Impact of Classical Mythology on the Modern Science

By Ziwei Zeng

AUTHOR BIO

Ziwei Zeng is a rising senior in Groton School in Massachusetts. He is very passionate about classical studies, technology and entrepreneurship and hopes to explore the intersections among these different fields.

ABSTRACT

The popularity of Classical mythology has gradually increased in contemporary society. The narrative revolving around classical mythology can be seen as unrealistic fancy flights used by the ancient Greeks, but it has greatly impacted modern science. It is evident that classical myths do not originate from experimental results and thus are not actual realities but have successfully shaped contemporary scientific skills and knowledge. Classical mythology, comprising the captivating stories of heroes and gods, not only entertains but also has left a long-lasting impact on understanding and applying scientific knowledge. The information and knowledge from Classical mythology have subtly influenced modern science. It has shaped most scientific discoveries and even formed the basis of the principles used to define scientific concepts. The research paper examines the impact of classical mythology on modern science by exploring the effect on the universe's origin, weather and natural phenomena, healing and medicine, navigation and astronomy, communication and language, modern hydrology, and analogies and metaphors.

Keywords: Classical mythology, influence, modern science, astronomy and navigation, healing and medicine.

INTRODUCTION

Since ancient times, humans have attempted to create a sense of the natural world surrounding them. When looking at strange things that happen or natural disasters occur, individuals naturally search for explanations before contemporary science. Finding the explanation before consulting modern science implies that sometimes, back then, people had to search for the explanation on their own without science. Even though Classical mythology can now seem hard to believe and outlandish, it was the basis and what provided the cause of different natural phenomena just before modern science involved day and night subjects, volcanoes, and whirlpools.

Myths such as classical mythology have been consulted to discuss and describe each aspect of science, from simple concepts such as rain and wind to complex concepts such as the Northern Lights and the solar eclipses. Auroras happen when charged particles established along the Earth's magnetic field connect with the Earth's upper surface gasses (Haarmann, 2015). Classical mythology and its captivating stories of heroes and gods surpass its course of mere entertainment. Classical mythology has an incredible mark on the modern world's scientific knowledge fabric. From computer science terminologies to navigation and medical intricacies, the influence and impact of classical mythology can be observed and explained in modern science foundations. Not only does mythology conceptually inspired scientific discoveries through engagement with universal themes and natural phenomena, it also often challenges the known boundaries of reality and encourages exploration into the unknown. This sense of wonder and curiosity drives scientific inquiry.

LITERATURE REVIEW

Computer Science

According to Computer Science, "The Trojan Horse" refers to a computer virus that acts harmless but secretly imposes damages. The appellation of the virus is derived from Classical mythology; the word Trojan Horse is generated from classical mythologies, most notably Homer's Iliad (Chami, 2015) and Vergil's Aeneid. Homer explains how the Illiad army failed to capture Troy city, retreated from the siege, and left a wooden Trojan Horse in front of the gate, ostensibly exhibiting it as a gift to the city gods. Troy city residents accepted the gift by pushing it inside the city's walls, even though the Trojan priest, Laocoon, had already warned the crowds about the imminent danger. In Aeneid Book 2 line 50-53, it says, "Sic fatus validis ingentem viribus hastam in latus inque feri curvam compagibus alvum contorsit. Stetit illa tremens, uteroque recusso insonuere cavae gemitum que dedere cavernae." Having spoken in this way with powerful strength, Laocoon hurled a spear into the side, and the belly of the horse curved by the joints. The spear stood trembling, and with the belly having been concussed the hollow cavities resounded and gave a groan. Yet Laocoon's warning did not raise the Trojans' alarm. The Trojan Horse was then brought by the Trojans to the middle of the city together with people's celebrations as the book depicts, "fatalis machina muros feta armis. Pueri circum innuptaeque puellae sacra canunt funemque manu contingere gaudent. Illa subit mediaeque minans inlabitur urbi". This translates into "fateful machines filled with arms climb the walls. Boys and unmarried girls sing sacred songs around and rejoice to touch the rope of the wooden horse by hands. The Machine comes up and being menacing, glides towards the middle of the city". At night, Greek soldiers emerged from the horse and went ahead to capture Troy city, setting all places on fire. Vergil describes that day as, "nos delubra deum miseri, quibus ultimus esset ille dies, festa velamus fronde per urbem", meaning that day was the last for our men cover the temples of gods with festive foliage through the city, implying how doomed they were and how fatal the Trojan House was.

