Impressions from China

Tim Pharoah laments the effects on the public realm of fast and frenzied urbanisation



China's population has doubled in 50 years to reach 1.4 billion. Of much greater importance from a planning perspective is the fact that the urban population has grown in that time from 150 million to almost 800 million, the proportion rising from 20 per cent to over 60 per cent. This scale and pace of urban growth is unmatched in the Western world at any time in history. The total urban growth in 19th century England was no more than that experienced in Shanghai in the past decade alone.

China is building fast to accommodate the urban hordes, and to cater for their travel. In Shanghai the number of metro lines has gone from just one to 15 in the past 20 years. It is a similar story in many cities: there are now more than 20 cities with over five million population, of which 15 cities have over 10 million inhabitants.

So what is frenzied? The word might apply to energetic children, who tear around the playground simply because they can, without much thought to any particular purpose or consequence. Similarly, much of what is being built in China appears to be without a guiding vision, and with a disregard for the longer term consequences. In children such abandon is delightful. In city building it can be a disaster.

Almost any judgement about Chinese cities will be true in at least one place, because it is such a vast and populous country with much diversity, but this article explores some generic aspects of contemporary urban transport and development in China and their urban design outcomes.

HIGH AND WIDE

Two features immediately stand out: for urban development, it is concentrations of tall blocks and towers; for transport, wide roads are the dominant element. How these two features play out in terms of urban density is key to understanding how modern Chinese cities work.

The vision of modern China recalls 1950s North America, rather than 21st century Europe, but the story behind the vision is rather different. In the US, high density had been a consequence of high levels of (mostly streetcar) transit. The insertion of high capacity roads and the switch to the private automobile prompted sprawl and low density growth. In China the growth is occurring with an assumed goal of motorisation from the start. High density is achieved within residential enclaves, but gross densities are very much lower because of the large size and frequency of the road network. The volumes of travel are also exacerbated by the way that activities are configured.

The rise of car use has been inexorable in 21st century China. But just as noticeable is the flooding of city streets with electric motor scooters, which now seem almost as numerous as the humble bicycle once was. This has created a new set of challenges in managing the street environment.

GATED COMPOUNDS

Much development occurs in gated enclaves, very often of some considerable size. Limited entry and exit points mean that connectivity between areas is difficult. One can find oneself 100m or so away from local shops and facilities, in

1 Barriers impede access to the Zhengyangmen Museum and despoil the streetscape in a major tourist area near the Forbidden City







The impermeability created by the gated compounds is exacerbated further by the frequent inability to cross the street in convenient locations

terms of crow-fly distance, but the lack of permeability between enclaves means that considerably longer journey distances are involved. It is common therefore for people to use motorised transport to undertake local journeys, which in a permeable European city would involve a short walk.

The compounds themselves can have both positive and negative features. The concept has historical roots, with the Forbidden City offering a well-known example. The contemporary compounds also seem to be aimed at protection and the creation of defensible space. Whether such fear is justified in a country with a relatively low crime rate in public spaces, is hard for an outsider to judge. The creation of a quality environment within the compound is by no means guaranteed. Attractive and safe residential environments can be created, and have been, certainly in the more up-market developments. Such examples usually involve parking provided underground. But the potential for safe play spaces or attractive gardens is destroyed when the gated area is simply a car-park.

STREETS OR HIGHWAYS?

Any street with a significant role in providing connectivity will have (to European eyes) extremely generous widths. Inevitably this has a huge impact on the townscape, characterised perhaps as canyons with fast flowing rivers of movement. Unlike natural canyons, of course, the rivers flow in both directions. This affects street life, and the design and management of local access.

BARRIERS, BARRIERS AND MORE BARRIERS

The UK had a love affair with pedestrian barriers in the latter half of the 20th century, but it was a mere fling compared to that which has unfolded in China. It seems that people there cannot 2 Zhengzhou City today 3 Dan Ryan Expressway, Chicago 1960s

4 Zhengzhou: gated compound with car free interior

be expected or trusted to observe any traffic rules. In order to achieve any sort of order, barriers are needed to keep opposing flows apart: local and through flows, public and private vehicles, two and four wheeled vehicles, and pedestrians and any sort of vehicles. The result is a horrendous degradation of the streetscape. Barriers are ubiquitous even in highest foreign currency-earning tourist areas, for example outside the gate to the Forbidden City.

Equally hard to accept is the impact of these barriers on local movement. The impermeability of the gated compounds is exacerbated further by the frequent inability to cross the street in convenient locations. If, as is common, the gates to compounds are located mid-block, and barriers run from junction to junction, a walk between compounds involves a major detour. In addition, the sheer width of the street and the difficulty of traversing it means that it is not surprising to find that people choose to drive their car or scooter to make even the most local of journeys. For the same reason, very often vehicle users, especially two-wheeled vehicles, will be ridden in the opposite direction to the intended flow, to avoid having to cross to the correct side.





There may be some potential benefit in the wide street dimensions in the future for reallocating space from vehicles to pedestrians, cyclists or public space. Some reallocation has already occurred in some cities, for example in order to insert a segregated bus rapid system (BRT), but the impact on local access is likely to remain a problem.

EDGE CONDITIONS

The liveability of streets depends not only on the ease of crossing and re-crossing them, but also on the conditions for pedestrians to engage in activities or simple perambulation, which must usually, for practicality and convenience, take place at the edge of the street adjacent to building frontages. However in Chinese cities, it is these edge conditions that create a poor quality of street life. The parking of motor scooters and bicycles on the footpath can be chaotic, obstructing movement on foot, and taking space that should contribute to the quality the public realm.

To western sensibilities, the undisciplined movement and use of the side or edge spaces creates a potentially unsafe environment, and limits the potential for sojourn. Social interaction, it seems, takes places almost exclusively indoors.

TOO MANY CARS, TOO LITTLE TRANSIT

Zhengzhou, the capital of Henan Province, has become a major city almost overnight, and provides a useful example of how major expansion has been handled. Public transport so far has lagged behind population growth, but the building of big roads has not. Traffic and parking have become the dominant features of the urban realm. BRT has mitigated the transport situation to some extent, impacting visibly on the design of the major road network, but to release more space for development and public realm, it is necessary to provide higher capacity and higher speed rail transit.

So far Zhengzhou has only two metro lines, but a further 12 lines are currently under construction. These could open opportunities for a major reduction in car use, but it does not seem to be the aspiration, and in any case such a goal is being undermined by an equally vigorous development of the major road network. A new CBD has been built, remote from the city centre, which has some impressive spaces and buildings. The image of this commercial and cultural area, however, is promoted as a motorway city rather than as an attractive destination.



CONCLUSION

This article is based on recent visits to central China, including Beijing and Zhengzhou. My overriding observation, apart from being in awe at the vastness of the place and the apparent ability of people to carve out their lives in hostile environments, concerns the type of future to which Chinese cities are heading. The aspiration seems to be to create transport systems and urban environments based on individual motorisation, and in this way reflects the aspirations seen in European cities more than four decades ago. What is seen as modernity in China today is to many European eyes an ill-considered vision that is neither attractive nor sustainable. A change of direction is needed, but undoing the anti-urban infrastructure that has already been created will be a daunting task. Changing mindsets may prove to be the most difficult challenge of all.

Tim Pharoah

5 Zhengzhou city centre with nowhere to walk6 Zhengzhou gated compound dominated

by parking.
All above images by the author
7 Zhengzhou: promotional image for the new CBD as a motorway city