
Popularising the Science of Toxicology by Reza Afshari

The "Voice" and Execution of Socrates

Solve the mystery: What could be the potential causes of death and the "Voice" of Socrates?

- Socrates's death was mediated by poisons
- The "voice" he was hearing could have been the result of toxic exposure to stimulant plants or mushrooms

Take a guess (or confirm), and email back your response to be entered in the BCTOX drawing for a \$20 gift card (Deadline: March 10, 2018).

- If you send just a diagnosis you will be entered once.
- If you send the potential reasons justifying your diagnosis you will be entered twice

--- There is no right or wrong answer for this competition. You may select a given diagnosis or provide a new one.

Greece

After successfully opposing the entire military power of Xerxes, Greece, engulfed in its pride and arrogance, eventually started to decline from within as luxury and brutal indulgences gradually overran and demoralised society (1857). Authorities made up of indecent aristocrats worshipping thousands of deities were running the most shameless and undisguised courts in the name of justice while being half hated and half feared by their electorates; some of them were more powerful than the whole court itself.

While Athens,, the most luxurious city at the time and a diamond among the impure world, was full of these aristocrats, Greece also produced unique intellects, including Socrates. Socrates focused on human affairs: What is good? What is beautiful? What is just or unjust? What is a citizen, etc.? Questioning concepts which were morally and intellectually ahead of his time, a demon was created that eventually put him to death (1857).

Socrates

Socrates (469 BC – 399 BC), the son of a sculptor and a midwife, was an ancient Greek philosopher. An oracle advised his father upon his birth that Socrates had a guide inside worth a thousand teachers. In adulthood his drive to expose ignorance and charade made him unbearable to many he tried to persuade into changing their ways. He has been sculpted and portrayed as a solid figure, with a bulldog face and friendly eyes; nude with steam wafting around him inviting people to communicate with this wise figure (Hamilton 1967).

Jaspers described Socrates as a sort of projection figure for men of each epoch (Lageman 1989). Socrates jump-started a turning point in the history of human philosophy. He focused on the problems of human life and the character of man. He was a doctor of the soul (Chessick 1982). It is very difficult to learn about Socrates. Albers Schweitzer once famously said that it is easier to get a historical picture of Jesus than Socrates, as Jesus was described by men of simpler backgrounds, and those who described Socrates were more educated, imaginative and philosophically opinionated. Who knows what the reality was (Chessick 1982).

Socrates' ideas were based on two major pillars of divine sign or voice and he believed that through discussion you can deliver truth like a midwife does, a statement likely influenced by his mother's occupation. He was fond of those who

were influenced by him due to a conquest for inner vision; not those stimulated by money and power.

Socrates believed that as human nature is constant, ethical values are constant and timeless, too. Many people believe in a similar concept "ethics is an absolute not relative notion" even today. If he was alive today in Canada; however, he would certainly not have been executed; a punishment virtue which is history now in this country. This difference in fact suggests that ethics is fluid and changes from time to time. We have to make our mind individually on this believe of his.



Socrates (469 BC – 399 BC) RA©

A lesson from Socrates: Look inside yourself, admit your ignorance, take a good shaking up from me and reform your life here and now! --- Such a powerful statement. I have gooseflesh reading it! Repeat what he said to see your inner quest. He is the most influential moral philosopher of all time! Socrates' ideas of "know thyself" and "an unexamined life is not worth living" are essential to psychotherapy today (Lageman 1989). Although Socrates is not part of our modern consciousness (Chessick 2004), he still remains relevant! In fact, many of today's moral precepts are the direct result of his work.

Today we mainly focus on craftsmanship, technology, pragmatism, and fast relief of our miseries. Socrates idealized a world reflecting the love of beauty, our human concern about the origin of the world and our will to order and explain (Chessick 2004).

--- more questions than answers

His scepticism of democracy, at a time when the Athenian democracy had only recently been restored (Dayan 2009).

I can still picture him in action.

Socrates used to pose his audience a series of very difficult questions or what is called "pimping" (van Schaik 2014). Pimping evokes negative emotions and leads to an environment that is not conducive (Kost and Chen 2015), although I believe the use of this term was not favoured by Socrates.

Daimonion or the voice

The physicality of the mysterious voice has not been fully explained, and is subject to debate among scholars.

The voice started when he was young. It was recurrent and brief. During the episodes, Socrates stood motionless and unresponsive with spontaneous recovery and amnesic confusion (Muramoto and Englert 2006). The voice did not tell him what to do, but what not to do.

This began when I was a child. It is a voice, and whenever it speaks it turns me away from something I am about to do.

--- *Apology 31d*

In recent years, evidence has been provided that his daimonion was consistent with a simple partial seizure of temporal lobe origin without

secondary generalization (Muramoto and Englert 2006) (Muhammed 2013).

In his dream he was repeatedly told to “practice music”. He did not obey until his last days in prison. Perhaps it could be explained by “the limits of logic” as Nietzsche considers (Chessick 1982). Nietzsche’s love and hate lead to paradoxical feelings toward Socrates. He endorsed him, while calling him a villain and recognised himself as a similar powerful personage (Lageman 1989).