Trojan Horse computer virus is a demonstration of Classical Mythology in that the Trojan Horse computer program acts as a perfect and legitimate program, such as a file handler or a compiler with access to different users' files.

However, once people click on it, the seemingly legitimate-purpose program turns into malicious software, starting to attack the host computers. An example of a Trojan horse virus can be seen in the Appendix.

Although the naming conventions may seem contrived, this tradition not only honors mythology but also gives a narrative or mnemonic device that aids in remembering and discussing scientific concepts. The trojan horse used by the Greeks is not the exact copy of a computer virus, but the nomenclature reflects how humans interpret logical issues— the very concept of infiltrating an adversary with innocuous objects rings true in science or history.

Apart from modern science terminology, the nomenclature tradition is evident that the universe's system is "heliocentric," meaning that the planets rotate around Helios (Chami, 2015). There is also a theory referred to as Gaia to theory, wor. Thea refers to an appellation based on Greek mythology and implies Mother Earth. Furthermore, in 1795, the famous German chemist Martin Klaproth was very excited about discovering a fresh metallic element, and he named the finding "Titanium" (Chami, 2015). It is directly connected to Classical mythological Titans, Earth goddess sons. Also, the "Promethium" appellation is generated from the Classical mythological Prometheus, who is believed to be the mythical figure who gave humans gods stolen fire. Mythological names often add a layer of symbolic meaning to scientific discoveries. When a new element is named Promethium, it carries with it the narrative of Prometheus, who defied the gods to bring fire to humanity, symbolizing enlightenment and possibly forewarning the dual promise and peril inherent in the element's radioactive nature. This linkage between natural occurrences and human imagination not only provides a mnemonic aid but also suggests a deeper narrative about the nature of scientific exploration—a journey that begins with trials, imaginations, and mental experimentations.

Additionally, Scorpius refers to a summer constellation on South Ophiuchus. Based on Greek Mythology, the scorpion is the one that stung the hunter Orion to death. However, the accounts collide with the actual situation. In Classical mythology, Ophiuchus is associated with medicine by the Greek god Aesculapius. Capricorn is the 10th zodiac symbol rooted in the Capricornus constellation. According to the Greeks, Capricorn represented the mountain Pan, who acted as a night musician and a shepherd in the daytime. Astrology's fifth zodiac symbol is Leo, which has existed since the Leo constellation. The constellation is also associated with a Classical myth related to the initial task among the twelve tasks given to Hercules, which is slaying the Nemean Lion, also known as the Nemean Leo.

Mythology embodies the collective unconscious of humanity, encapsulating archetypal themes and figures that resonate across cultures and ages. By naming celestial bodies, elements, and other scientific phenomena after mythological figures, scientists tap into a deep cultural well.

Weather and Natural Phenomena

Classical mythology contains narratives explaining the origins and the foundation of natural phenomena such as lightning and thunder, the varying seasons, tsunamis, and earthquakes. The narratives entertained the early Greeks and ensured they effectively made sense of the surrounding environment. Modern-day scientists and researchers have established their views and opinions and developed an in-depth understanding of the natural world phenomena through experimentation and observation. One example of the influence of Greek mythology on the general knowledge of natural phenomena revolves around the narrative of Zeus, the king of gods, and his powers of control over lightning and thunder. According to Classical mythology, Zeus was known for throwing thunderbolts to punish people who angered him. The narrative enabled the early Greeks to explain and describe the thunder crashes and the lightning's bright flashes they heard and observed during heavy storms. Contemporary science, however, has demonstrated that lightning and thunder are caused by electricity discharge in the atmosphere

(Karakis, 2018). The concept and phenomena can be understood and studied through meteorology. As humans are inherently drawn to stories, the use of mythological names transforms the scientific landscape into a cosmos teeming with stories, making complex ideas more accessible and memorable.

