How crucial are the mutual interactions of emerging e-mobility and the transformation of Chinese middle classes for the future of societies and mobilities?

That film was recorded in early 2015, some of the statements are not clearly out-of-date. Indeed, the main point of the video, relating mobility transition and the middle class, still stands though – clearer than never.

How do we transform systems of urban mobility to ecologically sustainable and socially equitable models? This is a key global challenge today. And with a massive process of urbanization just beginning across large parts of Asia and Africa, the stakes are even higher. And, while the Chinese case includes important programmes of public transport, it is arguably in the decarbonisation of private transport through the electric vehicle (EV) that China could be most important.

The EV is treated in China as a singular opportunity to take global technological leadership in a key industry of the 21st century. Today I want to focus on another aspect that is often overlooked: namely the ways in which e-mobility may interact with changing forms of social stratification and inequalities. A key socio-economic issue for the electric vehicle so far has proven to be demand. Sales of EVs grew significantly in 2014 and seem to be up again in 2015. But they remain very small in comparison with sales of conventional ICE cars* (*Internal Combustion Engine), let alone the total numbers of cars on China's roads. An important part of this problem concerns who is this demand?

An ongoing process with high stakes: the co-definition of the Chinese middle class and e-mobility

We do not have to look hard today to find discussion on the rising Chinese middle class; whether its Western journalism, and especially the business press, discussing the next billion customers, who will supposedly save capitalism from stagnation, or an equally vibrant discussion about changing society in China with its own set of hopes for a better future or 'China Dream'. But there is also a growing critical literature too, which shows just how hard it is to give empirical substance to many of the arguments about a massive and genuinely 'middle' strata of Chinese society that fills even some, let alone most, of the criteria we traditionally associate with 'middle class' in the global North. Against both of these positions, though, it is much more productive to think about the 'middle class' as a term that is actually undergoing a major redefinition - so that we don't really know what it means yet. Rather it is doing a lot of socio-political work, as it were, as a key term in the ongoing performance of a major process of socio-
political change in contemporary China: with, very probably, global significance.

This, of course, depends upon everyone using the term as if its meaning is, in fact, obvious and fairly stable, especially where we use it in everyday discussion as social agents - perhaps even about ourselves - rather than as academic observers. Only in this way does approvingly (or disapprovingly) designating something 'middle class' or not carry any weight. But in fact the meaning of 'middle class', and perhaps especially in China, remains largely open; an empty signifier, but one that is being actively filled. This involves the everyday competition amongst agents seeking to establish themselves as 'unquestionably' middle-class in the eyes of others, and of themselves, as a mark of what is hoped to be relatively secure success in an otherwise hyper-competitive society. With this in mind, we can return to the question of mobility and e-mobility transition. Mobility, and personalized choices in mobility, are key elements of the differential enabling and disabling of class. This is unquestionably in part a matter of the ease of access to movement and of the role, extent and form of mobility in one's life; and equally of one's right to immobility. But it is also a matter of the social, cultural and even political enabling associated with the forms of mobility of different class positions. Cars, for instance, are amongst the most expensive and conspicuous forms of consumerist display. But the opposite is also the case: where mobility is not a simple matter of getting most efficiently from A to B but a complex, systemic and social phenomenon, the ongoing emergence of class - and especially the all-important consumer demand of the 'middle class' - is likely to prove crucial in shaping low-carbon mobility innovations that have an impact at a systemic level.

So, in short, the meaning of e-mobility and Chinese middle class are being co-produced, produced together and in parallel: with major significance in both respects, and their respective repercussions, elsewhere in the world. This means, though, that we can also explore how each is affecting the other; and some of the important issues this raises about future mobilities and future societies. Let's have a quick think about some of these issues.

**Class is affecting e-mobility transition**

First, then, regarding how 'class' is affecting attempts at e-mobility transition. As mentioned above, perhaps the biggest barrier to attempts to get mass adoption of the EV is the issue of lack of demand. This is clearly not just a matter of price - since significant subsidies and other major perks (like privileged access to licence plates) have made no real dent on this problem. Nor is it just a matter of inadequate charging infrastructures, though of course these matter profoundly. In China, particularly, there is also the problem of most EV models being unexciting, 'normal' cars that come with no element of display of exceptional personal success - while still being relatively expensive. As the now-famous catchphrase goes, uttered by a contestant on a dating game show, many Chinese would rather 'cry in the back of a BMW than laugh on the back of a bicycle'.

