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Significance of Spiders in Science and Religion: Article An Overview

> Muhammad Abid Nadeem 1 Junaid Nadeem²

¹ Department of Arabic and Islamic Studies, Government College University Lahore, Pakistan.

² Wildlife & Parks Department, Government of Punjab, Lahore, Pakistan.

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Department of Islamic Studies, Federal Urdu University of Arts Science & Technology, Information: Islamabad, Pakistan.















Significance of Spiders in Science and Religion: An Overview

Muhammad Abid Nadeem *

Iunaid Nadeem **

ABSTRACT

Spider and its silk have been a subject of great intrigue for the scientific community. The wide variety of applications of silk has catapulted it to the center stage of research in biopolymers. However, this interest in spiders is not merely limited to the scientific world. This tiny arthropod has been revered as a deity among various ancient civilizations of the world. In mythology and folklore, the spider is often depicted in association with the deity of fertility and prosperity, thus it is held in great respect. Although the spider is no longer worshipped, it is still regarded with great respect. Islam and Judaism credit the tiny arachnid with saving the Holy Prophet Muhammad (PBUH) and King David respectively. Moreover, the reference to spiders also occurs in the Holy Scriptures of Semitic religions. The spider and its web are used as a reference by God to convey guidance and warning. The central theme lies in the fragility of spider webs. The non-believers often rely on worldly allies and resources against God; however, their example is that of a fragile spider web that is easily blown away.

KEYWORDS:

Spiders, Islam, Bible, Science, Semitic religions

Introduction

Spiders belong to the phylum Arthropoda, class Arachnida, and order Araneae. In terms of size, the order Araneae ranks the largest order in the animal kingdom and it ranks seventh in terms of total species diversity among all groups ¹. According to the World Spider Catalogue ², over 48,000 species have been reported so far, which is less than one-third of the expected world total ³. It shows that a majority of the spider species of the world have neither yet been discovered nor described⁴.

Spider and its web are a subject of great intrigue to researchers across the world. As a generalist predator, spiders exert immense influence on the structure of the global food chain ⁵. Nyffeler and Birkhofer ⁶ conducted a study to evaluate the impact of spiders on the global food chain by estimating the biomass of prey killed annually by the spider community.

^{*} Associate Professor, Department of Arabic and Islamic Studies, Government College University Lahore, Pakistan.

^{**} Wildlife & Parks Department, Government of Punjab, Lahore, Pakistan.

The astonishing results of the study revealed that the annual prey kill of the spider community falls within the range of 400-800 million tons per year. Therefore, due to their high rate of prey consumption, efficient prey searching ability, wide host range and polyphagous nature, spiders are considered a promising biological control in the field of integrated pest management. Furthermore, spiders are also an excellent bioindicator for not just pollution, but also for the overall changes in the environment and habitat quality ⁷.

Moreover, extensive research is being conducted to understand the spinning mechanism of spider silk so that its true potential may be unlocked. At present, a wide range of applications of the spider silk are being explored. Apart from astounding strength, spider silk exhibits slow rate of degradation and biocompatibility which makes it an excellent biomaterial for not only tissue engineering but also for drug delivery ⁸. Keeping in view its biocompatibility, biodegradability, non-immunogenic nature and healing potential, spider silk has been studied for their application as sutures, scaffolds, brain implants, nerve repair, bone repair, artificial skin, knee replacement and various other biomedical applications ⁹.

Apart from the scientific world, spiders also hold a status of great significance in all major religions of the world as well as in mythology. The reverence dedicated to the spider is recorded even in the very first civilizations of the world. The paper offers a comparative study of the significance of spiders and their webs in the major religions of the world and ancient mythology.

Objectives:

- 1. The Study of Religious and Scientific concepts about Spider
- 2. The Study of Superstitions and Folklore about the Spider
- 3. The Study of References about Spider in Semitic Religions.

Literature Review:

In 20th century, Abdul Majid Daryabadi (1892-1977) a renowned religious scholar of Indian Subcontinent wrote a book about animals mentioned in the Holy Qur'ān. It was very first book on the subject. After that Dr. Muhammad Abid Nadeem carried out an extensive work for his Ph D studies entitled: "Qur'ānic Fauna and Flora in the Light of Islamic Literature and Biology".

Research Gap:

Basically, this paper is based on above-mentioned research work but super-quoted both works lacked some scientific and civilizational concepts that have been explored with the help of co-author.

