

Kylie M.

San Diego, California

Consumption

Black and white film photography

These pieces visually demonstrate the negative connotations associated with poison's literal and metaphorical application. Poison's most widely known uses are in homicide and literature, two opposing ideas that create a novelized perception of a deadly weapon when put together. To represent these emotions, I found or made scenes surrounding the theme of consumption—how most poison is taken in by humans, whether through literal poison or through media and literature—on the Oxbow campus and at the Napa Methodist Church. I used this project to represent the idea of poison that I researched in my paper and to reinforce and establish new relationships. From this, I learned how to work with friends and strangers alike to realize my vision; I had to reach out to ask for help, work my schedule around others, and recognize that I would not get a second chance at anything I made if I messed it up the first time. Each picture's focus and environment are all representative of my experiences and research, but they are also abstract enough to be interpretable by any individual so that anyone can make up their own story behind the pictures.

Medicine, Murder, and Morality:
An Examination on the Social Influence of
Poison



Kylie M.

The Oxbow School

OS48

Writer's Note: What is poison? How has poison contributed to social hierarchical systems? How does poison illustrate the human desire for power and control? What are the moral implications of human nature considering the use of poison as a means to cause intentional harm?

I. Introduction

Poison comes in many forms. It can be a natural substance derived from plants and animals or transformed into a weapon, medicine, or a metaphor for human nature. Its use for murder, assassination, and suicide sheds light on a darker aspect of human history. It can be used to subtly kill someone or to cause suffering via the dysfunction and manipulation of the human body to potentially create extreme and prolonged pain. Poison is distinct from other methods of harm in that it distances the moment of instigation from the harmful results. The symptoms of deadly poisons cause reactions within the body themselves, and oftentimes there is no apparent cause of death at first glance.

Poison can be taken in the literal sense as a tool for homicide or medicine, or it can be taken as a symbol of evil. The literal use of poisons include substances and plants such as arsenic, belladonna, poisonous nightshade, henbane, cyanide, phosphorus, hemlock, opium, mandrake, foxglove, – the list goes on. These cause bodily harm when ingested, inhaled, injected, or when absorbed through the skin. Common symptoms include (but are not limited to) sickness, chills, dizziness, drowsiness, headaches, rashes, difficulty breathing, double or blurred vision, and seizures. The most common poisons used for homicidal acts are “arsenic, cyanide, thallium, strychnine, aconitine, atropine, and antimony” (Steck-Flynn, 2007). Arsenic was a popular method of poisoning in past centuries because it is tasteless and odorless, making it easily disguisable in food or drinks. Another popular poison, cyanide, is an extremely fast-acting agent that can kill the

recipient in less than thirty minutes when given a lethal dose (Jethava et al., 2014). Strychnine, on a short-term basis of approximately eight hours, causes “generalized muscle spasms, muscle cramps, stiffness and tightness, agitation, heightened awareness and responsiveness, respiratory failure, stimulation sensitive seizures, and possibly death” (Centers for Disease Control and Prevention [CDC], 2011). Despite these deadly symptoms, substances can be extracted from poison to be used as medicine. A poisonous plant as a whole may be toxic to consume, but isolating either the substance that makes a plant poisonous or what was not poisonous to begin with has the capability to transform that toxicity into a tool for good.

The literal and medicinal application of poison turns more figurative when put into text. Poison’s surreptitious nature allows for translation into text as a metaphor or literary device to illustrate hostility in characters. People take the natural association that they have with poison as something dangerous, something to be avoided, and apply that to what they are reading. Poison has also been romanticized in literature to be something that elucidates the plot from the perspective of the audience and establishes relationships, such as in Shakespeare’s *Romeo and Juliet*.

These literal and figurative uses can be used to influence hierarchical systems and gain power and control over a community. It can tip the scales of dominant political or religious positions as a means of physically eliminating or spreading fallacies to delegitimize the opposition. An individual can gain power through the actions of oneself, or that of a third party, through nefarious means and take control of a broader community. Whether done directly between two parties or by a third party acting on behalf of another, it is implicative of human nature that we would resort to poison to quell our desire for control instead of conventional weapons such as guns, knives, and swords because it disconnects a person from the action of poisoning. A person

who wishes to poison another only has to hand them a drink whereas other methods require a certain level of physical participation.