In the context of a society that is increasingly individualized and, as such, increasingly competitive in materialistic terms, mobility choices become a key issue of status display; including even in the all-important matter of attraction of a life partner. By contrast, then, for all their sales success and perhaps even because of it, the proliferating E2Ws are seen by many aspirational Chinese as irredeemably associated with low personal quality and social status. Yet, this picture is not uncontested. While it is generally the case that to be seen in or on a 'green' vehicle itself carries no clear mark of status, what my colleague Dennis Zuev calls a 'digital class' of young urban people and even self-styled 'entrepreneurs', perhaps with experience of living, work and/or studying overseas, are increasingly willing to experiment with new forms of urban mobility that break away from the model of the big, foreign, luxury and privately-owned gas guzzler. For instance, experiments with car-sharing, perhaps using a fleet of smaller and/or electric vehicles, are emerging in China's biggest cities, with just such a clientele. This thus signals not just changing priorities vis-à-vis mobility, but also an opening up and destabilization of the relevant dimensions and qualities of qualifying as 'middle class'.

So it is as marks of distinction and relatively exclusive belonging - in other words, as marks of 'class'.
specifically - that Chinese urbanites are experimenting, or refusing to experiment, with e-mobility. And so this ongoing process of defining anew the substantive meanings and signs of being ‘middle class’ is essentially contested - hence more accurately at present a matter of multiple contending middle classes. This is perhaps especially clear about the E2W: for some, an unthinkable mobility choice as irredeemably associated with low status or quality. But for others, maybe even successful urban professionals, they are efficient forms of mobility, perhaps alongside continued ownership of a car for other, longer journeys or those involving the transport of bigger loads, like the weekly shop. In one example encountered in our research, some higher-ranking officials in one major city now take their children to school by e-bike, as it saves an hour sat in traffic, but then they meet expectations by arriving at work in the big, black car. So a relatively dynamic landscape of ‘class’ is impacting on the emerging forms of e-mobility innovation in China. But the opposite also matters profoundly. How is e-mobility transition affecting ‘class’ and associated forms of social stratification and systemic differential privilege in 21st century global capitalism?

E-mobility is affecting class stratification

Mobility around Chinese cities is increasingly associated with issues of frustration and even risk, with benefits and costs that are differentially distributed. This includes not just important but seemingly abstract issues of urban transport systems and emissions - but also and more importantly, in terms of their immediacy in conditioning individual’s mobility choices: air pollution; gridlocked congestion; road safety; commuting time, distances and conditions and the flipside of issues of social isolation, health and well-being; and even parking.

This is also true of emerging forms of e-mobility, as the key issue of charging exemplifies. Personal charging infrastructures at home are feasible for only a small elite with personal parking spaces or garages. Conversely, there are no formal infrastructures for charging E2Ws, leading to makeshift solutions such as electric cables passing outside from the owner’s upper storey windows down to street level, perhaps to the bicycle sheds that are the legacy from a former age of ubiquitous bicycle use. In one recent case in the major city of Zhengzhou, this caused a terrible fire.

The socio-political danger here, therefore, is that processes of e-mobility transition systematically privilege and penalize different models associated with different income brackets in ways that construct one as not only socially ‘higher’ but also safe, responsible and respectable while the other is seen as dangerous, irresponsible and in need of further policing, and perhaps in self-fulfilling ways. At its worst, then, it is possible that what would seem prima facie to be welcome moves to low-carbon urban mobility - maybe even transit-oriented development - may themselves construct and/or legitimate - and thereby possibly exacerbate - mobility inequalities, even as they mitigate the key issues of emissions and congestion.

Mobility

For the Mobile Lives Forum, mobility is understood as the process of how individuals travel across distances in order to deploy through time and space the activities that make up their lifestyles. These travel practices are embedded in socio-technical systems, produced by transport and communication industries and techniques, and by normative discourses on these practices, with considerable social, environmental and spatial impacts.

En savoir plus x

Movement

Movement is the crossing of space by people, objects, capital, ideas and other information. It is either oriented, and therefore occurs between an origin and one or more destinations, or it is more akin to the
idea of simply wandering, with no real origin or destination.

En savoir plus x

Associated Thematics:

- Lifestyles
  - Cars / motorcycles
  - Aspirations
  - Living environments
  - Change in practices

- Policies
  - Cars
  - Ecological transition

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1 https://forumviesmobiles.org/en/dictionary/446/mobility