Autonomous Cars are Not the Future

Shôn Ellerton, January 19, 2022

There are futurists out there who dream of a Jetson-like world of autonomous cars. I do not share this dream.



It's bound to happen sooner or later. Someone in southern California just got <u>charged for manslaughter</u> when his Tesla Model S ran a red light at high speed and crashed slap-bang right into a Honda Civic killing two passengers. I don't know the full details how it happened, but clearly it did. As for the crash, it took place in December 2019, but it took up to January 2022 for a decision to be made by the courts.

Accidents involving autonomous cars are not unheard of by any means, although, they are relatively infrequent. But, perhaps, that is simply because there are not many of them around. Personally, I don't like them being there at all on our public roads. And just to clarify this point, *public* roads rather than a private or closed-off system as I will come back to later. No doubt, there are many who will push back on my opinion claiming that autonomous cars are the way of the future and are way safer than conventional cars.

Well, I don't agree. And let me tell you why.

Let's start with the driver.

I'm sorry to say that each year, we are getting, on average, more ill-trained car drivers on the road. We've become de-skilled to the extent that we are far less in control of our vehicles once we start driving at higher speeds or unusual conditions. This happened to me after moving to Australia and then visiting Germany a few years later, struggling with my ability to maintain a safe *minimum* speed on the Autobahn with a rental car. I wrote extensively on this topic in an article I titled <u>Safety Fast</u> back in 2017.

Sure, cars are far better built these days, in terms of reliability, along with great safety features. Tyres have improved immensely over the years and are often used and abused to excess without fear of the danger of a violent blowout happening. We have an ever-growing plethora of new road safety rules which we need to abide by. We are not allowed to *not* wear a suit belt or sit in the back of the ute or pickup truck. We get our knuckles rapped if we start fiddling with our mobile devices whilst on the move. And many other rules and regulations which we need to obey for safety's sake.

Most of us have *no* idea how to perform simple maintenance of a car nor even care how it works. Many of us can't even park properly, relying on cameras and sensors and all that mod con stuff. Damn it, there are cars who will do the parking by themselves! So, in essence, if the autonomous-car-loving crowd get their way, our roads will be cluttered up with a bunch of useless and dangerous drivers relying on their cars being allegedly 'safer'.

And are the cars safer? Well, let's look at this purely from technical grounds. I have no doubt that when an autonomous car is functioning properly, its reaction time is far better than the human equivalent. It just is. An autonomous car can tailgate a car at quite high speeds and be able take evasive action, although being a passenger in such a situation would be quite a nerve-wracking experience to be sure. I certainly would be sweating with discomfort. However, in general, on good roads, with well-maintained vehicles and in normal driving conditions, a network of autonomous cars could very well be safer in terms of the number of accidents.

However, we don't always have good roads. What about all those little potholey backroads in the middle of nowhere? What about road-design error, for example, lane lines been painted in the wrong place? Yes, I've seen such occurrences!

We don't always maintain our vehicles properly. What about something as simple as a dirty sensor? What about when the computer fails due to being overheated, knocked about, or just expires for some unknown reason? The dirty sensor, in my opinion, could be the biggest culprit should we adopt an increase in autonomous cars on the road. These days, there are very few on the road, and those who own them probably keep them very clean.

We certainly do not always have good driving conditions. The rest of the world is *not* southern coastal California, a place where the roads are generally good, and the climate is near-perfect for driving. Snowstorms, hail, heavy rain, fog, sleet and other inclement conditions, no doubt, will impair the ability for the autonomous car to drive safely. Let's put that another way. Would most drivers feel comfortable driving around in really bad weather conditions? Probably not, but when someone relies on their autonomous car to do so and rather than waiting for better driving conditions, surely it is more dangerous to be on the road. Perhaps, the computer program in the car will disable the car from moving autonomously when inclement weather conditions arise forcing the driver to actually drive the car. This raises the improbability of a future where only autonomous vehicles are allowed on public roads. This will not happen, certainly not in my lifetime.