II. Medicinal Use

By definition, “poison” and “medicine” are essentially opposites. Poison is defined as “a substance that through its chemical action usually kills, injures, or impairs an organism” whereas medicine is “the maintenance of health and the prevention, alleviation, or cure of disease” (Merriam-Webster, n.d.), yet they are inextricable from each other because medicine stems from poison. It is with poison that we can make such invaluable medicines.

Despite poison’s applications to weaken or kill, there are multiple ways in which poisons have been used for the advancement of medicinal practices. For example, experiments in the early 1800s paved the way for the development of the first neuromuscular blocker in 1942. South American poisoned arrows used in the 1500s were tested on farm animals to determine the effects of the poison by experimenting with the body’s circulatory system and the musculature reaction. Curare—what causes the musculature response in the poison—had been used in the late 1800s as a part of morphine and artificial ventilation. D-Tubocurarine was refined in 1942 to create the first neuromuscular blocker¹ to relax muscles during medical procedures. By understanding the effect of a deadly poison, scientists were able to turn it into a substance to help with medical procedures for anesthesia, mechanical ventilation, and optimizing surgical procedures.

Antidotes for poison are made by analyzing the poison itself and extracting the necessary substances. The medicinal application of poison varies depending on the species, subspecies, and components derived from a plant. Certain poisons, such as opium, hemlock, and henbane, can be

¹ Blocks neuromuscular transmission, leaving the body in a state of paralysis (Cook & Simons, 2022).

taken in low doses as an anesthetic. There are also poisons that, when ingested by themselves, would be lethal. However, when they are ingested with other substances, they can be used as an antidote for something else, as is the case with strychnine and curare. There are types of wormwood (*Artemisia absinthium*) that contain the chemical compound thujone, known to cause symptoms such as “restlessness, vomiting, vertigo, tremors, renal damage, and convulsions” (Romm et al., 2010, p. 196), although there are subspecies of this plant that do not contain thujone and are used to “ease inflammation, improve digestion, treat skin infections, and kill parasites like tapeworms” (Curtis, 2023). Another example is stinging nettle. Brushing up against stinging nettle acts as an irritant by causing itchiness and a rash. When it is touched, “the tip breaks off leaving a microscopic hollow needle which injects a little dose of histamine, acetylcholine, serotonin, and formic acid” (Department of Environmental Conservation, n.d.). However, cooking deactivates the stimulants and has been used to “treat painful muscles and joints, eczema, arthritis, gout, and anemia” (Mount Sinai, n.d.), and is also used as a source of nutritious food.

While poison may be definitionally intended to cause harm, there are specific compounds within toxic plants and animals that can be used when separated from the original source. When consumed without alteration, poisons and venoms² cause disruption within the human body due to organism-specific chemical reactions. It is the artificial alteration of plant and animal toxins by humans that makes them not just consumable, but beneficial.

III. Literature

An alternate definition of poison is “something harmful or pernicious, as to happiness or well-being to exert a baneful influence on” (Dictionary, n.d.). To approach the topic of poison from a

² Poison is “is a toxin that gets into the body via swallowing, inhaling or absorption through the skin” where venom is “actively injected via a bite or sting” (Australian Academy of Science, n.d.)

non-literal perspective is to see how Western literature ties characters and themes to the negative associations with poison. Imagery that is commonly equated to poison is corruption, alcoholism, shame, jealousy, lying, lust, violence, and other actions and emotions considered “sinful.” In *The Development of the Norm Against the Use of Poison*, Jon Ellis van Courtland Moon describes poison as evoking “the ideas of treachery, invisibility, and transformation” (Moon, 2008), exemplifying a typical sense of hatred toward the use of poison, poisonous gas, and chemical warfare. When something is described as poisonous or related to poison in some way, our implicit bias is to assume that something is malicious.

King Richard in Shakespeare’s *The Tragedy of King Richard III* is described as a “foul toad,” a “poisonous bunch-backed toad,” and “a bottled spider,” all animals associated with being poisonous or venomous. In Shakespeare’s *Hamlet*, the description of King Hamlet’s physical reaction to being poisoned is used to show the torment of his soul as it proceeds into the afterlife. Shakespeare also uses poison in *Romeo and Juliet* as a plot tool. Juliet fakes her death, Romeo kills himself upon thinking she is truly dead, and she in turn kills herself when she wakes to find Romeo dead by her side. Poison is a negative force that drives them apart as they fight to be together, making the reader inclined to wish for their happy ending. By likening these characters and plots to the negative associations viewers have with poison and venom, Shakespeare goes further than saying something is evil; he makes the reader actually believe it.