The narrative of Poseidon is another example of who the sea god was and the powers he had to cause earthquakes. In classic literature, Poseidon was said to be responsible for earthquake creation and its shaking process. The myth enables the early Greeks to create sense from the destructive and powerful forces they faced. In the modern world, with the advancement and development of seismology, researchers and scientists have experimented and discovered that the primary cause of earthquakes is the tectonic forces' movement beneath the Earth's surface (Konstantinou, 2021). Understanding this is essential since it has enabled people to forecast, predict, and effectively prepare for the mitigation measures related to natural disasters. Classical mythology has also successfully offered explanations for the varying seasons through the narrative of Persephone and the time she spent in the underworld. Referring to the myth, the descent of Persephone inside the underworld during winter seasons described the Earth's barrenness. Persephone's return during the spring explained the plant's rebirth and return to life. While the early Greeks might have associated these variations with the actions of goddesses and gods, current science has explained that the varying seasons result from the Earth's axial tilt and orbit around the sun. Most importantly, the act of explaining natural weather phenomena through mythology has an additional meaning. The act of naming is fundamentally a human endeavor to order and control the chaos of the unknown. By naming the elements of the natural world, especially when it comes to weather after gods and heroes— an element that surrounds all humanity through the ages, scientists place themselves in the role of the myth-makers of old, who sought to make sense of the inexplicable through stories and characters. This act is a humble acknowledgment of the vastness of the unknown and an assertion of human creativity and agency.

Healing and Medicine

Classical mythology's influence on current science also extends to medicine and healing, where early beliefs and narratives have the understanding and knowledge concerning the human body and the disease's treatment and prevention remedies. The ancient Greeks believed that sickness was due to the imbalance of the body's humor, the bodily fluids responsible for ensuring good health (Miller, 2020). This belief led to the development of the four senses of humor: black bile, yellow bile, phlegm, and blood. Every humor among the four humors was related to distinct personality traits and physical features. Hippocrates, the Greek physician always regarded as the "Father of Medicine, " was instrumental in shaping treatment and medical practices based on Classical mythology (Greco et al., 2021). Hippocrates emphasized the importance of documenting and observing signs and symptoms and the importance of ethical practice and conduct in medical practice.

Hippocrates stressed the importance of pharmaceutical products since they directly affect a person's health. Hippocrates also created the Hippocratic Oath concept that set future directions and guidelines for medical physicians to follow during their practice (Hu, 2023). The Oath acknowledges the significance of confidentiality, patient care, and the principles and rules of medical practice that are highly utilized and followed in modern medicine. Classical mythology also influenced the creation process of medical terminology. Most terminologies used in medical practice, like pharmacy and hygiene, are believed to have originated from the early Greek words. The ancient Greeks strongly believed in the effectiveness of plants and herbs in curing and healing. Their understanding and knowledge of herbal medical plants are still being applied and used by modern generations. Currently, people still depend on herbal medicine, and some modern antibiotics and drugs are manufactured through plants. Furthermore, the study and

research of herbal remedies remain significant in medical research, especially pharmaceutical research studies.

The connection between the two is no mere coincidence. Mythology uses abstraction to transform individual experiences and observations into universal truths. In mythology, abstract concepts are often personified as gods, demons, or mythical creatures, embodying complex human emotions and moral dilemmas. This fundamentally critical abstraction process underpins much of the medical sciences as well. Medical science utilizes abstraction to categorize and systematize knowledge about the human body and its ailments. Diseases are abstracted into symptoms, causes, and treatments in order to be studied, diagnosed, and cured. This abstraction allows medical professionals to apply general principles to specific cases, creating protocols and treatments that can be widely used across diverse populations. It strips down the individual variability of patients into manageable, treatable units, often focusing on quantification and reproducibility. The idea of conceptualizing phenomena and distilling them into groups to study, learn, and recognize is shared between the two. Just as symbols in myths encapsulate complex ideas, medical diagnostics abstract the patient's experience and symptoms into symbols like diagnostic codes or imaging results.