When autonomous cars experience any or a combination of these factors, they are far more prone to failure possibly resulting in an accident. Imagine being a passenger in an autonomous car at night during a heavy rainfall on a badly maintained rural road with no road markings riddled with construction works. I'm not a good passenger at the best of times, but I'd be clambering for those anti-anxiety pills double-quick.

For those who might have remembered during the 90s, the prospect of having pilotless passenger planes put in place, how well did that go? Many a poll were taken asking if anyone would be comfortable flying in a pilotless plane. Very few if any! And there's a damned good reason why. We need the ability to take over the controls when conditions are unusual, and, as good as the programming may be in an autonomous vehicle, it may not be able to cope. Perhaps it can, however, there is one significant difference between the 'brains' of an autonomous vehicle and ours. We don't want to die. Humans have an extraordinary ability to escape from the clutches of death when the need arises.

Let's work around to another point of contention with autonomous cars. The fact that they need to share the road with non-autonomous vehicles. Not just those driven by stubborn old-fashioned fuddy-duddies like me who *want* to be able to drive their own cars, but what about motorcycles? Autonomous motorcycles? I think not. It never fails to surprise me from those who promote the idea nobody should be manually driving their cars in the interest of road safety don't take motorcycles, or other non-conventional vehicles, into consideration. As for those who *want* to drive their cars by themselves, don't

even bother. Safety comes first in their minds even if it means throwing the enjoyment of driving out of the window and depriving car enthusiasts of their hobby.

On the point of sharing the road network with other vehicles, I would like to point out that autonomous vehicles have been very successful in closed private systems. For example, mining operations make good use of autonomous vehicles without *any* need for human drivers. However, these systems are designed in such a way that humans are separated from autonomous vehicles by safety barriers or control markings delineating the zones in which these vehicles operate in.

Lastly, and I think this is the nail in the coffin with respect to adopting autonomous cars universally.

The legalities.

Who is responsible when an accident occurs? Is it the driver? Is it the manufacturer of the computer controlling the brains of the vehicle? Is the programmer responsible? Perhaps, the government body responsible for the design of the road. Or something else.

Well, the answer most universally accepted is that the driver is *always* responsible.

Which means that there always needs to be a driver sat behind the wheel.

Which means, well, what *does* the driver of an autonomous car do? Sit there like a stuffed animal monitoring the car do the work?

No. What will happen is the driver will become thoroughly bored by sitting there engaging in other activities like checking up on their smartphones, talking to others in the backseat, eating a fast-food takeaway, having a little snooze, or partaking in a little smooching with a new-found partner.

And to boot, the driver must not be under the influence of alcohol, so any who dreamt that the driverless car could take us from the pub back home after a few drinks legally will be bitterly disappointed.

If an accident happens, the responsibility comes down to the person behind the wheel regardless if the car is on autonomous mode or not. Is it better to have

agency and claim responsibility for your direct actions or is it better to blame the computer and *still* be at fault? I choose the former.

To finish off, the technology behind autonomous vehicles is always improving and there are genuine situations in which they are useful and safe free from complicated legalities when accidents occur. For example, some of the light rail network systems in various cities around the world using driverless trains have been successfully operated for many years with few or no accidents. However, they are in controlled environments sharing no space with manually driven vehicles. There are autonomous buses used in some cities in Europe; however, for those which share the road with the public, they are not driverless, as a driver is required to sit behind the wheel to intervene if necessary. But these are not autonomous cars of course. You get my drift.

Driver aids, such as automatic dipping of headlights when an oncoming vehicle approaches, automatic parking in tight spaces, assisting in warning the driver of veering off the road are all good and well. However, we must be careful not to lose the ability to drive a car safely ourselves. Many of our younger generation do not know how to drive a manual car, a relative rarity in our modern urban landscape. And by introducing autonomous cars, we are reducing the skills required to safely operate a car by depriving us of maintaining those skills through practice.

Those who suggest that we all dash around in autonomous cars in the future should not be surprised there will be no one left with the ability to drive at all. It's not something I'd want to see.