In *Poisonous Plots: Women Sensation Novelists and Murderesses of the Victorian Period*, Randa Helfield explores how “female sensation writers were condemned as poisoners and authors” (Helfield, 1995, p. 162) in the 19th century, exemplifying the poison of humanity as we see it through a modern lens and a Victorian one. The genre of sensation fiction was popular in the 1800s, but women novelists who participated in the movement were looked down upon for being

immoral, unfeminine, and perverted. Helfield provides the examples of Adelaide Bartlett and Mary Elizabeth Braddon to examine the influence of poison and its figurative application in the 19th century.

Adelaide Bartlett was a woman accused of murder. She killed her husband by forcing chloroform down his throat when he tried to back out of their relationship. However, instead of trying to hide this, she claimed she did it because he told her to based on earlier conversations they had regarding the status of their relationship. Her husband, Edwin, had stated that their relationship was to be purely platonic and that after his death, he would “give” her to a friend of his. He changed his mind and “Adelaide used chloroform to ward off his advances” (Helfield, 1995, p. 170). Despite the very clear and intentional murder that she committed, her defense was that as an author, she had been heavily influenced by “foreign literature” and in this case, she was the actual victim. She was acquitted of all charges.

The second example is that of Mary Elizabeth Braddon, who was accused of poisoning the minds of the people that read her sensually themed novels. She also blamed the influence of foreign literature in the face of criticism, but in her case, it was more plagiarism than influence. Even with many acclaimed critics attacking her work, she was able to claim herself to be the victim with the very clear plagiarism in her novels taken from French literature.

These cases present the figurative use of poison as both for harm and good, depending on perspective. Although these women’s writings were viewed as poison in a negative sense to the public, they were able to take foreign literature and use it to their advantage. From the accusation of poison, the specific topic of “foreign literature” was extracted to remedy public opinion. The application of medicine in a figurative context is taking the idea of poison as a whole, removing one aspect, and twisting it for one’s personal gain.

The depiction of poison in literature is used to reflect the difference between true human nature and the idealized human nature defined by modern social norms. True human nature is shown through Helfield's examples of authors from the 19th century in how they use poison for personal gain. Idealized human nature is shown in literature by creating a clear divide between what is morally right and wrong. Real life does not have such hard lines of good or bad as humans tend to be very multifaceted with both desirable and undesirable traits. To be able to place a person in one category or another without exception is exponentially easier and thus a more appealing approach to examining human characters.

IV. History

Our modern understanding of poison is represented well by historical figures such as the following: Mithridates VI Eupator (135-63 BCE), dubbed Mithridates the Great posthumously for his success as the ruler of Pontus, carried out a practice in which he would ingest small amounts of poison at a time to build up immunity. The previous ruler of Pontus had been poisoned with arsenic during a large banquet, and Mithridates VI held with him a sense of paranoia that he would experience a similar fate. When in power, Mithridates VI studied poisons extensively, testing substances on criminals condemned to die. Through his research, he developed an antidote that supposedly cured all poison ailments, known as mithridatium or mithridate. This cure-all antidote was sought after during the middle ages and the Renaissance. Different variations of the original mithridatium were produced in the following centuries, up until the 1800s in which a version called theriac was still in use. At the end of his rule, he faced the threat of defeat against the Roman forces he had tried to subdue for so long and tried to take his life with poison to escape capture. Ironically, he failed

because he spent so much time dedicated to creating an antidote. Instead, he asked a servant to kill him with a blade.

Locusta of Gual, the first recognized serial killer, was a poisons expert under Julia Agrippina, the Roman empress from 49 to 54 CE. She reportedly had a hand in the murder of Claudius in 54 CE (Momigliano, 2023). She was later summoned by Agrippina's son, Nero, to kill Claudius' son, Britannicus. After Nero's death by suicide, Locusta was sentenced to death and executed by the succeeding ruler.

Giulia Tofana developed a poison called aqua tofana that she would sell to wives to help them kill their husbands. The substance is clear, odorless, and slow-acting, making internal dysfunction caused by the poison appear to be a natural disease. Tofana and all her direct associates in the poisonings were executed in 1659 after confessing to the aided murder of over 600 men (Hardy, n.d.).

