Six things I learned from riding in a Google self - driving car

1 - Human beings are terrible drivers.
We drink. We doze. We text. In the US, 30,000 people die from automobile accidents every year. Traffic crashes are the primary cause of death worldwide for people aged 15-24, and during a crash, 40% of drivers never even hit the brakes. We're flawed organisms, barreling around at high speeds in vessels covered in glass, metal, distraction, and death. This is one of Google's "moonshots" – to remove human error from a job which, for the past hundred years, has been entirely human.

2 - Google self-driving cars are timid.
The car we rode in did not strike me as dangerous. It drove slowly and deliberately, and I got the impression that it's more likely to annoy other drivers than to harm them.
In the early versions they tested on closed courses, the vehicles were programmed to be highly aggressive. Apparently during these tests, which involved obstacle courses full of traffic cones and inflatable crash - test objects, there were a lot of screeching brakes, roaring engines and terrified interns.

3 - They're cute.
Google's new fleet was intentionally designed to look adorable. Our brains are hardwired to treat inanimate (or animate) objects with greater care, caution, and reverence when they resemble a living thing. By turning self - driving cars into an adorable Skynet Marshmallow Bumper Bots, Google hopes to spiritually disarm other drivers. I also suspect the cuteness is used to quell some of the road rage that might emerge from being stuck behind one of these things. **They**'re intended as moderate - distance couriers, not open - road warriors, so their max speed is 25 miles per hour.

4 - It's not done and it's not perfect.
Some of the scenarios autonomous vehicles have the most trouble with are the same human beings have the most trouble with, such as traversing four-way stops or handling a yellow light.
The cars use a mixture of 3D laser - mapping, GPS, and radar to analyze and interpret their surroundings, and the latest versions are fully electric with a range of about 100 miles.
Despite the advantages over a human being in certain scenarios, however, these cars still aren't ready for the real world. They can't drive in the snow or heavy rain, and there's a variety of complex situations they do not process well, such as passing through a construction zone. Google is hoping that, eventually, the cars will be able to handle all of this as well (or better) than a human could.

5 - I want this technology to succeed, like... yesterday.
I'm biased. Earlier this year my mom had a stroke. It damaged the visual cortex of her brain, and her vision was impaired to the point that she'll probably never drive again. This reduced her from a fully-functional, independent human being with a career and a buzzing social life into someone who is homebound, disabled, and powerless.
When discussing self-driving cars, people tend to ask manysuperficial questions. They ignore that 45% of disabled people in the US still work. They ignore that 95% of a car's lifetime is spent parked. They ignore how this technology could transform the lives of the elderly, or eradicate the need for parking lots or garages or gas stations. They dismiss the entire concept because they don't think a computer could ever be as good at merging on the freeway as they

are.They ignore the great, big, beautiful picture: that this technology couldmake our lives so much better.

6 - It wasn't an exhilarating ride, and that's a good thing.

Riding in a self-driving car is not the cybernetic thrill ride one might expect. The car drives like a person, and after a few minutes you forget that you're being driven autonomously. You forget that a robot is differentiating cars from pedestrians from mopeds from raccoons. You forget that millions of photons are being fired from a laser and interpreting, processing, and reacting to the hand signals of a cyclist. You forget that instead of an organic brain, which has had millions of years to evolve the cognitive ability to fumble its way through a four-way stop, you're being piloted by an artificial one, which was birthed in less than a decade.

The unfortunate part of something this transformative is the inevitable, ardent stupidity which is going to erupt from the general public. Even if in a few years self-driving cars are proven to be ten times safer than human-operated cars, all it's going to take is one tragic accident and the public is going to lose their minds. There will be outrage. There will be politicizing. There will be hashtags.

I say look at the bigger picture. All the self-driving cars currently on the road learn from one another, and possess 40 years of driving experience. And this technology is still in its infancy.
(Adapted from: <http://theoatmeal.com/blog/google_self_driving_car>. 21/08/2016.)

