Araştırma makalesi/Research article

Earthquake in Mythological Narratives

Mitolojik Anlatılarda Deprem

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Abstract

This study focuses on how the mythological narratives of various societies interpret earthquakes differently. Since ancient times, discourses on earthquakes have diversified and changed. Societies have developed various interpretations in the face of natural events such as earthquakes, volcanic eruptions, melting of glaciers, plagues, famine, drought. Eschatological myths include narratives that respond to such devastations. Eschatology deals with the last events in the world or in human history, that is, the end of the world or the end of humanity. Mythological narratives explain earthquakes as the results of divine forces to punish people. Some societies believe that earthquakes occur as a result of a wrong action. Different societies interpret earthquakes with different symbols, and these symbols may vary from society to society. Explanations of earthquakes may vary depending on the experiences, beliefs and history of each society. Although physical conditions play a determining role in shaping the symbols, societies tend to borrow from each other the symbols they use in their mythological narratives to explain the origin of a sacred, social, natural, supernatural or socio-cultural phenomenon. Therefore, even societies that live far apart may use symbols that are independent of their

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physical environment.

Keywords: earthquake, earthquake gods, mythology, eschatology

Öz

Bu çalışma, çeşitli toplumların mitolojik anlatılarının depremleri nasıl farklı yorumladığına odaklanmaktadır. Antik çağlardan itibaren depremlere ilişkin söylemler çeşitlenmiş ve değişmiştir. Toplumlar depremler, volkanik patlamalar, buzulların erimesi, vebalar, kıtlık, kuraklık gibi doğa olavları karşısında çesitli yorumlar geliştirmişlerdir. Eskatoloji mitleri bu türden yıkımlara yanıt vermiş anlatıları içermektedir. Eskatalogya dünyada veya insanlık tarihindeki son olaylarla yani dünyanın ya da insanlığın sonu ile ilgilenir. Mitolojik anlatılarda depremlerin nedenleri ilahi güçlerin insanları cezalandırmak amacıyla gerçeklestirdikleri eylemleri olarak açıklanır. Bazı toplumlarda bu eylemler kurallara uyulmazsa insanların sonunun geleceğine dair bir uyarı olarak yorumlanır. Bazı toplumlarda vanlıs bir evlemin sonucu olarak depremlerin meydana geldiğine inanılır. Depremlerin nedenleri farklı toplumlarda değişik yorumlanmakta ve yorumlara ilişkin kullanılan semboller de toplulukların yaşadığı fiziksel koşullarla ilişkili olarak gelistirilmektedir. Depremlere iliskin acıklamalar her toplumun kendi deneyimlerine, inançlarına ve tarihine bağlı olarak değişebilmektedir. Depremleri yorumlamak için kullanılan semboller toplumların yaşadıkları fiziksel koşullara uygun olarak geliştirilip değişse de, farklı toplulukların benzer sembolleri kullandıkları bilinmektedir. Toplumlar mitolojik anlatılarında kutsal, toplumsal ve doğal, doğaüstü ya da toplumsal-kültürel bir görüngünün kökenine ilişkin acıklamalarında kullandıkları sembolleri birbirlerinden ödünc alma eğilimi içindedirler. Dolayısıyla fiziksel olarak uzak mesafede yaşayan topluluklar yaşam alanları ile ilişkili olmayan sembolleri kullanmaktadırlar.

Anahtar sözcükler: deprem, deprem tanrıları, mitoloji, eskatologya

Introduction

An earthquake is a natural disaster that occurs as a result of sliding movements caused by a fracture in the earth's crust. Tremors that occur in areas affected by vibrations caused by crustal fractures cause earthquakes (Tümertekin & Özgüç, 1997). The destructive effects of natural disasters, especially in settlements where people live densely, can result in very serious losses (Özey, 2006). Human activities are not decisive in the formation of earthquakes. However, they have a great effect on the damages of earthquakes. Interpretations regarding the causes of earthquakes and other natural disasters with destructive effects vary across different societies. Since ancient times, these interpretations have been embedded in various mythological narratives, with symbols differing according to cultural contexts.