Alternatively, there are also events that happened on a larger scale that are indicative of human nature as poison was used in warfare and spiritual contexts. World War I was the first large-scale use of chemical warfare. Although it had been used in ancient times as a hunting weapon, and as a weapon of murder in both ancient and more recent societies, World War I was the biggest incident in which poison was used as a military weapon in conflicts between countries. The biggest problem with chemical warfare was its conflict with morality. Chemical warfare was unpredictable, and although the percentage of casualties in WWI was comparatively very low to other causes of death, it was vastly more inhumane. "Poison gas, chemical weapons, should be classed not as a weapon of war, but as a weapon of mass terror" (Perry, 2017). The extreme pain and physical deformation caused by poisons such as mustard gas left soldiers hospital-ridden for days, and even if they did recover, they were much more susceptible to other diseases. As such,

chemical warfare should be considered a torture device rather than a conventional weapon. It was also potentially a double-edged sword because the poison was airborne. Even sending shells containing the poison far away, with enough time and a strong enough wind, the poison could make its way back to the original instigator.

On a smaller scale, the religious and superstitious affiliations with poison focus on the perspective of the public versus the leadership of a community. The Salem witch trials of 1692 and the ideals of 4th-century bishop Epiphanius of Salamis are examples of justifying corruption by taking advantage of situational circumstances.

Witchcraft was considered a sin and a poison by those who were not witches. Over 200 people were accused of using witchcraft, twenty of whom were executed. Despite this, there is a modern theory that the accounts of the symptoms supposedly caused by witchcraft could be attributed to ergotism, a fungal disease that resides in cereal plants. Symptoms believed to be caused by witchcraft included fainting, nausea, aphasia, hallucinations, depression, prickly or burning sensations, increased sexual desire, paralysis, and a short temper. These symptoms closely align with the symptoms caused by ergotism (Woolf, 2000, p. 458-59).

Poison in religion is equated to heresy, sexual deviancy, and gender. Epiphanius connects poison and sexual slander to delegitimize his opponents by labeling them as heretics. He claims that sexual activities are a poison that causes heresy. In regards to gender, Epiphanius labeled the church as being feminine. The people of this time period viewed women's bodies to be more susceptible to "penetration" and sexual activity, so labeling the church as feminine shows that Epiphanius believed the church was vulnerable to heresy. Being labeled feminine is the equivalent of heresy because of the association between women's bodies and sex. By making the public believe that any who opposed him were heretics and that church was in a state in which it needed

to be saved, he painted himself to be the only “orthodox” (Whitley, 2016, p. 242) religious figure and the only one that would be able to lead his community to a life of normality. He saw himself and his work as an “antidote to cure” (Whitley, 2016, p. 244) heresy. Epiphanius is an example of using poison as a metaphor to gain power and control to help reconstruct the Christian identity.

V. Power and Control

When presented with a situation that questions the norms of a community, it becomes a power struggle between the status quo and the new idea. The Salem witch trials represent a situation where a new style of living was introduced in which individuals held greater power than the leaders of the community. Facing circumstances they did not know how to handle and the fear that they would not be able to control the outcome if the “witches” were to try to rise to power, the only option they saw fit was to eliminate the risk factor completely. It is the fear of losing power and control that makes people take drastic measures to hold on to it as long as possible. Labeling one type of people as a threat made all the people of Salem turn against each other as they lived in fear that their neighbors, their friends, or their family in the effort to find, try, and execute anyone who could be a witch. The stigmas attached to witchcraft made it impossible to reason with anyone who accused another of sorcery. It was a society that lived by the principle of guilty until proven innocent with the burden of proof placed on the accused to make it harder for anyone accused of witchcraft to be acquitted. The trials originated from superstitious beliefs but became a tool to enforce an authoritarian leadership. Anyone who tried to speak out against them could be accused of witchcraft and found guilty without question. The trials did not end until almost a year after the initial arrests because people began to lose trust that the trials were working. Dozens had been

arrested and killed with no reduction in witchcraft-related symptoms (Peabody Essex Museum [PEM], n.d.).

In a situation that lacks control, poison provides a method of enforcing power dynamics. It ensures positions of power by eliminating any contest. From a community's leaders, the paranoia, the fear, and the biases are all passed down to the wider community. It was a select few that held the power to influence the masses and take control once again when presented with an unforeseen event.