The content of the voice was vague, and he interpreted it as directing him to change his course of action. It was too convenient. The voice presented when he was about to initiate certain actions, which raises the possibility of him being controlled by the voice.

If his hallucinations were not divine, Socrates’ symptoms including the auditory voice could have been a result of a major psychologic disease or even a consequence of dissociative phenomena (Waddington 1992). It could have been driven by the pursuit of self-discovery, which was used as a means of increasing his power of convincing. In my view, Socrates may have also used stimulant plants to get in contact with the voice (stimulant plants and mushrooms were well recognised at his time). The latter is more plausible as psychological diseases tend to deteriorate the function of the patient, which is not the case for Socrates.

Facts

- The voice was heard recurrently during which time Socrates became unresponsive, with spontaneous recovery.
- Socrates’ cognitive capability did not deteriorate.
- The voice used to appear in convenient times before important decisions to be made suggesting a voluntary contribution.
- Stimulant plants and mushrooms were recognised at his time.

This evidence is suggestive of deliberate use of stimulants. The most plausible causes could have been magic mushrooms, Kat (Khat) or Hash.

Death

Socrates was tried at the age of 70, 5 years after Athens finally lost the Peloponnesian war in 404 BCE (Ober 1977). In this year Socrates was elected as a member of the Senate. Prior to and after 404 BCE Athens was governed by the people who Socrates had tutored. Frequent failures in wars manifested as frustration against their mentor, Socrates. If Gods were in power, authorities were not touchable due to a reign of terror and Greek fighters were brave, what could be the reason for failures? Socrates was getting old and was accused of insanity; these factors poisoned the thoughts of the oligarchy. Even Plato did not come to his execution due to the dangerous atmosphere (Ober 1977).

Socrates was denounced as insane as he believed in dreams, underwent trances and for his assertive claim that he had a divine mission referring to a voice he was hearing, his so called “Demon” or “Genius”, and claimed to possess supernatural powers (1857) (Specht 1972).

Socrates faced his destiny firmly and calmly as he believed “death” is merely the separation of the soul (psyche) from the body. He was surrounded by his friends. Towards sunset he consumed a cup of poison. The prison guard ordered him to walk about until his legs felt heavy and then lie down and let the poison to act. His personality, his wisdom and his ritualistic death has made him a part of our collective memory to this day.

It is reported that the prison cell in which he spent the last minutes of his life was commodious enough to hold the prisoner, the jailer, and 11 or 14 witnesses. This large size is highly unlikely (Ober 1977). The execution probably took place in a special chamber that could accommodate this number of people (Ober 1977). Plato did not come to the execution chamber, perhaps to avoid being denounced. As a person who has been

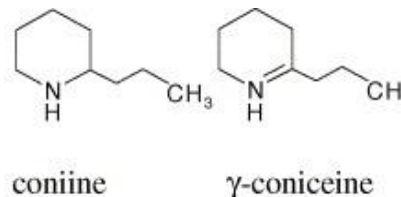
in love with Plato for the majority of my scientific life, I will not forgive him! He was the soul and his apparatus. Once Plato famously wrote that Socrates can counteract pharmakon (poison) with pharmakon (remedy). If that was the case, Plato should not had been absent from the execution chamber.

Poison

Socrates was condemned to death by an Athenian court for corrupting youth through his teachings. He chose to die by drinking hemlock (alkaloid coniine) which causes paralysis, convulsions, and death. Socrates’ death was due to coniine and conium maculatum (de 1950) (Hotti and Rischer 2017).

The root of Conium maculatum (hemlock) looks like a carrot but has a white root. This plant contains a neurotoxic alkaloid “Coniine, 2-propylpiperidine”. In sufficient dose, hemlock kills in minutes to hours.

As the prison guard explained, muscles are gradually paralysed and death the person asphyxiates when respiratory muscles stop working. Nausea, vomiting and irritation of the pharynx occur. Hemlock poisoning is also confirmed by the documentation of the practices of the ancient Greeks and their penal code.



It is described that Socrates did not experience gastrointestinal effects, which is not the case in hemlock poisoning. Records reveal that Socrates died bravely and peacefully. Although this is plausible due to Socrates’ strong personality, it is unlikely, due to clinical manifestation. Low oxygen levels should have led to irritability, gasping and cyanosis, which are not consistent with the image that his followers were willing to provide. He was the wisest, most just and kindest to his friends and is even highly regarded today after 2,400 years. It is highly plausible that Plato presented a modified account of Socrates’ death for political reasons and described a more “noble” death (Dayan 2009). His last words were “Crito, I owe a cock to Aesculapius. Will you remember to pay the debt?” Crito was perhaps absent-minded! Or perhaps he was trying to purify his psyche from the body!

I wonder if he was not executed by hemlock and somehow was freed, how much more or less his impact on human civilisation would have been. We should not underestimate the power of “scarifies” that may have indeed contributed to his successful legacy.

Question

What do you think? What could be the potential causes of “death” and the “Voice” of Socrates?

Take a guess, and email back your response to be entered in the BCTOX drawing for \$20 gift card. --- There is no right or wrong answer for this competition. You may select a given diagnosis or provide a new one. (Deadline April 10, 2018)

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