems in general, small and medium size cities deserve more effort. However, this argument might have missed a basic fact that big or mega-cities could provide reference to small and medium size ones, but it does not work the reverse way. There is few, if not any, guideline to mega-cities problems, for they are unprecedented either in demographical or spatial means.

Another argument discriminates mega-cities from global cities¹. Despite much common in morphology of huge agglomeration of population and resources, urbanized regions might be different in essence. It can be a global city playing active roles in globalizing market, like Hong Kong; or a mega-city which is quite passive and has little global significance. In another word, their role and position in world city system is totally different. By and large, global cities are dominating while mega-cities are subordinate. Yet, since cities all around the world have got more and more involved in a global market, the problem of mega-cities should be taken as a trans-national question rather than local or national. This characteristic of mega-

¹ Refer to the *Urban Planet Background Paper*

cities brings the tension of being both local and international to a place of academic significance, and would transcend the limit of national border.

From the second half of January to the beginning of February 2008, a severe freezing rain and snow storm attacked central and south China. Unfortunately, it was just happened at the time around Chinese New Year. Every railway station, long-route coach station and airport is full of passengers before and after the new year. The 'Chun-Yun' (spring festival transportation), which normally involves more than 150 million people, was often recognized as the largest population movement in present world.

The unusual climate disaster brought chaos to many southern China cities where the people are not used to have heavy snow and thick ice. Several days after the heavy snow and freezing rain, public transportation failed into paralyze. Electronic railways were cut when the power line was covered with thick ice and was too dangerous to work. In some areas the power line poles were dragged down by the iced lines, which were designed under normal standard, could not bear the unusual weight. High ways were no better: one of the main national express ways connecting Beijing with Zhuhai (next to Macau and to the south of Guangzhou) was covered with thick ice. Thousands of trucks, coaches and cars were trapped on the way and in the air.

2, The situation of Guangzhou

Guangzhou is located in the northwest of the Pearl River Delta, one of the most industrialized and export-oriented manufactory bases in China. From toys to textile, or sport shoes to semi-conductive products, this region is tightly linked to the world market. Once there was a rumor said if there was a traffic accident on the highway from Shanghai to Suzhou, both industrial cities in Yangtze River delta, the price of electronic accessories in world market might fluctuate for a while. It's also appropriate to apply that saying to Pearl River Delta. The tiny difference might be the cities connected by high-speed railway and highways: Hong Kong, Shenzhen, Dongguan and Guangzhou.

Long being recognized as the 'window' and 'laboratory' of Chinese reform and open policy, the Pearl River Delta got fast developed in the past 3 decades. Cities like Shenzhen and Dongguan arouse from small towns to big cities, which host millions of inhabitants. A large proportion of the population is mechanic increase, which means the immigrant from other places. According to the 2000 national census, Shenzhen has a population of 9 million with 'floating population' included, whereas Guangzhou is one million less but with 'floating population' excluded. The two together with Dongguan, mostly a city of migrant 'floating population' and a sleeping city of commuters to the former two, have a population at around 25 million. Here in this paper Guangzhou and Shenzhen are both taken as mega-cities.

In order to link the Pearl River Delta with the central and north, two stem railways were built and modernized to run electronic trains. One is from Beijing to Kowloon, crossing eastern provinces, and stop at Dongguan, Shenzhen before end in the peninsular of Hong Kong. Another one also departs from Beijing but penetrates central provinces before arrive in Guangzhou. Given the reality that eastern provinces are better developed, most migrant workers from central provinces prefer to choose Guangzhou as their transfer station when they come and vice versa. In this case, the railway station of Guangzhou is not only the transportation center for migrant workers under its jurisdiction but also those working in neighboring cities. When the climate attack happened, the railway system was overloaded. The waiting lounges which were designed to accommodate regular number of passengers suddenly filled with several folders of its capacity. When the trains were delayed at Guangzhou station, many people have to wait on the square in front of the station. The over-crowded square became somehow chaos caused by both the weather and administrative decisions.

3, Mega-cities in emergency

The snow storm began on Jan. 12. But it attracted the attention of neither the government nor public until the 25th. The Beijing-Guangzhou railway may be one of the most busy and heavily loaded commercial lines in the world. Not after the train N580 departed from Guangzhou for Shaoyang got stopped by the fail of the power line did the catastrophe was realized. Hours after the accident, more trains had to stop in Hunan province waiting for the power line to recover, whereas many trains in Guangzhou were delayed. However, passengers continued to come to the railway station and many have to wait outside in rainy and freezing Chinese winter air. At the same time, the ice-blocked highway connecting Beijing and Zhuhai was strictly forbidden for any traffic. That news soon made those who might have chosen coaches turn to railway, which is more reliable and relatively cheaper in price.

Price determined the choice. Normally the price of a train ticket would be one fifth of a flight ticket, or half of the coach's. Even though many passengers have to buy tickets from brokers with a higher price than printed on the ticket, it's still attractive to many with a low income. For them, though it's not comfort, overcrowded, and usually not that clean, train is after all safe, reliable, and perhaps more important, cheap. As widely recognized, income is related to the accessibility of transporting means. People with higher income would tend to choose high cost travel meanings, e.g. plane. Despite as many as 14 airports were closed at the peak of the storm and thousands of passengers were stuck in Guangzhou Intl. Airport when the runway was frozen, the situation had never being as worse as the railway station. What's more, passengers at airport and railway station have absolutely different situation when get stuck. Air-travelers were allocated to hotels ranked with stars and some get refunded for the delay, while when interviewed by a journalist why he won't leave the queue in front of railway station for a meal provided by the government for free, the middle-aged migrant laborer said: if I left for the meal, someone behind me would take my position which I have hold for more than 24 hours. Despite the same driven motif of most passengers, that is going back home for reunion, the difference in income separated them spatially and socially.

