

Letter to the Editor at The Economist,

Autonomous Vehicles (AV), the subject of your comprehensive special report on March 1st 2018, would produce a range of problematic, intertwined issues, many of which remain to be identified. Some important questions that your report does not touch upon include the associated risks with a widespread transition from fixed housing to large autonomous motorhomes, continually on the move; the consequences if autonomous cars owned themselves; and the high probability that a small number of platform based global giants, such as Google and GM, would soon dominate the market and thus take control of cities and urban regions.

It would be a grave mistake not to introduce a suitable road-pricing scheme before widespread trials establish de facto rules. Such a scheme would also produce major benefits, completely unrelated to autonomous vehicles. The argument, as suggested in my letter to the editor two years ago, is as follows:

“Transport infrastructure and its huge overcapacity are notoriously overlooked in analyses of the disruptive innovations that lie ahead in personal transport. All interest is focused at a micro level, on changes in vehicle technology, such as driverless cars, and arrangements such as car-sharing (*The Economist*, January 9th 2016).

Major benefits, in efficiency, comfort and for the environment, will first emerge when we optimize interaction at macro and micro levels. Only the public sector, the predominant owner of infrastructure and public transport, can seize the initiative by introducing dynamic charges, which would vary according to demand and environmental concerns, for space on roads and public transport. Privately produced digital services, based on the Internet of People and Things, service design and ubiquitous mobile computing, are leading the way towards a multimodal digital platform open to all types of transport.

The technology for systems of this kind already exists. What we lack is radical institutional innovation that would interlink both the modes of transport, supply and demand, and transport users and producers via individualized agreements. Because the public sector, with its monopoly-like status, is insensitive to market influence and horizontal threats, disruptive innovation here would be driven either by some great vision or in response to a calamitous event.”

A digital transport platform in public hands can even play a key role in counterbalancing powerful private platforms giants:

“As is widely recognized, companies such as Facebook, Google, Amazon and Apple have grown inconceivably in power and wealth. This process, the platformization of the internet, means only ‘those with outstanding products ... can try to forgo other’s platforms’ as the Schumpeter columnist correctly notes (*The Economist*, May 21st 2016). Looking for a counterbalance to this private dominance, transport is an obvious candidate. Public authorities, who often enjoy an infrastructure monopoly, hold winning cards. This is especially true in those urban areas where public transport lies under local authority control too. Introducing an open integrated digital platform for information and payment (including dynamic pricing and congestion charging) has the potential not only to counteract a private internet oligopoly. It would also open new horizons in the desperate struggle against increasingly inefficient, underfinanced, climate-damaging and unfair urban transport.”

Anders Gullberg, Associate professor, KTH Royal Institute of Technology, Stockholm. March 1 2018.