Like many narratives about lifestyles in the past, narratives about the causes of earthquakes have also been included in mythological interpretations (Yıldırım & Nişancı, 2023: 112-136). Starting from ancient times, explanations of the causes of natural phenomena with severe and

destructive consequences were often associated with supernatural creatures. People believed that divine powers caused the earthquake. The interpretation of earthquakes within cultural values may vary depending on each society's unique experiences, beliefs, and history. In addition, they are expressed by symbols developed depending on the physical conditions of the settlements where societies live. Earthquakes were often viewed as punishment by supernatural forces as a result of the anger of the gods or as a result of the corruption of humanity. In some mythological narratives, people thought about earthquakes as a warning message sent by gods to humanity. If these warnings were ignored, even greater disasters were believed to follow.

In mythological narratives, there are explanations about the origin of a sacred, social and more natural, supernatural or socio-cultural phenomenon (Emiroğlu & Aydın, 2009: 602). In other words, myths describe how a reality comes to life thanks to the achievements of supernatural beings, whether it is the whole reality in its entirety, that is, the cosmos, or only a part of it (e.g., an island, a plant species, a human behaviour, an institution) (Eliade, 1993: 13). On the other hand, myths are narratives that emerge with the effort to make sense of the supernatural and the unknown (Şahin & Ağbaht, 2021: 2545).

Earthquake is one of the natural phenomena whose cause is unknown and ancient societies attempted to understand them. When we look at the myths produced by people living in different parts of the world and in different societies, it is possible to see similar motifs (Bokhari & Masood, 2018; Kluckhohn, 1959). Myths provide important insight into how the societies they belong to, how people perceive the world and what they think about events (Şahin & Öz, 2022). Myths not only provide explanations for natural phenomena across the world but also offer narratives regarding the destructiveness of earthquakes.

These mythological narratives often communicate important messages, particularly concerning earthquakes, with the aim of influencing people's behaviour in line with cultural norms. Just as in the past, individuals are expected to adhere to certain values, with the belief that failing to do so will invoke divine punishment. In these narratives, earthquakes are frequently depicted as punishments from gods or goddesses. In contemporary times, such events are sometimes interpreted within the framework of monotheistic beliefs.

For instance, some people perceived the 1999 Gölcük earthquake as divine retribution for the moral degradation of society: "From what he saw with his own eyes, there were naked bodies of young boys and girls. Thousands of buildings collapsed, and people died because they made love." (Ekşi Sözlük, 27 January 2019). Certain segments of society believe that earthquakes occur as a consequence of the desecration of sacred values. After major destructions, some events are reinterpreted, with explanations suggesting that warnings had been issued beforehand. According to these comments, the group accused of desecrating the sacred can vary. For instance, "The soldiers marched on the Qur'an, and the earthquake happened because of it" (Ekşi Sözlük, 01 June 2022). On 17 August 1999, there was a large military population in Gölcük, and perhaps the earthquake was associated with the soldiers. Cultural values, which are decisive in people's daily life practices, are also effective in the interpretation of supernatural events.

One can also find comments that extraordinary events can proceed great destructions. Anticipating that a divine punishment might be coming, some people have given the necessary warnings. However, the earthquake occurred because they could not get people to give up their wrong behavior. "A week before the earthquake, my father was sitting in the park and he saw a man shouting, and he kept shouting, 'repent, repent.'" (Ekşi Sözlük, 01 June 2022). Similarly, the 2023 Kahramanmaraş-centred major earthquake, which affected eleven provinces with great losses, was also seen as a punishment (God's punishment for people who sin). "We have to ask, what did we do to trigger this earthquake? This attribute belongs to God. It means, "How great is His glory!) has committed every crime, including shirk, which brings wrath to the habit. O God, we ask forgiveness for our sins. We believe only in you as the God" (You Tube, 13 March 2023). Some segments of the society believed that the devastating earthquakes in Türkiye served as warnings for a society in decline. These interpretations closely resemble the flood myths found in Sumerian mythology (Hooke, 1991: 32), as well as those in the Torah, Bible and Qur'an. However, unlike the flood myths, there is no concept of 'chosen people' in the context of earthquakes.

