

## **UNFAIR APPLICATION OF SCIENTIFIC INVENTIONS:**

Although scientific discoveries have greatly improved society, there are some drawbacks as well. The following are a few drawbacks of scientific inventions

**Unintended Consequences:** Scientific inventions can have unforeseen consequences that may be harmful to the environment, human health, or society as a whole. For example, the use of certain chemicals or technologies may have negative impacts that were not initially anticipated.

**Ethical Concerns:** Some scientific inventions raise ethical dilemmas and challenges. For instance, advancements in genetic engineering raise questions about the ethics of altering the genetic makeup of organisms, including humans.

**Social Disruption:** Scientific inventions can disrupt traditional ways of life and societal structures, leading to social unrest or inequality. For example, automation and artificial intelligence have the potential to displace jobs and widen the gap between the wealthy and the poor.

1. **Dependency:** Society can become overly dependent on certain scientific inventions, which can create vulnerabilities if those technologies fail or are misused. For example, reliance on fossil fuels has led to environmental degradation and climate change.
2. **Health Risks:** Some scientific inventions, such as certain medications or technologies, may have unintended health risks or side effects that only become apparent over time.

3. **Environmental Impact:** Many scientific inventions have environmental consequences, such as pollution, deforestation, or habitat destruction. For example, industrial processes can lead to pollution of air, water, and soil.
4. **Security Risks:** Certain scientific inventions, particularly in the fields of cybersecurity and biotechnology, can pose security risks if they are misused or fall into the wrong hands.
5. **Inequality:** Scientific inventions can exacerbate inequality if access to these innovations is limited to certain groups or countries, leading to disparities in development and quality of life.

It's important to note that while scientific inventions have drawbacks, they also have the potential to address many of these challenges through further research, regulation, and responsible innovation.

Scientific inventions are what drives life and progress. However, there are few downsides to it.

- ***Loss of jobs.*** The company which comes with the useful scientific invention will dominate its competition meaning other companies will lose customers and people will be threatened to lose their jobs. Machinery and automation will cause the same effect.
- ***Moral dilemmas.*** For example, the development of sentient robots which are in every aspect better than

humans will make the human race redundant.

- ***Cost of lives.*** Experimentation has its costs. Either it's with animals or trials with people
  - someone will die in the name of science.
- ***Potential for ultimate destruction.*** Atom, nuclear physics, and nuclear energy are great discoveries. Yet, atomic bombs have the strength to destroy bigly. Not only physics can destroy. Biological inventions can be weaponized to release specially designed viruses to eradicate life. Same with chemical warfare. Science in bad guy hands can destroy civilizations.

It's not illogical to think that every invention is made for the good of the world. Inventions help people, better society, and advance technology, right? Many inventions do probably start out with good intentions, even if it's in the vein of just seeing what happens.

- However, as you'll see in the list of inventions below, the reality can be very different and not everything in this man-made world has had a positive impact on the world.
- In fact, the damage has been catastrophic in some cases. But of course, it's only possible to call out these inventions through the magic of hindsight.
- Who knows what other modern creations will have a darker side to them in decades to come?

## Cigarettes

- It seems obvious now that smoking is bad for you, yet for a while smoking was seen as a harmless habit, heavily marketed to millions of people.

- The first commercially available cigarette was launched in 1865 by Washington Duke made on his 300-acre farm in Raleigh, North Carolina, USA. His hand-rolled cigarettes were sold to soldiers at the end of the Civil War.
- It wasn't until the late 1940s and 50s that studies began to take place linking smoking to lung cancer.
- For instance, in Britain in 1949, Richard Doll, a researcher working for the Medical Research Council, and Bradford Hill, an epidemiologist at the London School of Hygiene, began looking at lung cancer patients in London hospitals.
- The patients were asked about family history, diet, and previous diseases. In 649 cases of lung cancer, two were non-smokers. Doll immediately gave up his own five cigarettes a day habit.
- By 1956, the link was incontrovertible and soon restrictions were placed on advertising, followed by higher taxation, restrictions on sales to children, and on smoking in public places, with information on tar and nicotine content being given to the public cigarette sales fell for the first time in a decade.
- Many smokers at the time blamed the tobacco companies, who aggressively promoted their products to consumers without any health warnings.
- Today, there are various restrictions on nicotine advertising. Still, in 2018, the World Health Organization reported that tobacco kills more than seven million people

each year.

- More than six million of those deaths are the result of direct tobacco use, while around 890,000 are the result of non-smokers being exposed to second-hand smoke.

## Plastics

- When plastics were first invented around 110 years ago, they were seen as a miracle invention for their strength, flexibility, durability and heat resistant structure.
- Today, they're still heavily in use, with most food packaging arriving to consumers in plastic containers, and syringes and hygienic packaging used in hospitals to prevent diseases.
- Plastics are used so prevalently in part because they're pretty much indestructible, but ultimately that's become plastics' best and worst trait.
- Around 33% of all plastic is used once and thrown away, and as plastic can't biodegrade, they just break down into smaller and smaller pieces that leak toxic chemicals and ruin ecosystems instead.
- While there is still a lot of work to be done to fully wage the war on plastic, changes are being made, for instance in 2018 when many companies like McDonald's banned the use of plastic straws and introduced paper alternatives around the UK.