Navigation and Astronomy

Classical mythology also played an essential role in developing and establishing navigation and astronomy, influencing how civilizations interpreted and observed celestial bodies in the universe. The interplay between mythology and the development of navigation systems is a fascinating example of how ancient narratives have influenced modern technological advancements, particularly in the realm of exploring and understanding the world. Classical mythology influenced the celestial body naming whereby the Greek myths gave names to constellations and stars like Pegasus, Ursa Major, and Orion (González-Vaquerizo, 2019). The initial naming of the Classical constellations mythological concept was cited during the 7th Century before Christ in Homer's achievements. For example, Homer explains how the craftsman god Hephaistos made Achilleus shield in the Iliad. The first god in Greek was Ares; the Romans referred to him as Mars; he was regarded as the battle god; he was eras and Zeus' son and was characterized by his tendency to lead and his ferocity.

Artemis, referred to as Diana by the Romans, was the hunt goddess and identified by the moon (Chami, 2015). She was also considered a twin sister to Apollo. Athena, whom Romans gave the Minerva appellation, was believed to be a skill, wisdom, and warfare goddess. Apollo was considered to be archery, man's beauty, prophecy, plague, healing, knowledge, arts, and music. The Romans consider Aphrodite Venus and is always regarded as the most beautiful goddess. Romans also refer to Hades as Pluto, the brother of Zeus. All the names referring to the gods and the goddess are currently used in the solar system as the names of various planets.

The names offered a way for the early navigators to navigate by and identify the stars, enabling them to pass information and knowledge about the celestial bodies from one generation to the next. Secondly, it influenced the explanation of celestial phenomena, where the classical myths always included narratives that described natural phenomena involving celestial experiences, such as the planets' changing position, meteor showers, and eclipses. The stories enabled the early astronomers to interpret and understand the happenings, forming the basis of scientific inquiry.Such constellations served as guides for ancient navigators and are still used in celestial navigation today. Moreover, classical mythology influenced the navigation process in the Mediterranean since explorers and navigators applied the concept and knowledge of constellations and stars mentioned in the myths to guide and direct their routes and journeys during that period.

By effectively observing the sky and night and sticking to the patterns of the sky, the navigators could navigate the Mediterranean and

explore the new islands and lands. Also, even though it is not a scientific field, astrology is said to have originated from Classical mythology and played a vital role in early societies. According to ancient individuals, the movements of celestial bodies are the position of the celestial destiny and behavior (Vico, 2020). The belief system affected the decision-making process involving exploration and navigation. Classical mythology affected early navigation and astronomy and provided the groundwork for the scientific understanding and exploration of the universe's stars, which continued until modern-day science.

The influence of classical mythology on science, especially astronomy, is so effective and diverse that the heavenly bodies and the sky have been awarded mythological names. Other celestial bodies and planets, including the stars making up the whole solar system, are, in particular instances, named after the Roman goddesses and gods and also from the classical myth. The different natural seasons and phenomena in the globe have effectively derived their original names from the Greek heroes and gods. Also, Johann Kepler applied the observational data from Tycho and devised the three laws about planetary motion during the 17th century (Falkner, 2020). The three laws explain the planet's elliptical orbits around the sun, the relation between the planet's orbital period, the distance between it and the sun, and the law of equal area. Kepler's laws are still crucial in planetary motion research and even influenced the development of celestial mechanics. Galileo Galilei, using a telescope he created himself, conducted a groundbreaking observation in astronomy during the 17th century (Falkner, 2020). Galilei was able to observe the four largest moons of Jupiter and the phases of Venus and discovered sunspots.