Poison in nature is used as a defense mechanism. It is used solely for the purpose of self-preservation but has been taken advantage of by scientists and turned into a weapon. Artificially introducing toxins to the human body takes away the natural purpose of poison by turning it into a weapon to cause harm rather than a tool of self-defense. This displays the human desire to control by using these poisons to reverse the effects of neuromuscular diseases, gaining power over the human body itself.

Poison as a weapon represents both the desire for control and the lack thereof. Although it is a weapon that lacks control in itself because of the separation between person and action, there is enough of a connection to be able to acknowledge that an accomplishment was made without retaining a sense of responsibility. A sense of control comes from this loose association with one's self having succeeded in eliminating a target but without the subconscious recognition of causing harm. Where with a weapon such as a knife, you would have to seek out a target, physically appear before them, and watch them die at your own hands, poisoning someone is a chain reaction of events. It starts small with the initial poisoning and gets progressively more out of control, but the poisoner is only ever a part of that one, small first step. The act of poisoning itself is uncontrollable to varying degrees but can be guided to meet a certain end. It is the subconscious mind, unhindered

by the persistence of social norms, that gains pleasure from the position of power obtained by the ability to biologically manipulate others.

VI. Conclusion: Moral Implications on Human Nature

Poison demonstrates the aspect of humanity that people try to hide. In the face of a society that prioritizes socially acceptable actions, poison provides a loophole for those that want to indulge the darker side in themselves while still retaining a favorable public image. In a society riddled with norms and preconceived notions of what is right and wrong, the thoughts and desires that we suppress spread into all other aspects of our lives. Annoyance is an infection, spreading from a minor inconvenience to ruining your whole day. Anger festers, growing stronger the longer it goes unchecked. Sadness is a plague, as people feel empathy for those that are not doing well; when one person sees another crying, it upsets them as well because they know that something is wrong.

Poison is dehumanizing because it takes away bodily function and kills in a manner that makes the body betray itself. It artificially introduces toxins to the human body that it cannot handle. Socrates went to trial for “impiety and corrupting the youth” (Bowles, 2007, p. 16). Due to his outspoken opinions against democracy in Athens, a democratic society, he was sentenced to kill himself by ingesting a lethal amount of hemlock, a punishment constructed specifically to contradict his philosophies and self-perception that he had been preaching to the people of Athens. Two of his main principles were that no one would intentionally harm themselves and that a good person could not be harmed because even in death, it would not destroy character. The act of killing himself blatantly contradicts the first philosophy. In turn, though, it also contradicts the second philosophy mentioned because he considered himself a good man and committed an action that turned him into a bad one.

On one hand, the use of poison disconnects the poisoner from the poisoned, relieving the guilty feeling of responsibility because they are not using their own body to inflict harm on another but rather relying on the dysfunction caused by poison to do the work for them. On the other, poison can be used to inflict much more suffering, tying back to the idea of craving control.

Poison's literal and figurative uses show the deterioration of rational thought and morality in the face of the fear of losing control. People always crave the ability to know what's coming next. In a world in which so much can go wrong, being able to control what seems like the uncontrollable is an unrivaled feeling of power. Poison, in itself, indulges the innate human desire for control over life and death.

Works Cited

- Australian Academy of Science. (2017, March 11). *Poison vs. venom*. Australian Academy of Science. <https://www.science.org.au/curious/people-medicine/poison-vs-venom>
- Bordon, K. De C. F., Cologna, C. T., Fornari-baldo, E. C., Pinheiro-júnior, E. L., Cerni, F. A., Amorim, F. G., Anjolette, F. A. P., Cordeiro, F. A., Wiezel, G. A., Cardoso, I. A., Ferreira, I. G., Oliveira, I. S. de, Boldrini-frança, J., Pucca, M. B., Baldo, M. A., & Arantes, E. C. (2020). From animal poisons and venoms to medicines: Achievements, challenges and perspectives in drug discovery. *Frontiers in Pharmacology*, *11*. <https://doi.org/10.3389/fphar.2020.01132>
- Bowles, D. (2007). *Wrongfully accused: The political motivations behind Socrates' execution*. <https://www.mcgill.ca/classics/files/classics/2006-7-03.pdf>
- Brown, T. (2013). From arrow poison to neuromuscular blockers. *Pediatric Anesthesia*, *23*(9), 865-867. <https://doi.org/10.1111/pan.12152>
- Cook, D., & Simons, D. J. (2022, September 24). *Neuromuscular blockade*. National Library of Medicine. <https://www.ncbi.nlm.nih.gov/books/NBK538301/>
- Curtis, L. (2023, April 19). *The health benefits of wormwood*. Verywell Health. Retrieved April 19, 2023, from <https://www.verywellhealth.com/wormwood-5082001#:~:text=Wormwood%20is%20an%20herb%20that,and%20kill%20parasites%20like%20tapeworms>.
- Department of Environmental Conservation. (n.d.). *Stinging nettle*. Department of Environmental Conservation. <https://www.dec.ny.gov/animals/105371.html#:~:text=Nettles%20have%20hollow%20stinging%20hairs,acetylcholine%2C%20serotonin%20and%20formic%20acid>.