73 - Consider the following:

1.Drinking before driving. (1)
Justificativa: "We drink" - Parágrafo 1
2.Sending a written message while driving. (1)
Justificativa: " We text" - Parágrafo 1
3.Sleeping for a short period of time. (1)
Justificativa: "We doze" - Parágrafo 1
4.Hitting the brakes.
5.Speeding up. (1)
Justificativa: ".. barreling around at high speeds in vessels covered....- Parágrafo 1

According to the text, some human mistakes that happen before or during a car accident are:

a) 1 and 3 only.
b) 1, 2 and 4 only.
c) 2, 4 and 5 only.
d) 3, 4 and 5 only.
►e) 1, 2, 3 and 5 only.

74 - According to the author:

a) elderly human beings tend to drive better than autonomous vehicles.
b) during early tests, many animals and cyclists were hit and hurt by autonomous cars.
►c) radar, GPS and 3D laser-mapping are used in Google's self-driving vehicles. (4)
Justificativa: " The cars use a mixture of 3D laser - mapping, GPS, and radar to analyze and interpret their surroundings, and the latest versions are fully electric with a range of about 100 miles" - Parágrafo 4.
d) self-driving cars were responsible for 30,000 deaths in the US last year.
e) the new technology proposed by Google for cars has been tested for more than 40 years.

75 - Based on the reading, mark the correct alternative.

a) the author's mother suffered an accident while on a self-driving car.
b) self-driving vehicles have caused more tragic traffic accidents than cars driven by men.

►c) traffic accidents are the main cause of young people's death around the world. (1)

Justificativa: "Traffic crashes are the primary cause of death worldwide for people aged 15-24" - Parágrafo 1

d) the new Google autonomous car is still too aggressive to be used on open roads.

e)more than 50% of the people who are still at work were impaired in car accidents and are unable to drive.

76 - Consider the following characteristics of the new Google self-driving car:

1.It runs on batteries and petrol.
2.It can be used in extreme weather conditions.
3.It has a design which requires further modifications. (4)

Justificativa: " When discussing self-driving cars, people tend to ask manysuperficial questions. They ignore that 45% of disabled people in the US still work. They ignore that 95% of a car's lifetime is spent parked. They ignore how this technology could transform the lives of the elderly, or eradicate the need for parking lots or garages or gas stations." - Parágrafo 5

4.It can reach the speed of 25 miles per hour. (3)

*Justificativa: " **They**'re intended as moderate - distance couriers, not open - road warriors, so their max speed is 25 miles per hour." - Parágrafo 3*

Mark the correct alternative.

a) Only 1 is correct.
b) Only 1 and 4 are correct.
►c) Only 3 and 4 are correct.
d) Only 1, 2 and 3 are correct.
e)Only 2, 3 and 4 are correct.

77 - The word **"they"**, in boldface and underlined, in section 3, refers to:

►a) Google's new self-driving cars.

*Justificativa: " **They**'re[refere-se aos novos carros] intended as moderate - distance couriers, not open - road warriors, so their max speed is 25 miles per hour." - Parágrafo 3 -*

b) inanimate or animate objects.
c) objects resembling living things.
d) other car drivers.
e)open-road warriors .

78 - The text points out that the design of the self-driving car is deliberately attractive because:

a) Google expects to neutralize their possible competitors.
►b) people tend to behave positively towards things that look like alive things. (3)

Justificativa: Our brains are hardwired to treat inanimate (or animate) objects with greater care, caution, and reverence when they resemble a living thing. - Parágrafo 3

c) young people enjoy driving attractive brand new models.
d) other drivers might not surpass these autonomous cars on the road.
e) their appearance may help people who suffered accidents overcome their fears.

79 - In the sentence "They **dismiss** the entire concept because they don't think a computer...", the underlined word can be substituted, without losing its meaning, by:

►a) refuse to accept.

Justificativa : Descartar, dispensar

b) affirm once again.
c) compliment.
d) improve the quality of.

e) incorporate.

80 - Based on the text, it is correct to affirm that the author:

a) denies the advantages of self-driving vehicles.
► b) admits the new type of car will receive severe criticism.(4)
Justificativa: "*Despite the advantages over a human being in certain scenarios, however, these cars still aren't ready for the real world.*" - Parágrafo 4
c) wants to buy his mother an autonomous vehicle in the future.
d) was an intern working in Google's new self-driving vehicle project.
e) believes the new self-driving cars need human support on highways.