Galileo's groundbreaking observation effectively supported and backed up the heliocentric model and contributed to the Copernican system's acceptance. Astronomy and physics were also transformed in the 17th century by Sir Isaac Newton's theories of motion and universal gravitational law. Newton's law of motion and universal gravitation provided a comprehensive explanation of celestial and earthly motion. (Falkner, 2020). The laws described the comet's behavior, the moon's motion, and the planetary orbits, creating a universal framework for understanding how gravitational forces work. Ancient astronomers, especially those of the Babylonian and Greek traditions, developed the concept of the ecliptic plane and the celestial sphere. The ecliptic refers to the apparent sun's path across the sky during the year. Contemporary astronomy still applies these concepts as essential reference points for celestial objects' location and identification of their positions.

Moreover, Zodiac names representing a person's star sign start from the date of birth and originate from classical mythology. For example, cancer the crab refers to a Goddess Hera creature sent to destroy Heracles (Giacomo, 2021)). Aries, the ram represents a golden ram's picture placed by Zeus among the stars for heroism honor ship (Wang & Bu, 2020). "Leo," the lion, was linked to Heracles' laborers, and his initial role involved killing the Nemean Lion. This fundamental mythological structure, where a hero ventures out, faces challenges, and returns transformed, can be likened to the process of developing and refining navigation technologies themselves—a journey of innovation that encounters and overcomes numerous technical challenges. Not only does the zodiac names honor these traditions, it underlines the spirit and drives necessary to pursue exploration in the area of the sciences.

The symbiosis between mythology and navigation and astronomy isn't just about historical influence, but the ongoing dialogue between our cultural narratives and technological progress. Mythology frames our understanding of and aspirations for technology, while technological advancements in navigation continue to fulfill and expand upon those mythic quests, bringing the magic of the old stories into the realities of the new world.

Communication and Language

Among the ways classical mythology has shaped current science is the influence of

myth on the growth and development of communication and language. Communication paved the way for the exchange of scientific knowledge and concepts. The early Greeks strongly believed that language and communication were vital to preserving cultural traditions, teaching lessons, and sharing narratives. Mythology is rich in symbols and metaphors, which transcend direct language and communicate complex ideas and emotions succinctly. The belief is clear enough and evident in the ancient myths shared and passed down from generation to generation by word of mouth before they were documented. With its extensive grammar and rich vocabulary, the Greek language has had a long-lasting effect on the growth and development of most Western languages.

Most scientific terminologies, such as biology, originated from the ancient Greek word bios, which refers to life, and logos, which refers to study examples. Most scientific terms used today were applied in ancient Greece during communication (Shavkatovna, 2021). Additionally, classical mythology offered a common framework for understanding and communication among the early Greek societies, creating a sense of cultural unity. The shared myths allowed for efficient and easy knowledge and ideas to be transmitted, thus facilitating ideas and dating scientific advancements and inventions. Mythological themes and symbols are deeply embedded in cultural identities. When communicators use mythological references, they engage deeply with cultural narratives that can make communication more poignant and relevant. This can be especially powerful in political speech, marketing, and any form of storytelling aiming to connect deeply with an audience. In the contemporary world, the impact of Classical mythology on communication and language is still evident since most of the scientific ideas and concepts that continue to be found originate from Greek mythology and language.

Modern Hydrology

Although hydrology is a term used in Greek and not used in classical literature, the term hydrology was used sometime later during the Renaissance. The classical natural philosophers formed robust knowledge in most of the related scientific fields, providing them with names such as hydraulics, climate meteorology, etc. The terms are currently in use globally. The classical natural philosophers formed the basis for the hydrological idea with the hydrology cycle. Knowledge development was achieved through technological solutions to natural practical challenges and scientific curiosity. While the early descriptions belong to the mythology sphere, the rise and development of philosophy were followed by the need for adequate scientific explanations of the phenomena (Perdomo Marín, 2020). It seems like an initial geophysical challenge formulated according to scientific terms was the explanation of the Nile flood regime. Myths indeed contain embedded ecological wisdom about water sources and hydrological cycles. Hydrologists and environmental scientists can learn from these stories to understand traditional ecological knowledge, which can be vital for sustainable water management.

