

Context of the text

What type of text is this? What's its purpose? To persuade/inform?

What motivated the author to write this piece?

Any possible conflict of interest? He co-founded Trip Convergence (TLC), a patented invention of express carpooling.

Evidence

Is this enough evidence? When is the trial to happen? What does "around the world" mean? Only 3 countries mentioned.

Paul Minett: Will driverless cars be heaven or hell?

5:00 AM Tuesday Oct 18, 2016

Retrieved from:

http://www.nzherald.co.nz/business/news/article.cfm?c_id=3&objectid=11730506

A transport revolution is looming, how can cities prepare for the best possible outcome?



The imminent arrival of the autonomous car creates a huge challenge for cities and regions. Photo / 123RF

- Paul Minett has interests in transportation and business strategy consulting, and is a director of two Auckland based businesses.

Suddenly the autonomous car seems to be waiting just around the corner. With the massive investment going into developing this new technology (or combination of technologies) around the world, it seems we should rather be preparing for its arrival than discussing the timing.

The Ford Motor Company has announced a self-driving car in its line-up by 2021. Uber has already begun testing a fleet of autonomous cars to deliver taxi services in Pittsburgh (USA) (with drivers ready to take over, for the time being). A similar trial is under way in Singapore.

And recently Christchurch Airport announced the trial of an autonomous shuttle: no driver and no steering wheel on board.

There are any number of predictions being made about the likely impact of "driverless cars".

There is a whole spectrum, from "heaven" to "hell" (and probably back again).

Language used

What kind of "revolution"?

What does "imminent" mean?

Argument

How large is the investment? How does it compare against investment in public transport?

Why "preparing for its arrival"?

Language used

Does "heaven" reflect a utopian positive outcome?

Why "all"?

What does "short period of time" and "most people" mean?

The "heaven" version

In the "heaven" version, the autonomous cars will all be owned by fleet service providers (think Uber without Uber drivers) and over a relatively short period of time most people will stop owning and driving a personal vehicle, opting instead to call the service when they need mobility.

In this version, there will be a huge reduction in the private vehicle fleet as the number of vehicles required to deliver all the mobility needed has been modelled and is predicted to be at least below half of the number of vehicles in use today.

Importantly in the "heaven" version, it is expected people will share these vehicles, both concurrently (like carpooling) and consecutively (like car sharing). As a result, even demand for public transport will be reduced in the cities of the world, and there will be a lot less traffic congestion.

Argument

Who will be the fleet service providers? What about the relative cost to users? Will people be ready to give up autonomy?

Based on what has the prediction been made?

This will require a change in car use from private ownership.

Cities in developed Western countries?

Less traffic congestion? Where's the evidence? What about relocating cars?

Argument

Will sharing cars also mean sharing data? Ethics around "big data" usage?

Missed opportunity to discuss possible positive impact of driverless cars on the environment (e.g., reduced greenhouse gas emissions).

Language used

The "hell" version

Argument

"Each person"?
This is a
generalised
assumption.

In the "hell" version, there will be far more cars, as each person graduates from owning a private car they drive, to owning driverless cars they direct. In this version, children, elderly, and pizza will all be passengers or cargo at different times, along with many deadhead trips to collect these non-driving passengers and cargoes.

Possibly – but what about affordability and unintended consequences??

Similarly, rather than park a vehicle at work, it will be sent to run errands during the day.

A simple law of conditions of use might solve this.

The hell version involves less demand for parking, but big increases in vehicle kilometres travelled and traffic congestion will probably go through the roof.

Yes, probably somewhere in between. How can we influence?

Of course, the eventual reality will be somewhere in between heaven and hell, probably here on earth. The question is, can civil society influence the extent to which the outcome is more heavenly, rather than more hellish? Would we want to?

Who is to blame in case of accidents? What happens in case of a "bad" and "worse" case scenario? E.g., save life of a pedestrian or car passenger?

This imminent arrival of the autonomous car creates a huge challenge for cities and regions. Most metro areas' transportation plans articulate a set of investments they intend to make in roads and public transport over the coming few years. In Auckland it runs to billions of dollars. The plans do not anticipate the disruption the autonomous car might bring.

Good point! But: where has this disruption been successfully argued for?

On the one hand, these investments might turn out to be completely necessary if the hellish outcome eventuates. On the other hand, there is a risk these investments will become "stranded assets" and future debt obligations related to them will not attract the expected revenue streams.

Even if there is a low assigned probability of a heavenly outcome, the size of the potential losses should give transportation decision-makers reason to pause.

Argument not well-established.

What to do?

What is a city council or regional transportation authority to do? Here are three suggestions.

Firstly, delay every road and public transport expansion spend where possible.

Secondly, to deal with the increasing demand for mobility in the very near term, minimise demand for vehicle trips. Mostly this means getting as many people as possible to travel as passengers (in cars, vans, and buses) rather than as drivers, as much as possible, particularly for trips involving travel on congested corridors at peak times. It can also mean increasing non-motorised trips (walking, cycling), and trip avoidance (teleworking).

Thirdly, seek out policy settings to give the best possible likelihood of a heavenly-leaning outcome to the eventual arrival of autonomous cars.

The dividend from this strategy is potentially massive. There is ample capacity in existing vehicles and roads to reduce congestion right now if people will agree to use the existing infrastructure more effectively. If successful it will create breathing space, probably at relatively low cost while the disruption plays out.

It will reduce demand for expensive infrastructure assets and should help create the culture of sharing needed to achieve the more heavenly outcome from autonomous cars.

It could have both short-term and long-term benefits regardless of the eventual shape of the transportation system.

Alternative: to plan and invest in public transport while carrying out research on autonomous cars.

Argument

This ignores current delay of road and public transport expansion spend – why further delay?

Would investment in public transport expansion (e.g., train systems) be more sustainable in the long run?

How? Incentivise and regulate? Would this work without expanding public transport?

Vague; what policies, and how is this going to happen?

Conclusions

This assumes people haven't agreed to do so.

"Relatively low cost" – based on what evidence?

New infrastructure will still be needed for autonomous cars (e.g., charging bays, storage).

The conclusions don't seem to follow on logically from the evidence and reasoning given.

Language used

What does "heavenly-leaning" mean?

Is "Potentially massive" persuasive language?

Conclusions

Might only happen if there's behaviour change. Car-sharing options already exist but with not much uptake. How would this be different with autonomous cars?