A recent study conducted with religious officials in 2023 on the earthquakes showed striking issues, as they were related to religious explanations, which underlined earthquakes as divine punishments. According to the research, some of the religious officials expressed their opinion that the earthquake occurred as a result of the rupture of fault lines. It has been determined that some religious officials, on the other hand, see earthquakes as a divine punishment or warning by referring to the Qur'an (Batır & İnce, 2023: 98-119). Although the people interviewed in this study went through the same education process, they have different views on earthquakes. These results also reflect that people sit in the web of meaningfulness that they weave and interpret the facts in this network of meaningfulness (Geertz, 2010: 21). According to the findings of the research, people make their interpretations based on their beliefs.

This study analyses people's association and their explanation of earthquakes in relation to symbols found in the mythological narratives of various societies through the lens of interpretive anthropology. As Altuntek underlines, interpretive anthropology examines how people assign meaning and interpretation to the things and events around them, and how they create shared communicative worlds or cultural systems of meaning (2009: 114-115). In this context, objects associated with earthquakes in different cultures will be interpreted.

1. Earthquakes in antiquity

Earthquakes have been experienced since the early periods of Anatolia. It is possible to find traces of it in the drawings of the Neolithic Age settlers of Çatalhöyük (6200 BCE). (Karagöz, 2005: 9). It has been documented that earthquakes were also recorded after the use of written sources was introduced.

Starting in the sixth century BCE, new ideas emerged that did not attribute earthquakes to the actions of divine forces. These views are known to have spread across Anatolian lands. The first view of the formation of earthquakes was put forward by Thales, according to whom the land on earth rested on waters. Earthquakes occurred due to the movement of land floating

uncontrollably on the water due to wind and other reasons. This view of Thales was opposed by his close friend Anaximander, who argued that the world looked like a drum and that the land masses did not stand on anything. According to Anaximander's view, the earth, which looks like a drum, has a very heavy mass and earthquakes occur because this mass collapses into itself and due to the mobility during the collapse. According to Aristotle, large and small cavities in the world have been formed, and the changes formed by these cavities lead to earthquakes (Övünç, 2019: 7-13). Aristotle's views seem to support Anaximander's claims.

Earthquakes have caused significant destruction and changed the population structure of the settlements. B.C. The "earthquake storms" that took place in the thirteenth century caused the destruction of the Bronze Age. It is also suggested that earthquake storms cause the migration of sea peoples. In Anatolia, Mesopotamia, North Africa, and the Minoan period, very large earthquakes occurred in 1470-1450 BCE around Crete, half of the island was torn apart and earthquake waves occurred (Braudel, 2007: 23). Entire settlements on the Mediterranean coast, such as palaces and other structures in Crete, were destroyed by earthquakes. As a result of the earthquakes in these regions and the destruction they caused, the migrations of sea peoples caused the collapse of many civilizations (Yıldırım & Nişancı, 2023: 112-136). Several Hittite cities were also affected by great destructions. The destruction of Hittite cities in Anatolia at the beginning of the twelfth century BCE is attributed to earthquakes (Braudel, 2007:23).

According to environmental records, earthquakes and tsunamis occurred in ancient and prehistoric times. In the National Oceanic and Atmospheric Administration (NOAA, 2018) database, there are many references to earthquakes from around the world. Although there are references to earthquakes in many parts of the world, records of earthquakes that occurred in the Mediterranean during the Classical and Late Antique periods have been documented. In East Asia, Japan, Korea and China, there are detailed historical records of seismic activity and some tsunamis. In other parts of the world, where there are no records of earthquakes, it is seen that there are no historical texts that continue to be understood as earthquake records due to the lack of historical records and/or the loss of historical texts (Liritzis, Westra & Miao, 2019: 1307-1330).

