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Hands Off the Wheel

Could advancements in driving technology change daily transportation as we know it? Articles "Puny Humans Still See the World Better Than Self-driving Cars" and "Self-driving Perfection Is Still Years Away" discuss the high-tech future of the common automobile. I will analyze how these two articles, one written for the technology loving public and the other written for professionals in the auto industry, view self-driving technology. Will the auto industry soon be steering towards mass-production of self-driving cars, and how safe is this new technology?

"Puny Humans Still See the World Better Than Self-driving Cars"

In her 2017 article "Puny Humans Still See the World Better Than Self-driving Cars" in *Wired*, Aarian Marshall gives her outlook on the pros and cons of self-driving technology through her analysis of a study done by University of Michigan Transportation Research Institute researcher Brandon Schoettle. Marshall's article is found in the Transportation section of *Wired*, a digital and print publication that is targeted towards those who have an interest in the newest advancements in technology. She says that "it is still dawn in autonomy-land, and at least for now, humanity holds an advantage," arguing that self-driving technology exists, but human drivers still hold the upper hand on the roadways.

"Self-driving Perfection Is Still Years Away"

In his 2017 opinion column "Self-driving Perfection Is Still Years Away" in *Automotive News*, Richard Truett gives his take on self-driving technology through his observation during a ride along in one of Ford's autonomous Fusions. *Automotive News* is a publication that covers the auto industry and is targeted towards professionals within this industry, so Truett takes a straightforward, logical approach with his explanation of why self-driving technology most likely will not take over the roadways anytime soon. He writes, "I can see Level 3 vehicles in a few years where vehicles can drive themselves on highways but must hand off to the human driver if they can't figure out a situation. And that's about really all we can expect in the next 25 years," arguing that the technology might someday have a place in daily transportation but not so much to where a human driver will be able to sit back, relax, and enjoy the ride.

Rhetorical Situation

The purpose of these articles is different in that one is written for a wider audience that is more likely eager to know the current status of self-driving technology, while the other is written for professionals who are more likely to question the safety aspect. Aside from transportation, the *Wired* publication covers a broad range of tech-related topics, so the audience most likely includes a lot of people who aren't necessarily interested in cars but are interested in the technology of self-driving cars. In contrast to the *Wired* audience, the audience of *Automotive News* isn't as broad. This publication is targeted towards automotive industry professionals, such as manufacturers and dealers, so the safety of self-driving technology probably takes priority over the novelty. Because the *Wired* audience is made up of everyday tech enthusiasts, Marshall takes a logical yet humorous approach with her writing. Witty additions to statements, such as "for all their sensors and computers, robocars still don't see or understand the world as well as

we do with our eyeballs, ear canals, and brain folds," create a humorous tone that is likely to keep the attention of the *Wired* audience. In contrast to Marshall's humor, Truett appeals to the *Automotive News* audience through a formal tone because he wants his audience to take his opinion seriously. He explains his opinion by way of straightforward logic as he writes, "I believe it's going to be many years, decades perhaps, until self-driving cars integrate safely onto the nation's roads and transport passengers 100 percent safely 100 percent of the time."

Top Priority: Safety

There is no doubt that safety should be top priority when enabling a car to cruise the highway on its own. Because her article is based on the study done by Brandon Schoettle, Marshall points out that safety is of concern by quoting Schoettle as saying that "you're probably safer in a self-driving car than with a 16-year-old, or a 90-year-old. But you're probably significantly safer with an alert, experienced, middle-aged driver than in a self-driving car." Sticking to her humor, because her audience is most likely reading for entertainment, Marshall adds light to Schoettle's statement by saying it is "vindication for those 40-somethings feeling past their prime." Truett also addresses safety by pointing out one of the challenges faced by engineers as he quotes Helen Kourous, a Ford engineer, as saying that "roundabouts are considered to be very challenging for automated vehicle technology. They are very unstructured. No two are alike. You can find many different configurations. Human drivers can sometimes get confused in them." Naturally, if a driving situation is difficult for a human to navigate, then it is going to be more difficult for their four-wheeled counterpart. This would be of importance to Truett's audience because they are industry professionals and safety has to be of top priority when deciding whether self-driving cars are ready for release to the general population.

Questioning the safety aspect by quoting a Ford engineer, as Truett does, is likely to be of importance to a professional audience such as that of *Automotive News*.

There Are Good Points to be Made

Indeed, many tweaks need to be made in order to prove that self-driving cars have a future in the world of transportation. However, both Marshall and Truett point out advantages that this new technology has over the human driver. In defense of self-driving cars, Marshall writes that it seems they "are already better at navigating in the dark, for one. Human eyes can only see about 250 feet at night, and headlights reach go so far. The robocar's radar can see about 820 feet, good lidar sensors go nearly as far-and in 360 degrees. Machines can react faster than humans, in about 0.5 seconds on a dry road compared to 1.6 seconds for the meatbags." Staying true to her humor by referring to self-driving cars as "robocars" and humans as "meatbags," Marshall gives a leg up to the newest car in development. Because she is writing for a special interest magazine, and the interest is technology, the ability of the car is probably more intriguing to her audience than the inability. Recalling his recent test drive of a Land Rover, Truett points out that self-driving cars "can function safely in certain situations," as he explains a technology called "platooning," which allows vehicle-to-vehicle communication. He says that platooning is when "the vehicle communicates with the one ahead of it." This technology would allow cars to stay within lanes that aren't clearly marked by "using high-definition mapping and other technologies." Truett's audience of professionals would certainly appreciate the mention of this positive aspect because it confirms that, even though the technology is not 100 percent reliable, it is going in the right direction.

Conclusion

Both articles "Puny Humans Still See the World Better Than Self-driving Cars" and "Self-driving Perfection Is Still Years Away" address safety issues concerning self-driving cars, but they also make note of the progress that has been made. Marshall points out more cons that Truett, but they are both skeptical of this new technology. I think Truett's skepticism is more prominent because he expresses that he does not expect a self-driving car will, in his lifetime, be able to "whisk" him to work as he sits "in the back seat reading *Automotive News*." Marshall shows skepticism throughout her article. However, she closes with a forewarning to her readers: "totally self-driving cars aren't here yet. They won't be everywhere for many years. But they're hustling, and they're getting better. You're going to have to keep improving those driving skills—and staying off your dang cell phone—to keep up." Through the analysis of these articles, I find the advancements in self-driving technology to be quite fascinating. It is mind boggling to think that a vehicle could someday take control of the wheel. However, I have to side with the skepticism in these articles, as I don't foresee that cars will be able to take full control of transporting passengers from point A to point B anytime soon.

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Works Cited

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