Nile flooding explanation was then considered as a paradox due to the striking distinctions from the run of the river in ancient Greece that the point where the flooding of the river happens in summer at the time the rainfall volume is low in most parts of the Mediterranean (Koutsoyiannis & Mamassis, 2021). Even though the initial trials were unsuccessful, Aristotle formulated a correct hypothesis. The initial historical, scientific expedition tested the hypothesis of the change to Hellenistic from classical periods. Hellenistic times led to advances and developments in science fields such as hydrology, such as the measurement and the definition of the flow discharge done by the heron of Alexandria. The hydrology explanation is a concrete confirmation of the view that the cycles of hydrology were effectively understood in early Greece. However, it creates a question about why correct descriptions were not considered and why modern and ancient mythological concepts were considered until the 18th century. In general, mythology reflect our attempts to understand, respect, and coexist with the natural

world. Myths about water not only enrich our cultural heritage but also inform contemporary scientific practices, reminding us of the deep connections between our environmental realities and the stories surrounding them.

Analogies and Metaphors

Analogies and metaphors drawn from Greek mythology are essential and powerful tools researchers and scientists apply while elucidating significant scientific concepts and ideas. The figurative contrasts and comparisons are critical to bridging the gap between the intricate scientific concepts and the broader general audience understanding. The application and usage of mythological references enhance vivid imagery and familiarity with explanations and scientific descriptions, making them accessible. The best example is the "Achilles' heel," which explains how such metaphors are used. The phrase "Achilles' heel" is generated from Classical mythology, particularly the narrative of Achilles, who was an instrumental and heroic figure during the Trojan War (Reniers, F. (2022). The myth explains that Achilles was invulnerable but not for his heel; that was the source of his downfall when it was pierced using an arrow.

According to scientific concepts, the phrase is applied metaphorically to illustrate a critical vulnerability or weakness in a theory, process, or system. When researchers refer to something as the "Achilles' heel" in a specific model or concept, they discuss a fundamental limitation or flaw potentially compromising the system. Through the application of such mythological metaphors, researchers tap into a common cultural reservoir, making them share and communicate intricate principles related to science in a related and experimental way. The metaphors facilitate and contribute to comprehension and add value to the storytelling element of science, increasing the memorability and engagement of a diverse audience.

CONCLUSION

Classical mythology has directly influenced and has had a profound impact on modern-day science. One of the significant aspects of classical mythology's impact and influence on contemporary world science is mythology's contribution to the general understanding of the universe's origins. Classical mythology, with its rich narratives and tapestry of creation stories and gods, was the foundation of early civilizations and scientific revolution through discussing and explaining how the natural universe started to exist. Moreover, classical mythology comprises stories describing the origin and the causes of natural phenomena such as earthquakes, tsunamis, and volcanic eruptions. The stories were used to entertain ancient people and also to ensure that they make sense of the environment in which they reside. Modern scientists, through experiments, have been able to explain the cause of natural phenomena, a practice that the ancient Greeks started.

Furthermore, the idea relating to the use of herbal medicines for treating diseases in early Greece has also been extended to the modern field of medicine, where herbal treatment and manufacturing of pharmaceutical drugs are still being practiced. Classical mythology has also influenced the naming of celestial bodies such as planets and constellations. The mythology also influenced language and communication, where scientific terminologies such as biology have been used to describe science. Hydrology is an ancient science; scientists also used hydrosol, a current scientific term applied in the current scientific explanations. The application of ancient metaphors such as the Achilles heel has contributed to a common understanding in the scientific field. Lastly, classical mythology's power to guide and inspire scientific inquiry must be considered. The impact may be connected to a river carving through the human language landscape, forever leading the scientific discovery process.