2. Earthquakes in mythological narratives

The terms "mythos" and "mythology" are often associated with sacred or religious in nature. It is used for narratives about the origin or occurrence of a natural, supernatural or socio-cultural phenomenon that is social rather than individual. Perceiving, shaping, and symbolizing the world is, in essence, a reflection of human life and the events surrounding it. According to the paradigm of meaning, myth is a way of thinking, a state of thought. In this sense, myth is the reality about the world itself and arises as a result of dialectical logic. Therefore, in mythological time, all the facts of life are perceived with mythological consciousness. Myths are not only a means of interpreting ancient times but also a frework that influences the environment, society, and human behaviour of people. They are passed down through generations, conveyed in symbols within oral culture.

Bayat considers mythology as a dynamic system of signs that explain the formation of the world and the formation of vehicles. Myth always encounters the reality of life that concerns human beings at any point and explains it in a unique and quite striking way (Bayat, 2005: 4). Therefore, many events such as the beginning of hunting, tool making, food production, agriculture and animal husbandry, family, regulation of male-female relations, conflict and reconciliation, and natural disasters find their counterparts in myths. Myth is a "code" that confronts us with the past (Atay, 2016: 50). Myths are also seen as a complex cultural reality that can be interpreted according to multiple and complementary perspectives (Eliade,1993: 18). In the content of myths, there are narratives from early societies that describe the actions and discourses of the gods, as well as moral teachings. Due to these arrangements, which are necessary for every society, the meanings of mythological elements and their symbolic objects are reproduced in every culture. Due to the reproduction of mythological narratives, analyzing their meanings is becoming increasingly complex and difficult to interpret as they are layered on top of each other in every society and in every period (Bulut, 2020: 161).

Mythology presents events in an extraordinary manner to explain stories or origins believed to be sacred. According to Eliade, myths form the foundation of social life for people in archaic societies. While explaining people's lives, he associates the idea of "myth" with the understanding of "sacred activity", "meaningful movement" and "primordial event" (Eliade, 2005: 397-490). In this sense, myths are revealed through symbols how supernatural beings bring a reality to life, whether it is acts of creation or other activities. In this sense, myth is the story of a creation. In the story of creation, it is told how it began to exist with the explanation of the starting point in creation.

In every society, explanations about the universe, natural and supernatural worlds, and the meaning of human place and existence in all these, past and future are passed on from generation to generation through myths (Bulut & Sezener, 2019: 3071-3081). Myths also explain natural phenomena, particularly those whose mysteries remain unsolved by humans and are thus considered frightening. Just as mythology addresses the creation of man and his environment, it also grapples with the destruction of that environment. Various interpretations have emerged in response to natural events such as earthquakes, volcanic eruptions, melting glaciers, plagues, famine, and droughts. Eschatological myths include narratives that address such destruction. The term "eschatology" derives from the Greek word eschatos, meaning "end." Eschatology concerns the ultimate events in the world or in human history (Sharpe, 2000: 24). In this sense, eschatology refers to the narration of the 'last things' events marking the end of the world or its destruction (Bultmann, 2006: 29). For example, in Greek mythology, the emergence of chaos occurs when the crimes committed by the sons of Lykaon reach Olympus. Zeus visits people who are said to be sinners in disguise to see these crimes on the spot. When he returned to Olympos, he thought that barbarism had engulfed all humanity and decided to destroy all of them (Gravers, 2010: 174).

Eschatology myths are also considered a belief system. In this context, it is the mythical aspect of the beliefs developed about the end of the universe and life. In other words, they are the myths of the eschatological elements in theology. In the language of traditional theol-

ogy, eschatology is the doctrine of last things. It refers to the irreversible end in the process of the flow of the end time. At the same time, the end is approaching as the end of the world, and therefore the future of our time (Bultmann, 2013:24). In eschatological myths, both good and bad are mutually reinforcing. The healing that will come after a destruction brings hope (Eliade, 2005: 198). The most important premise in eschatology is the mythical aspect of the beliefs formed in people about the end of the universe, the world and life. The apocalypse occurs with the events that will occur when the end of the world and life comes. Myths of the afterlife constitute the subject of eschatology myths (Çınaroğlu, 2008: 42). In this sense, earthquakes are considered within eschatological myths.