Arachnids in Greek Mythology

The word 'Arachnid' has its roots in the ancient Greek mythology. According to the legend, a young pheasant girl named Arachne was truly gifted in weaving. Her skill gained her arrogance and caused her to boast that she was a better weaver than the goddess Athena. Angered at the haughty words of a mortal, the goddess commanded her to acknowledge the superiority of the goddess, "Seek all the fame you will among mortal men, but yield place to the goddess" 10. However, Arachne refused and instead challenged Athena to a weaving competition. Both weaved beautiful tapestries, and while Athena's work praised the gods, Arachne's insolent depiction of gods fueled Athena's anger and thus she tore the tapestry. Ashamed and in sorrow, Arachne then hung herself. The goddess while taking pity, granted Arachne life again but turned her into a spider, so she could spend the rest of her humble life weaving. Thus, even today, the word Arachne is used for spiders, among other members.

Significance of Spiders in Islam

Spider has a special significance in Islam. They are revered in the Muslim world as it is widely believed that it saved the life of the Holy Prophet (PBUH) during his migration from the city of Makkah to Madinah. The event has been widely reported in numerous religious literatures. As it is believed that the spider saved the life of the Holy Prophet (PBUH), it has earned a special status among Muslims and it is therefore deemed impermissible to harm it.

It was reported by Imam Ahmad that the Holy Prophet (PBUH) alongside his companion, Abū Bakr (May Allah be Pleased with Him) was forced to migrate from the city of Makkah to Madīnah because his enemies had plotted to kill him. As they migrated, his enemies began to pursue them with ill intent. The Holy Prophet (PBUH) and Abū Bakr (May Allah be Pleased with Him) hid inside a cave. By the command of Allah, a spider quickly spun a web to cover the entrance of the cave. The enemies thought that if anyone had entered the cave, the web would have been destroyed, thus it should be surely empty. Consequently, they left and abandoned pursuit, thus the life of the Holy Prophet (PBUH) and his companion was saved by the tiny spider ¹¹

Another tradition has been quoted by Abu Nu`aym al-Isfahānī, a medieval Persian Muslim scholar, in his famous work titled Ḥilyah alawliyā'. He explained the background of the revelation of the following verse:

"Wherever you may be, death will overtake you, even if you should be within towers of lofty construction..." 12

Al-Isfahānī narrates an incident of a women and her servant in the old times. When the women gave birth to a girl, she asked her servant to bring

fire. While tending to the task, the servant was met by a man who asked what the women had given birth to. Upon hearing of the girl, the man foretold that the girl would grow up to be a fornicator, who would marry her servant and a spider will be the case of her death. Distressed by the fate of the child, the servant attempted to kill her before fleeing. However, the girl miraculously survived. As per the prediction, the girl grew up to indulge in fornication. As time passed, the servant acquired great wealth and reached the area where the girl lived. He met the girl and instantly fell in love. The girl abandoned her habit of fornication and married the man and moved to live in a fortress within the jungle. One day, the girl encountered a venomous spider within the tower, and while trying to kill it, she was bit by the spider and instantly died, thus fulfilling the prophecy. At this instance the verse was revealed to highlight the definitive nature of death, which will encompass all irrespective of their stature, power or wealth. ¹³

Al-Isfahānī also elucidated that spider wove its web for two Apostles of Allah, one for Dā'ūd (A.S.) when Jālūt summoned him and for Muhammad (S.A.W) at the time of migration to Madīnah ¹⁴ Similarly, when `Abdullāh bin Anīs was coming back after the assassination of Khālid bin Nabīj al-Hindlī, he took refuge in a cave; the spiders wove a web on the opening of cave and saved him from Khalid's tribesmen. ¹⁵

Similarly, the Surah 29 of the Holy Qur'ān is named "Al-`Ankabūt" which is translated as "The Spider". In the verse 41 of this Surah, Allah says:

"The parable of those who take protectors other than Allah is that of the Spider, who builds (to itself) a house; but truly the flimsiest of houses is the Spider's house; if they but knew" 16

The verse is a scathing criticism of the non-believers who assume that their allies and resources are sufficient against Allah. But their example is of a spider who builds its web, confident about its strength; however, the flimsy web is easily blown away. The name of the Surah is similar to the Surah "Al-Nnaḥl" (The Bees) and Surah "Al-Nnaml" (The Ants), where Allah uses examples of insects to deliver his message.

Significance of Spiders in Judaism

Interestingly enough, the spider holds a similar significance for Jews as for Muslims. An incident similar to the one quoted by Muslims is also reported in the Torah, in the Book of Samuel:

"And he came to the sheepcotes by the way, where was a cave; and Saul went in to cover his feet: and David and his men remained in the sides of the cave." ¹⁷

The rabbins have commented on the verse as "God, foreseeing that Saul would come to this cave, caused a spider to weave her web over the mouth of it, which, when Saul perceived, he took for granted that no person had lately been there, and consequently he entered it without suspicion." Thus, the spider is credited to have saved the life of David from King Saul who was intent on killing him. The story is narrated as, when King David was young, he questioned God that why he created spider, as its web served no useful purpose. To this, God replied that one day he would understand its purpose and significance. Years passed and David became a hero to his people, consequently, Kind Saul became envious of him and fearful for his throne. Thus, he sought to kill David and his companions. David hid inside a cave, but Saul and his soldiers soon tracked him down, at that moment; a spider quickly spun its web across the entrance of the cave. Seeing the undisturbed web, Saul and his soldiers left. Therefore, the spider and its web saved the life of David.

