Why your car is a better driver than you

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It came to my attention while working on an article about intelligent systems in cars that people *might* be a tad touchy when it comes to talking about letting cars do the work when driving.

I'm not talking about infotainment systems or fancy doodads. I'm talking about systems that could greatly improve the safety of cars: steering wheels that vibrate when you're about to drive off the road; safety belts that tighten when you need to be hitting the brakes; side mirrors that blink when someone is in your blind spot and you're about to change lanes; multi-camera systems so you can see 360° around your car; rear-view cameras so you can see behind you; and cars that communicate with each other to avoid crashes.

I've heard ALL the excuses, complaints, and protests: What if the brakes engage when they're not supposed to? What if my car isn't smarter than me? I'm a better driver than a computer. I've never been the cause of an accident. It's too expensive. I don't trust a machine to make decisions. What if the seatbelt tightens too much and doesn't let go? What if I mean to drive poorly to save someone's life?

I will not proceed to address all your questions and concerns so we can all go home: They won't. It is. You're not. You have. It won't be. You already do. Seriously? This never happens.

I hope everyone is happy now. Safe driving. (Just kidding)

But the truth is your car *is* a better driver than you.

Human error is the major cause in 90 percent of accidents and the *only* cause in 75 percent of accidents, according to research [1]done in Germany. In fact, 1.2 million people die worldwide [2] each year in car accidents, most of which are caused by driver fatigue and poor concentration. These systems never get tired or hungry or distracted by phones buzzing and kids screaming. They're never fiddling with the radio or applying makeup or eating a sandwich. They don't get bored after a few hours and check a phone. They exist for one purpose and that is to make sure you don't get in an accident.

If you don't think they'll improve the safety records at all, you should look at how the more primitive systems like seat belts or anti-lock brakes made a difference. In a study [3]of European car accidents, even the limited safety systems now available reduced accidents by 30 percent between 1990 and 2001.

What would have happened if those cars had even better systems available?

The systems don't make the mistakes that humans might, and they can't break laws. During an accident, the difference between a fender-bender and a deadly crash can be milliseconds. Intelligent systems have the ability to shave off those few milliseconds because they don't have to think about stopping; they just stop.

It's not that all drivers are bad; it's just that these systems are *better*. Even looking at cars that are fully-autonomous like Google Cars, you can see the benefits. In August 2012, Google [4]announced its fleet of 12 autonomous cars had driven

300,000 miles accident-free. The autonomous cars aren't ready for production yet—they still have trouble with snow and temporary construction signs—but they're rapidly improving.

Intelligent systems are generally more reliable than human drivers, and most feature some sort of redundancy to ensure they don't fail unexpectedly. The manufacturers of the processors and sensors understand how important it is that these systems work. They cannot fail without warning. We would prefer they did not fail at all. No one is rolling the dice on your life.

I live in an incredibly crowded state where the public transportation options stink and the roads are crowded with teenagers, grandmas, soccer moms, business people, crazy people on motorcycles, and out-of-towners who don't understand how to negotiate rush hour in a blizzard on an overcrowded highway. Frankly, we could use the help because it's nuts out there. I would feel better knowing the SUV next to me isn't going to crush my Bug like, well, a bug, if I'm in her blind spot.

Bring on the smarty-pants cars.

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