REFERENCE

Bassukas, D. (2019). Sedimentological and geochemical evaluation of Vouliagmeni lake sediments, perachora peninsula, Corinth, Greece. *SGEM International Multidisciplinary Scientific GeoConference EXPO*

Proceedings. https://doi.org/10.5593/sgem2019/1.1/s01.062

Chami, A. (2015). The influence of the Greek Mythology over the modern western society. *University of Tlemcen*. https://citeseerx.ist.psu.edu/document?repid=rep1&type=pdf&doi=a65de91d5e9f1c9efc6135ef86b0800de8feb6f8

Falkner, D. E. (2020). An introduction to Greco-Roman mythology. *The Patrick Moore Practical Astronomy Series*, 1-9. https://doi.org/10.1007/978-3-030-47694-6_1

Giacomo, C. (2021). *Astronomy of the Ancient Greeks and Mayas: A Comparison of Scientific Observations and Innovation* (Doctoral dissertation, Harvard University). https://dash.harvard.edu/bitstream/handle/1/37367695/Giacomo%2C%20Carmin%20Thesis%20Final%20Revisions%20Completed.pdf?sequence=1&isAllowed=y

Wang, D., & Bu, Y. (2020). The influence of secularism from Greek mythology on teaching in engineering culture. *DEStech Transactions on Social Science, Education and Human Science*, (some). https://doi.org/10.12783/dtssehs/ssme2019/34770

González-Vaquerizo, H. (2019). From Ancient Greek myth to contemporary science in Australia: Cronus as an environmental hypothesis. *Journal of Modern Greek Studies (Australia and New Zealand)*, 101-122. https://core.ac.uk/download/pdf/222963839.pdf

Reniers, F. (2022). *Pandora's Lab. Queering scientific practice to incorporate storytelling as a comparison method with Ancient Greek mythology* (Master's thesis). https://studenttheses.uu.nl/bitstream/handle/20.500.12932/43074/Thesis_Reniers_Pandora%20s%20Lab.pdf?sequence=1

Greco, G., Mastellari, V., Holland, C., & Pugno, N. M. (2021). Comparing modern and classical perspectives on spider silks and webs. *Perspectives on Science*, *29*(2), 133-156. https://doi.org/10.1162/posc_a_00363

Haarmann, H. (2015). Myth as a source of knowledge in early Western thought. https://doi.org/10.2307/j.ctvc2rmjp

Hu, X. (2023). Historical impact of ancient Greco-Roman mythology on medical terminology. *Journal of Social Science Humanities and Literature*, *6*(5), 118–123. https://doi.org/10.53469/jsshl.2023.06(05).17

Karakis, I. (2018). Neuroscience and Greek mythology. *Journal of the History of the Neurosciences*, *28*(1), 1–22. https://doi.org/10.1080/0964704x.2018.1522049

Konstantinou, A. (2021). Modern Greek "Prehistory": Ancient Greek myth and Mycenaean civilization in Modern Greek education. *Our Mythical Education. The Reception of Classical Myth Worldwide in Formal Education, 1900-2020*. https://doi.org/10.31338/uw.9788323546245.pp.49-68

Koutsoyiannis, D., & Mamassis, N. (2021). From mythology to science: The development of scientific hydrological concepts in the Greek Antiquity and its relevance to modern hydrology. https://doi.org/10.5194/hess-2021-7

Miller, G. (2020). Evolutionary psychology. *Science Fiction and Psychology*, pp. 45–80. https://doi.org/10.3828/liverpool/9781789620603.003.0001

Perdomo Marín, J. C. (2020). The ancient mythology of modern science: A mythologist looks (seriously) at popular science writing, POR Gregory Schrempp. *Revista de Antropología y Sociología: Virajes*, *22*(2), 296-302. https://doi.org/10.17151/rasv.2020.22.2.14

Rainey, K. T. (2021). The rhetoric of mythology and science in Campbell's works. *Uses of Comparative Mythology*, pp. 153–176. https://doi.org/10.4324/9781315860602-13

Shavkatovna, M. A. (2021). Allusion is how to render elements of Ancient Greek mythology in the tissue of modern literature. *The American Journal of Social Science and Education Innovations*, *03*(01), 505-514. https://doi.org/10.37547/tajssei/volume03issue01-91

Vico, G. (2020). *The new science*. Yale University Press.