Biblical Reference to Spiders

The spider is mentioned thrice in the Old Testament; however, no reference is quoted in the New Testament. In the Book of John, it is said:

"What they trust in is fragile; what they rely on is a spider's web." 18

The verse has a similar context as the Qur'ānic Verse 41 of Surah 29. The non-believers are criticized for their flimsy faith and arrogance; they rely on worldly allies and resources against God, however, what they rely on is like a spider's web. The reference to the spider's web is in the context of its weakness and fragility, as it is easily blown away.

The second reference to spider is quoted in the Book of Proverbs:

"The spider taketh hold with her hands, and is in kings' palaces." ¹⁹

It is an interesting verse which praises the resilience of a spider. Even though it is a tiny arthropod, it accomplishes the daunting task of climbing the massive palace walls. The spider accomplishes the impossible feat by not giving up; the steadfastness allows the humble creature to achieve its goal. The spider is used as an example to encourage and strengthen the faith of believers that irrespective of how difficult or hopeless a situation/task may seem, it can also be overcome through perseverance and effort.

The third reference to the spider is in the Book of Isaiah:

"They hatch cockatrice' eggs, and weave the spider's web: he that eateth of their eggs dieth, and that which is crushed breaketh out into a viper."²⁰

The commentary of Joseph Benson on the said verse explains that

"They hatch cockatrice' eggs" is a reference to the evil plots and plans hatched by the non-believers. "And weave the spider's web" is a reference to the plots weaved to entangle and ensnare the believers, however, just like the spider's web, which is weak and flimsy, these plots would not come to fruition. "he that eateth of their eggs dieth" Anyone who partakes or joins these plots would be at a great loss as these people would be among the losers. "and that which is crushed breaketh out into a viper" the more anyone seeks their council or partakes in such evil plans, the more is he likely to be consumed by their poison. ²¹

Spider in Mythology & Folklore

Spiders are of special significance not just in all major religions of the world but also in the ancient mythology and folklore as well. Worshipping spiders in the ancient Egypt was linked to the Egyptian goddess of War and Weaving called Neith. She is linked to the spider because she is depicted in hieroglyph symbols resembling a weaving loom. The goddess was believed to have created the world and humanity on her loom ²²

Similarly, another prominent depiction of spider in ancient civilization is in the desert of South Peru called the Nazca lines. These mysterious lines form massive images which span over 200m. Nazca lines were recognized as a world heritage site by UNESCO in 1994 due to its uniqueness. It is believed that these geoglyphs were created between 400 and 650AD. Among these various images, there is also an image of a giant arachnid with eight legs. Experts suggest that perhaps the images are a dedication to deities as a way of worship. In ancient cultures, spider is often associated with fertility; therefore, the image may be supplication for rain and bounty. ²³

The reverence of spiders is recorded in the Summerian Civilization as well, which is one of the very first civilizations in the world. It existed in the historical region of southern Mesopotamia (modern day Iraq) during the 4500 to 1900 BC. According to historical account, Uttu was the Sumerian spider goddess; patroness of weavers and clothing. According to the mythology, the goddess is credited with giving birth to the first plants and trees on Earth. ²⁴

Superstitious & Symbology Associated with Spiders

The superstitions about spiders can be traced back to the early Egyptians, when spiders were associated with riches. It was not only considered bad luck to kill a spider, but having it inside your home was considered good luck and a protector from misfortunes. Similarly, in the Middle Ages, spiders were associated with luck. People would often trap spiders inside shells and use them as necklace for protection against illness and misfortune. During the Middle Ages, a primitive medical cure was associated with the spiders which involved trapping a spider inside

a box till it died. It was believed that the dead spider had taken away your illness along with it. The spider is also used in symbology for patience for its hunting with web traps and for mischief and malice for its poison which causes slow death. It also symbolizes progressiveness and storage due to its spinning of its prey before it takes it to its burrow.

Conclusion

Spider has been revered in numerous ancient civilizations of the world. Its status as a deity of fertility and prosperity has elevated its status among all fauna. Although it is no longer worshipped, however, it is still held in high regard among all major religions of the world. Spider and its web has been a subject of great intrigue not only in the scientific community but also in the religious community. The article has provided a comparative study of spider and its web among the major religions of the world as well as in the ancient mythology and folklore. Worth mentioning point is that it has not been considered a deity neither worshipped nor a highly revered arthropod in Islamic teachings, Judaism and Christianity.

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