- Hardy, L. (n.d.). *Meet the woman who killed over 600 men*. Novel Suspects. <https://www.novelsuspects.com/articles/meet-the-woman-who-killed-over-600-men-giulia-tofana/#:~:text=Tofana%2C%20her%20daughter%2C%20and%20her,But%20Tofana%27s%20legend%20lives%20on.>
- Helfield, R. (1995). Poisonous plots: Women sensation novelists and murderesses of the victorian period. *Victorian Review*, 21(2), 161-188. <https://doi.org/10.1353/vcr.1995.0002>
- Inorganic poisons. (1909). *The British Medical Journal*, 2(2556), 1802-1803.
- Jethava, D., Gupta, P., Kothari, S., Rijhwani, P., & Kumar, A. (2014). Acute cyanide intoxication: A rare case of survival. *Indian Journal of Anaesthesia*, 58(3), 312. <https://doi.org/10.4103/0019-5049.135045>
- Mark, J. J. (2017, December 4). *Mithridates VI*. World History Encyclopedia. https://www.worldhistory.org/Mithridates_VI/
- Mount Sinai. (n.d.). *Stinging nettle*. Mount Sinai. <https://www.mountsinai.org/health-library/herb/stinging-nettle/#:~:text=Stinging%20nettle%20has%20been%20used,benign%20prostatic%20hyperplasia%20or%20BPH.>
- Perry, M. (2017, April 16). *Why the world banned chemical weapons*. Politico. <https://www.politico.eu/article/why-the-world-banned-chemical-weapons/>
- Poison*. (n.d.). Merriam-Webster Dictionary. Retrieved April 24, 2023, from <https://www.merriam-webster.com/dictionary/poison>
- Romm, A., Burgess, I., Winston, D., Zick, S. M., & Crawford, A. M. (2010). *Conditions of the reproductive organs*. Elsevier. <https://doi.org/10.1016/B978-0-443-07277-2.00009-X>

- Steck-Flynn, K. (2007). Just a pinch of cyanide: The basics of homicidal poisoning investigations [Abstract]. *Law Enforcement Technology*, 34(10). <https://www.ojp.gov/ncjrs/virtual-library/abstracts/just-pinch-cyanide-basics-homicidal-poisoning-investigations#:~:text=This%20article%20profiles%20the%20following,aconitine%2C%20atropine%2C%20and%20antimony.>
- Strychnine: Biotoin.* (n.d.). Centers for Disease Control and Prevention. https://www.cdc.gov/niosh/ershdb/emergencyresponsecard_29750018.html#:~:text=It%20causes%20generalized%20muscle%20spasms,sensitive%20seizures%2C%20and%20possibly%20death.
- Swenson, H. (2020, March 27). *Shakespeare's much-maligned toads and frogs*. Folger Shakespeare Library. <https://www.folger.edu/blogs/shakespeare-and-beyond/toads-frogs-shakespeare-plays-poison-witchcraft/>
- Van courtland moon, J. E. (2008). The development of the norm against the use of poison: What literature tells us. *Politics and the Life Sciences*, 27(1), 55-77. https://doi.org/10.2990/27_1_55
- Whitley, T. (2016). Poison in the Panarion: Beasts, heretics, and sexual deviants. *Vigiliae Christianae*, 70(3), 237-258.
- Woolf, A. (2000). Witchcraft or mycotoxin? The Salem witch trials. *Journal of Toxicology: Clinical Toxicology*, 38(4), 457-460. <https://doi.org/10.1081/clt-100100958>