

1. Videos

Thinking the future of car mobility

By

Kate G. Reese (Researcher in environment sciences)

20 September 2016

Automobility is a cornerstone of American life. But what are its future prospects in an era of climate change and depleting natural resources? America is at a crossroad between acceleration, rebuilding and transition, explains Kate Reese.

We begin with the idea that automobility – that is, the movement made possible by motor vehicles – is a double-edged sword. We take this idea from Anthony Giddens, who has said this of modernity, that modernity is a double-edged sword in that it gives us a number of opportunities and wealth and opportunities for flourishing that we wouldn't otherwise have. But at the same time it wreaks a degree of havoc on both human health and the health of the non-human world.

In the United States this is a particularly sharp problem – the blades, the edges, of this sword are particularly sharp. In the United States the role of the automobile is so central to daily life and to national identity, and so the question becomes: How do we reconcile these two aspects of this contradiction of automobility? How do we reconcile the violence that it does to the world with the opportunities and freedoms and the flourishing that it makes possible? And so how, in the United States, can we imagine a future where the automobile has a different role in our daily lives?

Facing the future between ruptures and continuities

So we begin with the theoretical premise that one fundamental way that people make sense of problems or make sense of contradictions is by thinking in terms of the future, thinking temporally. Emirbayer and Mische have written about this temporal aspect of human agency in terms of the projective dimension of human agency. So that is to say that when we act in the present we act not only with knowledge of our past and situate it in the present but we think in terms of what we can become in the future. This means thinking that things will be possible that aren't possible now. This means envisioning potential change within ourselves. So I would suggest that thinking the future, that is to say, social imagination, is an act not just of projection or imagination but of fundamentally reconsidering who we are as a society, as a culture.

One form that this takes is to envision what ruptures are possible or likely or desirable, what changes we might hope for, what changes we might anticipate. At the same time this also means envisioning what continuities in our identity we expect to continue, what continuities will allow us to continue to be who we are. One example that can illustrate this point is actually a cover of the Popular Mechanics magazine from 1951, which shows a helicopter in the garage of a suburban household. So we can see that Popular Mechanics magazine has envisioned a potential change in the form of us all driving helicopters to work instead of cars. But at the same time it reinforces a very particular sense of American identity, in that you can see the architecture of the house, the lawn and the man's hat, and the

fact that it's a man putting the helicopter back in the garage, reinforces a sense of a very particular suburban identity, a very autonomously mobile suburban identity.

And so the question that one can ask is: How does this renegotiation of identity happen today, when we face issues of climate change and the depletion of resources?

There are three approaches today to the future of automobility in the US. They can be characterized as: accelerate, rebuild and transition. The first one, accelerate, sees the need to accelerate the process of technological innovation in order to better deal with the issues of climate change and resource depletion. The second one sees the need to rebuild our cities along the lines of American cities before the post-war suburban expansion. And the third approach, transition, sees the need to fundamentally transition to a thoroughly different way of life in the context of a dramatically different economy post peak oil and as we experience the effects of climate change.

1. The acceleration of innovation

In 2001 the US Department of Energy launched an initiative; it published a report that it entitled the Quadrennial Technology Review, or the QTR. It modelled this review after the Quadrennial Defense Review, which is a report that the Defense Department puts out every four years to establish trends and to try to put forward a program for action for defence policy. And so the Energy Department put together a similar program to address energy transformations in the years to come. What one can see when one looks at this broad project of energy transformation is we see a vision where changes in transportation form a large part of a broader transformation of the energy landscape. But what we also see is that transportation here is not seen as a social issue per se; it's seen more as a technological issue.

The vision of the future that you see in the Quadrennial Technology Review and all of the documents associated with it is one where innovation accelerates. It accelerates into the future, and this is what will solve the problem of climate change and resource depletion – if not solve it completely, at least make it manageable well into the future. The idea here is that historically it's taken decades for technological innovation to unfold, but, given enough resources, given enough research, given enough engineers, given enough labs working on the problem, given enough grad students with enough grants, then we will be able to accelerate this process and shorten the timeline from several decades to one or two decades. This is what will allow us to bring down carbon dioxide emissions in a timely manner.

