# PHI M1 Prep

## Q1

Explain the differences between how the Greeks viewed technology, vs how modern society view technology.

Greeks viewed technology as complementing nature. Now we see technology as opposing nature. In the time of the greeks, they thought as nature as divine. Nature was this very important thing that we all should learn to imitate. Technology was seen as something that would complement and improve nature. The Greeks thought of technology as imitating nature such as how a house would imitate how animals in nature build nests, and traps would imitate spider webs. Their line of thinking with a house would be that the base idea is a bird nest which is found in nature. Then the humans would improve it by adding a roof, adding a door, and other things to make it better.

Nowadays we think of technology as opposing nature. We think of nature as things such as birds, lions, trees, and grass. We think of technology such as farming, and building as destroying animals habitats, and destroying trees and land. We also think of technology such as computers using lots of electricity which also destroys nature.

## Q2

Come up with a definition of technology.

Technology is anything that is created by humans, or something that has already been created by humans, for the purpose of doing something, making something easier, or entertainment.

This definition includes many things that we know to be technology such as computers since computers exist for all three of my points. They “do something”, make life easier, and can be used for entertainment. Saddles for horses were invented by humans for the purpose of more easily riding horses. Hammers were invented to more easily apply forces to objects. Saws were invented for more easily cutting certain materials. Even Art is classified as technology through this definition since Art is for entertainment. It also includes items made by items made by humans, such as an art piece made by Artificial Intelligence, or a binary program file compiled by a computer. Something like a water bottle, or a plate are also classified as technology since they were both invented by humans in order to make it easier to satisfy the basic human need of food and water.

Many things we know not to be technology are not included in this definition such as cows, trees, and the ground. This is because none of these were created by humans or by something made by humans. These all existed for a long time and would still have existed even without humans ever existing. If I was to go into a forest where no human had ever been, we can all agree that that is nature. My definition also says that is nature since none of that was created by humans.

## Q3

Is there any inconsistency with Bacon's “Subduing nature by shaking it to its bones”?

Bacon mentions that we need to obey nature’s laws in order to subdue it. What he means by that is that in order to conquer and overcome nature, we need to first know how it works. For example, in order to cut down a tree to get the wood, which can be used to build houses, tools, or many other items, we first need to understand the physics. If we do not know that, we will cut down a tree and it will fall in any direction, potentially on the person cutting it down. Another more modern example is computers. To make the computers, which overcomes nature in so many ways, we first needed to understand physics. At the base level, computers are just physics. The directions and behaviour of electrons define how a MOSFET transistor works. Transistors are what the logic gates in a computer are made of, and these logic gates build the whole computer.

Even once we have the computer built, we still need to know how to follow logic laws to make the programs that run on these computers.

Another thing Bacon mentions is the theory of the idols. Since there are naturally all the 4 idols such as the idol of the cave, idol of the tribe, idol of the marketplace, and idol of the theater, these are all things that we must understand in order to conquer them. The first step in overcoming a preexisting bias is to understand that it exists. Here we are understanding that these four idols (biasses) exist in the human mind by nature, and we can therefore conquer them and reduce their effect on our scientific research.

In conclusion there is no real inconsistency in Bacon’s statement of having to understand and obey nature in order to conquer it and “shake it to its bones”.

## Q4

Write about the good and bad effects of technology on humans. How does technology improve things, and how does technology erode human values?

Technology has a large impact on humans, and this impact has both positive and negative impacts. The main impact of technology is to improve efficiency. We see this all the time in real life. When we need to get somewhere, we can drive, or take the bus, or even fly. This means we are able to meet people from all over the world. If this technology did not exist, people would have never been able to discover other nations. Canada would be full of people whose ancestry is Canadian, Europe would be full of people whose ancestry is European, and so on. Now we have people from all over the world in Canada and other countries around the world. It also increases efficiency with manufacturing allowing us to have many luxuries improving quality of life such as computers, smartphones, and so on.

Technology also provides basic necessities to the vast majority of people such as food, water, and shelter. In the past, people would make a shelter out of sticks and leaves which would get destroyed during a storm. It would have taken an enormous amount of effort from a large number of individuals to make any large sturdy structure. (Building a large structure could be argued is technology as well). It would have taken such effort that only a small percentage of the population would have been able to get a sturdy shelter. Now we can build a strong sturdy building in as little as a few days by a single person if needed depending on the size and complexity of the building (considering a small shed, this can be done by one person in a few days). It also allows everyone to have food, and especially the correct types of food year long. In the past, it would have been challenging to get vegetables and fruits in the colder months due to them not growing. Now we can easily get them due to shipping, and fridges. Even water is much easier to get as we can pump it from a water source all the way across the country to people’s houses.

Despite all of technologies benefits with efficiency, we have to think of the hidden costs of this efficiency. This is actually quite visible especially over the past few years with the rise of generative AI. One example is if we purchase a product and it is defective, and we require support, we often have to go through an AI bot to get support. While a good human would likely realize the mistake and provide a replacement product as should be done, the AI bot may not as it has different values than humans. Humans are compassionate beings, and AI is just made to follow instructions. This shows that technology erodes human values such as compassion, and justice. Another example is that even with driving, we often spend so much time driving around, which is more efficient, but is that really what we want to do in our free time?

