Entry by Chloe Veylon – First prize year 8-10 Alleyn's School

Self-driving cars – putting your life in the hands of robots?

Automated vehicles could be something of a reality in the near future but this new technology may come with some major flaws.

Development of the automobile dates all the way back to the late 17th century and has continued to improve over the course of the past three hundred years with huge improvements having been made in this industry such as the invention of the seatbelt or the development of electric cars. Cars with aspects such as self-parking have been developed. However, many companies want to go further still and are looking into the creation of completely automated vehicles. But this may be going too far. Is trusting artificial intelligence with the life of passengers too much?

In 2021, the UK invested £100 million in self driving technology. But, one of the biggest hiccups of this industry is public acceptance. A recent study showed that 78% of respondents were afraid to ride in a driverless car and 41% said they did not want to share the roads with completely automated cars. Jack Weast, chief system architect of Intel's autonomous driving group in Phoenix said that they could develop 'the safest car in the world but if consumers don't want to put their kids into it, then there's no market' implying that the £100 million invested in the technology will go to waste when it could have been spent on more valuable causes such as carbon neutral cars or cancer research.

Although artificial intelligence eliminates the risk of accidents caused by human error, a report from the centre for Data Ethics and Innovation warns that it might not be enough for self-driving cars to be safer than normal cars as it says that the public may have little tolerance for accidents which are the fault of 'faceless technology companies or lax regulations' even if they are safer on average that human driven cars. Additionally, there is a huge moral question when it comes to testing self-driving cars because, if it is carried out on public roads, members of the general public may inevitably become part of the testing whether they want to or not. Professor Stilgoe of University College London says that 'there is something quite important about the ethical principle of informed consent.'

In March 2018, Elaine Herzberg died in the US state of Arizona after being hit by a self-driving car. The car was an Uber test vehicle, operating in self driving mode but with a human safety backup driver. The car hit her and she died of her injuries in hospital later that evening. Although incidents and setbacks are bound to happen as self-driving technology is still in its early stages of development, this unfortunate accident shows how, as drivers start to trust autopilot more, they are likely to become

distracted and negligent and therefore unlikely to be able to intervene quick enough if need be – creating huge safety risks.

Like when self-checkout tills were implemented, self-driving technology is another example where machines are taking jobs away from humans: more than 4 million people will be put out of work if self-driving cars become available for everyday use. There will be no more need for taxi drivers, bus drivers, truck drivers and delivery workers. Taxi driver Simon Phiel, who has been in the taxi business for over 35 years, says that 'it would be a disaster for self-driving cars to take over my job. I've done it my whole life and it's the only thing I know how to do.' Of course, the technology to enable self-driven taxis all over London is still far off but this does raise an important question – as more low skilled jobs are performed by machines and artificial intelligence, how do we adapt our educational system to ensure that all people have the suitable training to work in higher skilled jobs ?

Eric Schmidt, an American software engineer, said that 'the self-driving car is not self-aware. It's just driving; it's not thinking.' Nothing beats the human brain when it come to adapting and anticipating different situations. If other technology on the road fails – such as traffic lights – self driving cars may become 'confused' and not be able to deal with a situation it has never experienced before causing chaos on the roads. Furthermore, some moral decisions will be impossible to program - how will the car decide whether or not to avoid a pedestrian even if it means smashing into a wall and hurting its own passengers? And will the car manufacturer be responsible if such an accident happens? – And if not, who is?