What we also see in these texts is a vision of the American identity that remains based fundamentally around the car, remains consumer – the American remains a driver. The American remains fundamentally an individual, autonomously mobile American. It also gives the sense of the nation state as the locus of problem-solving, that here we see it's engineers that fundamentally change mobility, it's that change happens in labs, not in homes, that change happens in test tracks, not in driveways, not in people's lifestyles. Indeed the underlying concept is that these are the only places that meaningful change can happen because the American consumer won't change, and we shouldn't expect them to change. So it makes sense, then, for this transformation to come primarily from the technological end.

2. When the past is the way ahead

The second approach, which we can characterize as rebuild, envisions the future primarily in terms of the past. What I mean by this is that there's a very strong sense among the new urbanist movement in the United States and the related smart growth movement, and similar approaches to urban planning, that see the 20th century as a moment of rupture. Particularly the expansion of the suburbs and the increasing rates of motorization represented to them a moment of abandonment of the cities, and a moment of social isolation and, fundamentally, a sort of ripping out of the fabric of American social life, and a wrong turn from the – to them – more natural, organic way of living in community, which is to say in small neighborhoods.

For this approach we can look to the Department of Transportation and the Environmental Protection Agency and even the Department for Housing and Urban Development, who have formed a partnership for sustainable communities that is working to develop standards for smart growth, that is to say, ways that urban areas can reshape their urban spaces that are more conducive to mobility that does not depend on the car.

One aspect of this rebuilding of the cities is the mistrust of the urban sprawl that occurred in the post-war era in the US. It's an effort to conserve the spaces that managed to make it past that moment of destruction and this moment of the rupture in the social fabric. So that means rebuilding dense, mixed-use neighborhoods, that means preserving historic buildings and that means actively creating continuity in the built and natural environment.

In terms of American identity this is relatively radical because what it asserts is that the fundamental American identity is not this autonomously mobile individual subject that we've come to believe it is but in fact that the real America is the America of the town, of the city, of the neighborhood. And so in this sense, to rebuild cities is not to abandon this American identity but rather to reaffirm it, to reassert it as it had been before urban sprawl.

What we also see is the idea of design as governance. So the idea here is that if you can design your cities well enough you can produce social outcomes that are desirable, and this is where climate change and resource depletion comes in, which is that if we design urban spaces well enough then not only can we restore this American identity that we've lost in the 20th century but in doing so we can reduce our oil consumption and our carbon dioxide emissions.

3. Transition to an unpredictable future: pioneering Americans

The third approach to mobility in the US can be characterised as the transition approach. And this approach is fairly, radically different to the other two in that it sees as inevitable a moment of crisis where climate change and resource depletion will reach a point that life as we know it will change dramatically, whether we want it to or not. The economies will change because we cannot rely on cheap fuels and so transportation will become more difficult and economies will change and this will affect the way we live our lives. In the US, the transition approach is mostly grassroots movements still. There are a few cities that have adapted some of its ideas, but mainly it remains a fairly ad-hoc although growing movement. And for this we can look to the post-carbon institute based in California and also the growing transition movement which started in the UK in the early 2000s but is now growing across the US.

The basic premise is that we are facing an energy descent, that the human population has reached a moment of overshoot and overshoot is an idea that comes from ecological theory that populations go through cycles and the human population is currently headed for a moment in the cycle of collapse. The idea of energy descent is very important in this concept and if you look at one of the iconic images from the transition movement's literature you can see that as we descend, on the one hand we become less energy-intensive, but on the other hand we find new ways of being in the world that are potentially more fulfilling.

