

Question 2

"Self-driving cars are inevitable and spell the end to human-driven cars. Once they are shown to be much safer, there will be economic pressure in the form of much higher insurance premiums for human driven cars followed closely by an outright ban on public roads. By adopting driverless cars, it would be easy to double road capacity by increasing road speeds, decreasing car spacing and eliminating traffic lights and stop signs. This only works if everyone is using a driverless car. Human-driven cars will be considered a public menace."

This quote from the Washington Post asserts that "self-driving cars are inevitable," and lists a number of predictions surrounding the transition from human- to computer-controlled vehicles. At first glance, the use of the word "inevitable" makes the quote resemble a technologically deterministic argument, for it appears to deny the role of users in ultimately adopting or rejecting a technology. However, aside from this choice of words, the rest of the quote falls in line with a more human-centered vision of technological change. As evidence for his claim of inevitability, the author does not merely state that self-driving cars will take over because they are inherently "better" technology than human-controlled cars. Instead, he lists three different social entities that will drive the transition: economic pressure, government pressure, and moral pressure. This perspective is closer aligned with theories of technological change emphasizing the role of social groups and delegation: Social Constructivism of Technology and Actor-Network Theory (ANT).

Social Constructivism of Technology (SCOT) was introduced by Wiebe Bijker and Trevor Pinch as a response to technological determinism. In "The Social Construction of the Safety Bicycle", Bijker outlines the core concepts of SCOT: relevant social groups, interpretative flexibility, and closure. SCOT claims that in order to trace the path to technological adoption one must "identify what social groups are relevant with respect to a particular artifact." (Bijker 177).

Although speculation about future technology is somewhat anti-SCOT¹, the relevant social groups for automated cars would probably be drivers who dislike driving, drivers who like driving, non-drivers, and government regulators. The adoption of the automated car, then, will play out as a struggle between these different groups with contrasting views of the technology. In fact, from the SCOT perspective the artifact “car” will actually exist as multiple artifacts during the struggle, a phenomenon Bijker terms “interpretive flexibility” wherein “the meaning given by a relevant social group actually constitute the artifact” (Bijker 192). This multiplicity of artifacts will persist until the struggle between groups reaches consensus and “from then on only one interpretation is accepted by all,” a point Bijker calls “closure” (Bijker 196). Whether the final artifact is a self-driving car or not remains to be seen – in SCOT no particular technology is inevitable, only the pattern of introduction, struggle and ambiguity, and finally resolution and closure.

Like SCOT, Actor-network theory (ANT) proposes a nondeterministic view of technology. However, ANT returns to the study of artifacts – not in isolation, but as part of a network that includes both human and nonhuman actors. In “A sociology of a few mundane facts”, Bruno Latour calls artifacts the “missing masses” of sociology because their human creators imbue them with agency to enforce social mores. ANT asserts that “the distinction between humans and nonhumans ... [is] less interesting than the complete chain along which competencies and actions are distributed” (Latour 253). The quote from the Washington Post demonstrates this relationship between human, artifact, and law; self-driving cars will do the work currently performed by traffic lights and stop signs, which is to enforce the rules of the road in the absence of a real-life policeman. This transfer or “distribution of competences” from

¹ Bijker recommends use of the “snowball method” to identify all of the relevant social groups from historical record, but this is impossible with an event that hasn’t happened yet. (see Bijker 46).

human to artifact is known as delegation. (Latour 246). In the ANT view, self-driving cars are only useful inasmuch as they could replace human actors in a way that is socially desirable.

Words: 587

Project Idea

Idea 1

My first idea is to investigate the relationship between humans and AI agents/robots. I am specifically interested in the social and psychological effects of interactions between humans and these "persona-humans". How different are they to a "real" interaction with another human?

What emotions do we experience when interacting with AI? Everyone has felt annoyance with a robotic phone agent, but we don't blame the robot, we blame the company. But is this only because the phone agent robot isn't a convincing actor - it doesn't "pass" as human? Or is it because we can't interact with it long enough to personify it? After all, a 30-second video is probably less human-like than a chatbot that can talk, but people who own them definitely experience an interaction that is different from the typical man-made object.

Idea 2

My second idea is to examine the historical record and gather together instances of technological innovators/visions whose lives were destroyed by their work. This idea is inspired by Arthur Schopenhauer, but he is not the first visionary whose work ended in tragedy. The goal of this project would be to compare the people I find and look for commonalities in their lives. I am especially interested in inventors who failed in large part due to sociopolitical factors, "conscientious" "ahead of their time" and were punished by the government or by society for their

work