Except for a few strategic commodities, like fuel, which was partly controlled by the government for a fixed price, many necessities, especially food, increased incredibly. A bowl of instant noodles would cost 80 CNY (approximately 8 Euro) on the highway in Hunan province and also on those trains which stopping somewhere far from city or town. Many people were in severe lack of food and clothes.

If there was any revolutionary change in the way of communication and organization in present day China, that must be internet. It's estimated that China is the second of population using internet, just next to the US. Internet changed real life society in China, and it was proved to be the most efficient, swift and convenient network. In fact, before the government had noticed how serious the situation was, tens of thousands of 'net worms', as nominated by themselves, had posted traffic information on websites, including weather reports². As soon as the train N580 got stuck by the fail of railway power system, this news was brought to internet. From then on, websites like www.tianya.cn became the pivot of all kinds of information, some of the reports and discussions were even quoted by traditional media like Reuters and BBC, not to say local media.

One example might be proper to be quoted here. On Jan.28, a man in Guangzhou posted a call for voluntary aids to rescue the passengers stuck on Beijing-Zhuhai highway³. Not long after, that article got tens of thousands clicks and soon a team was organized with 6 people from Guangzhou and Shenzhen. One Jeep and 2 cars were organized to form a 'rescue team'

² See: <http://cache.tianya.cn/publicforum/content/free/1/1108357.shtml>, or <http://cache.tianya.cn/publicforum/content/free/1/1117264.shtml>

³ See: <http://cache.tianya.cn/publicforum/content/free/1/1111063.shtml>

and set out to the freezing and dangerous highway in the dawn of the 30th. With the help of online business and payment, this team not only kept in contact with people concerning this brave effort, but also got donations from all over the country. As long as one has a bank card from one of the Chinese banks, they can buy and pay to online shops and the goods will be delivered to the base of the volunteer team. In fact many did it with all kinds of efforts. Eventually the team made a second delivery with trucks of food, paper pants, medicines, water, clothes, etc. to the frozen highway. China was once taken as a country lacking voluntary spirit (K. Wittvogel, 1981); internet called it alive and made it work.

4, Social control and its implications

On the same website mentioned above, a lot of discussions were devoted to the role of government and leaders. Prime Minister Wen Jibao is one of the focuses. He visited cities badly attacked by the catastrophe as soon as the government began to react and apologized face to face to passengers in railway stations. His presence made him welcomed according to news reports. However, he didn't escape from accuses in online forums.

Nevertheless, the 'net worms' did not stop at being critical to government, but rather extend to rethink the way of social control and governance⁴. Many people compared it with the Katrina hurricane in Louisiana, 2005, in which the US government was also blamed for slow reaction and bad organization. Here in this paper, to stick on the governance of mega-cities, it's might be appropriate to focus on the square of Guangzhou railway station.

When more and more passengers, mostly migrant laborers, came to the square with the hope to get on train, the square became the hot point of the whole campaign against snow storm. On one hand, many workers had finished their work and ended the contract with the employer as well as landlord. Many of them brought everything they own to the station just because it's the end of the yearly circle: they will go back for a home reunion and then leave again for cities to find a new job. On the other hand, the government of Guangzhou municipality might have done their best to organize the mass population. They provide the passengers with free food, medicine and shelter them in temporary camps. What's more, for the sake of safety, the government deployed paramilitary to separate the crowding population into groups, so that they won't be out of control. This strategy worked indeed. Despite the tragic lose of 2 lives in the unprecedented crowd; the dangerous situation didn't turn into a mass panic which would result in more tragedies. By the Feb. 6th, the day of Chinese New Year's Eve, Guangzhou railway station resumed to its regular pace after the recovery of electronic railway power lines.

This storm tested the vulnerabilities of Chinese society after 30 years of fast economic development. One of these aspects is that mega-cities work in a different way with global cities. Not far from Guangzhou and just next to Shenzhen, Hong Kong had few to do with the climate disaster except for a bit rise in food price. It was those migrant workers revealed the truth of development in Pearl River Delta, if not the whole China. The combination of hundreds of thousands workers for a global market, self-organized well-being citizens, with the condemned governance, yet many dedicating and hard working bureaucrats, could only be understood in the context of Chinese mega-cities.

5, Conclusion

Scholars interesting in Chinese urban development have long been facing a question: to which extent could the Chinese experience be transferable to other developing countries. Some asserts that based on similarities but limited with peculiarities, the Chinese experience could be worthy of reference (Friedmann, 2006).

⁴ See: <http://cache.tianya.cn/publicforum/content/free/1/1121617.shtml>

In a conference on the disaster, the mayor of Guangzhou municipalities said, 'The situation at the square of (Guangzhou) railway station didn't deteriorate. It's quite exceptional, but not inevitable.'⁵ Perhaps it could be partly attribute to the experience gained in combating with SARS in 2003. Nevertheless, this case is still a good example to handle emergency in Mega-cities, especially in developing world.

⁵ See: http://news.xinhuanet.com/society/2008-02/03/content_7556692.htm