One huge point is that these technologies erode our freedom. Nowadays, we cannot practically drive to a location in the middle of nowhere, and camp for a month. If we do this, we will miss bills due dates, potentially miss important letters in the mail such as jury summons, as well as jobs would not likely allow this. This shows that technology really erodes the sense of freedom that humans have. We are bound by this technology so we may not be able to do what we truly want to do.

Another very recent example is modern safety equipment on cars. In the past, we could take a car and drive wherever we want, do whatever maneuvers we want, and the car would follow our instructions. Now the car has many advanced safety features that are meant to improve safety using technology, but as a side effect, the car no longer always will follow the instructions of the driver. For example, if I press the gas pedal, and the car senses an item in front of the car, it will press the brakes without me doing so. Regardless of the intentions of the car, this has reduced the freedom of the user. Then are we really the ones driving the car or is it a machine doing most of the hard work? An analogy is where young people go shopping with their parents and then are proud of going shopping. At the end of the day, the parents were still the ones making all the important decisions. They were just trying to make the child feel good about them being supposedly independent. Is this is what is going on with cars where the car is trying to make the driver feel in control when all the strings are really being pulled by the machine?

These technologies also erode peoples creativity. In the past before technology, people came up with ideas that were truly their own. Now, often people see something online, or talk about something with someone from a different part of town, and then come up with an idea. Is this idea truly their own? Or is the idea just copied from what they saw online, or from this other person from a different part of town?

# Summary of Course

## Greeks

Greeks thing of technology as something that imitates nature. Weaving and house building were created by imitating spiders and swallows building nets and nests.

Technology is a genuine mechanical knowledge such as how farmers know how to work the land, and shoemakers know how to work with wood and other materials. This is known as Techne. Episteme is the theoretical knowledge about techne.

They organized science into multiple categories such as Logic, Science and Philosophy, Ethics and Politics, and Art and Technology.

The Greeks thought of nature (physis) as a divine law. They thought that everything done according to nature (or with technology since that perfects nature) is divine. Technology can only seek to perfect nature by altering it to meet human needs and to be useful.

## What is Technology

When coming up with a definition the definition should not be too broad or narrow, it should not be circular, it should not use figurative language or metaphors, and it should be in positive terms.

Technology can be defined as tools or machines. These items are concrete, and easily understandable. This definition however does not include things such as physiologist tools, which are technology.

Technology can also be defined as a pattern of rule following behavior. This treats technology as rules rather than tools. Technology is a pattern that is systematically developed. This will include psychology, and software.

## Francis Bacon

Bacon is the founder of the modern inductive scientific method where we observe something, and come up with a rule to explain that something. This is done systematically.

The human mind has a lot of problems, it has 4 main biasses in which it sees the world.

* Idol of the tribe means that we are biased due to human nature, we want to have order and regularity, and we are influenced by emotions.
* Idol of the cave are illusions of the individual person, a single person thinks the whole world is similar to this person and thinks in the same way.
* Idol of the marketplace is about language barriers such as words that have complex or abstract meanings, and miscommunication.
* Idols of the theater are about superstitions.

Bacon thought that humans should dominate and control nature. We however need to do this by obeying the laws of nature. Humans are superior to nature.

The final goal of humans is to create a new reality.

Bacon wanted to reform the education system to take precaution against the idols.

## August Comte

He introduced and popularized positive philosophy. It is about knowledge that is testable, and verified.

He said that there were three stages in humanities development. Theological stage (Sacred Text), Metaphysical stage (Theoretical Reason), and Scientific stage (Experimentation and Observation). The first stage is dominated by military, the second stage dominated by churches, and lawyers, and the third stage by industrial institutions and science. Individual human knowledge also follows these three stages.

Sociology is the end of the scientific (positive) method. All other sciences build up to it.

He believes that the fragmentation of science is not a good thing, they should not be split up into all the different stages. We should focus on one general specialty that studies the general scientific traits

Comte wanted to reform the education system with sociology.

## Jean Jacque Rousseau

Rousseau valued freedom, he considers technology as removing freedom. Humans are increasingly dependent on one another for their satisfaction of their needs.

Humans are naturally good, a human in nature would be free and be good. Civilization corrupted the humans by forcing them to compete for things such as food, and water. Since humans have to fight other people for this in a society with technology, they will steal and kill.

Science adds luxury and leisure which do not improve the moral well being. Luxury is needed to feed the poor people, but if there was no luxury, then there would be no poor people.

## Jacques Ellul

Continental philosophy of technology tends to criticize technology, this is what Ellul studies.

There are 7 main characteristics of technology. Rationality, artificiality, automatism, self-augmentation, wholeness, universalism, and autonomy.

Technology is meant to create efficiency. This can take away from the thing that makes people human. It is created for the modern world, but it is not a good fit for society. Technology has outgrown human control, we are not able to understand or govern all these individual technologies.

Technique is the prime mover of all the rest of the change such as social change, and political change. Technology is autonomous, it will keep marching forward even without humans. It is its own system with its own laws, outside of human values.

Ellul believes that the world is deterministic. Freedom is dynamic, and humans must continue to be determined to be free.

He believes that everything now is rooted in technique. Even sports use technology which reduces freedom, and gives deterministic results.

He does not want to eliminate technology, but wants to raise awareness and make it known that individuals have a responsibility to be aware of technology’s flaws.