3. Mythological interpretations of earthquakes in different cultures

The interpretation of seismic movements in history is often reflected in mythological narratives, whereby the symbols used in the interpretation of the causes of earthquakes are related to the physical environment. These symbols and interpretations, however, often transcend cultural boundaries, making it possible to find similar narratives in different societies. It is believed that it is formed by the movement of the animal, which is sometimes believed to be standing on the earth. Sometimes it is explained that earthquakes occur as the animal moves its head. The type of animals may vary depending on the region where they live. There are also societies that use the same animal symbols. According to Aşçı et al., the animals are elephants in India, wild boars in Mongolia, giant spiders in Japan, and oxen heads in Anatolia (Aşcı, Oymak & Çabaş, 2017: 59-72).

The authors also note that in Greek mythology, an earthquake occurs when the god Poseidon (the god of the sea and rivers) imprisons the giant Polybotes on the island of Kos and smashes the rocks and covers them. This narrative is consistent with the legend of Kos, a volcanic island. In ancient Chinese civilization, earthquakes are a harbinger of the need for a change of government (Aşcı, Oymak & Çabaş, 2017: 59-72). In Mesopotamia, earthquakes are caused by people's failure to fulfil their duties to the gods. It is believed to have been carried out by the god Ea/Enki (Erdem, 2020: 74).

In mythology, the most famous and first divine character associated with earthquakes is Poseidon, who makes the earth/seas tremble. As the god of earthquakes, Poseidon is the one who surrounds the earth and shakes the earth (Turak, 2018: 35-48). Earthquakes occur as Poseidon gets angry and strikes his trident to the ground. He destroys cities by stabbing his wilderness one after another. Poseidon is also known as the ruler of seas, lakes and rivers. Its equivalent in ancient Rome is "Neptunus". It is among his duties to guide and help sailors and to produce salt (Cömert, 2010: 64-65). Poseidon is also a wild, harsh, ruthless god who creates floods, and tsunamis with giant waves (Erel & Zabcı, 2007: 71-79).

In the Nordic earthquake narratives, Loki stands out. Loki is the Norse god, who causes the earthquake against his will. With his power, Loki takes actions that will bring about the end of the world. Loki kills Balder, the son of Odin and Frigg, the apple of the gods' eye (Page, 2017: 87). Those who want to avenge Balder go after the gods Loki. Loki escapes and

builds a small, secluded house over the sea and on the side of a high mountain. However, he does not have a peaceful life. Loki constantly watches the surroundings through the doors of the house, which open in all four directions, for fear of being caught. Sometimes he hides in the waters disguised as salmon. Wanting to avenge Balder, the gods track down Loki. When Loki disguises himself as a fish, they catch him with the help of a net. They take Loki to a deep and dark cave in the mountain, tie him to a chain, and hang a huge snake with poison flowing from its mouth. Poison drips from the snake's mouth constantly on his face. Loki, disguised as a salmon, causes earthquakes that shake the earth every time he stirs with the enormity of the pain he feels. His son and wife follow the tremors and find Loki. However, they are powerless to break the chains bound by the divine powers. His wife tries to make his captivity more bearable by holding a stone over Loki's head. Thus, he manages to calm Loki down and reduce earthquakes. However, when it is full and his wife goes to evacuate, the poison dripping from the snake burns his skin very violently. Loki writhes in pain in a way that shakes the whole world (Etter, 2011: 98). Loki, who is released when the rocks he is attached to crumble, uses his power to turn the world into a battlefield (Wilkinson, 2014: 96-98). Monsters, gods, giants, war, destruction, all hell breaks loose. The known world disappears; Angry flames destroy everything left over from earthquakes, and the earth turns into a desert (Güleç, 2018: 162-179).