So it's a combination of deep pessimism as we face the idea of collapse of society as we know it, and major crises, major ruptures, but we can also potentially embrace this as an opportunity to change and to grow in better ways. Another image that illustrates this comes from the transition US primer: it says bringing a new world to life and coming from a black and white world to a world in colour. So the idea here is that we do face radical change and inevitable radical change and that the only continuity we can be sure of in such an uncertain future is any continuity that we build ourselves. And so this is why the concept of resilience is so important to this approach – resilience is the ability to build continuity yourself, to recover from crisis, to recover from ruptures. In terms of American identity this takes some interesting forms. The idea of adventure is actually very important to this approach; the idea that we are headed into unknown territory, and so we have strengths that we don't know that we possess but we

will find and develop along the way. I've even heard it said in this context that we're all going to be pioneers again and this of course draws on a rich American tradition of frontiersmanship and bravery in the face of the unknown. So here it's a very different idea of what the future holds. It's not that we are going to accelerate technological innovation in order to solve problems, it's not that we are going to rebuild our cities to recapture something that's lost – it's that we're headed for the great unknown but that we have the resources in us to face this great unknown.

To wrap, it's worth noting that there are in fact several convergences between the different approaches, they share a lot of things. The policies enacted by the smart growth movement are similar to policies desired by the transition movement and even the Department of Energy recognises the importance of things like land densification and public transportation. So there are several policies that all approaches can agree on.

However, what remains interesting and what remains I think fundamentally more important is the dramatically different understandings that these different approaches take to what the future holds, what road we're on. One department of Energy technology roadmap states that the path to success is clearer now than ever before. So in this vision we're on a path, we know the way, all we have to do is accelerate down that path. The second approach sees us as having taken a wrong turn, that we're going in the wrong direction and that we've already tried striking out in a new direction in the 20th century and that it didn't work and we abandoned the ways of human settlement and living in a neighbourhood and that we have known for centuries work and so what we have to do is to turn around and go back to the way that we know is a good way to live.

Finally the transition approach sees the path that we're on as ending, whether we want it to or not and once it ends we have no idea what our path will be or what our destination will look like. This image here is from the transition US primer to action on climate change and peak oil. It's very telling that the destination sign is empty.

The unsettled future of mobility

What this means for social action is that we have the opportunity that we've never had in quite the same way before to have a conversation about what that destination can look like. So there's definitely potential for political coalition-building, for overlap between the different approaches and I think it would be a mistake to attempt to pick one or the other as the right one. They all have their important contributions to make. So overall, despite the similarities between the approaches, the question of where we're headed in the US, of what our mobility in the future will look like in an era of climate change and resource depletion remains fundamentally unsettled

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

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.

Associated Thematics :

Lifestyles

- Cars / motorcycles

Policies

- Cars
 - Ecological transition
-



Kate G. Reese

Researcher in environnement sciences

Kate Reese is a doctoral student in the School of International Service. She also serves as managing editor for the. Her interests revolve around international communication, mobility, and environmental politics. She recently published an article in Global Environmental Politics on the central role of the automobile in modern social and economic life. Her current research is on the global politics of urban transport.

To cite this publication :

Kate G. Reese (20 September 2016), « Thinking the future of car mobility », Préparer la transition mobilière. Consulté le 19 January 2025, URL: <https://forumviesmobiles.org/en/videos/3301/thinking-future-car-mobility>

 Licence Creative Commons

Videos by Forum Vies Mobiles are licensed under a Creative Commons Attribution-NonCommercial-ShareAlike 3.0 France License.

Permissions beyond the scope of this license may be available at contact.

Other publications



Saudi Arabia: The transformation of mobility in the kingdom of oil

Aniss Mouad Mezoued, Mobile Lives Forum



Can universities learn to leave behind air travel?

Tamara Ben Ari, Parke Wilde



The impact of the teleworking revolution on the growth of megacities (Paris, London, New York)

BVA Xsight



Have metropolitan mobility policies been redefined by the Covid pandemic?

Jean Debrie, Juliette Maulat

1 <http://creativecommons.org/licenses/by-nc-sa/3.0/fr/>

2 <http://forumviesmobiles.org>

3 <http://creativecommons.org/licenses/by-nc-sa/3.0/fr/>

4 http://fr.fvm.localhost/modal_forms/nojs/contact