The myths associated with Loki's suffering when he disguised himself as a fish are included in the myth of eschatology. In Norse creation stories, the fish motif plays an important role. After God created the earth, He attached it to a fish. It is believed that earthquakes occur when the fish turns from one side to the other. In some parts of Scandinavia, it is believed that the fish lies by curling up in a ring and clenching its tail with its teeth while holding the earth. Earthquakes occur when the fish releases its tail The fish symbol, which is believed to cause earthquakes, is also seen in Turkish and Eastern mythologies. A Turkish text compiled by Verbitsky mentions a fish with its head turned north (into the dark). Earthquakes occur as the fish changes direction (as cited in Öksüz, 2021: 65).

In the belief of the Kai people of New Guinea, Malengfung, the Creator, withdrew to the horizon at the edge of the Earth after creating the cosmos and humanity, where he fell into a deep sleep. However, every time he turns in his sleep, the ground shakes. But there will come a day when Malengfung will rise from where he lies and shatter the sky, the sky will fall on the earth and shatter, and the creator Malengfung will end all life, thus ending life (Eliade, 1995: 79).

In Turkish mythological narratives, the earthquake is associated with Katay Khan, or in some renderings as Kaday or Kıtay (Kiday), who is considered as the God of Earthquakes in Turkish and Altaic mythology. Katay Khan, also known as the Blacksmith God, creates an earthquake with his 40-horned bull. When this bull becomes agitated, it stomps its feet on the ground, causing slight tremors. Its heavy breathing through its nose generates not only small vibrations but also faint earthquake-like sounds. When he gets even hotter, he puts his horns in the ground and shakes the earth. Their grunts create the noise of the earthquake (Karakurt, 2011: 124).

According to Akman (2012), in the folk image of the occurrence of earthquakes, the world stands on the horns of a yellow ox. Earthquakes occur when the yellow ox moves for any reason. This ox is on a stone, the stone is on the back of a fish, the fish is in the water, the water is in the air. This ox is given names such as Gâv-ı Zemin, Sevr-i Ahmer and Behmut (Uraz, 1994: 19). It is possible to attribute the legend that the world stands on ox horns in Ottoman creation narratives to the same root (Esin, 2001: 72-74). The sky rests on four poles, located in four cardinal directions; the earth is surrounded either by an ocean river or by a mountain range, which may have been noticed in the eighth century in the Tonyukuk inscription; it is carried by a tortoise or the horns of a bull, whose movements cause earth tremors (Roux, 2000: 602). According to the Teleüt Turks in the north of Altai, the world, which looks like a plate, is carried by four oxen on all four sides. In another Turkish epic, oxen carry the world resembling a tented grass (Ögel, 2014: 321). Among the Kyrgyz Turks, on the other hand, there is a large ocean underground with a thick layer of clouds over it. There is a rock on the cloud, and a gray ox on the rock. The world stands on this ox (as cited in Ögel, 2014:32). Mythological narratives are reality, and this reality is told through symbols. According to Altun and Cınaroğlu, Central Asia is not located in an earthquake zone. Therefore, it is possible to state that the effects of Sumerian and Babylonian mythologies and the biblical tradition are the basis of the flood myths of the Turks (Altun & Çınaroğlu, 2020: 28-40).

The association of earthquakes with bulls is also found in the mythological narratives of Iran. In Iran, especially among the elderly living in rural areas, it is believed that the earth stands on the horns of a bull sitting on a fish in the sea. When the bull is tired or when injustice and sin increase in the world, the bull becomes impatient. It shifts the Earth from one horn to the other. As a result of this action of the bull, earthquakes occur. It is believed that great earthquakes occur when the earth falls from its horn as a result of the movement of the bull (Berberian, 2014: 99-104).

Other narratives from more remote lands, such as the New Philippines have been reported. On the island of Namolut, one of the Caroline islands known as the New Philippines, various myths are known that the gods will one day destroy all of humanity due to the sins of humans. In these myths, even if humanity is destroyed, the gods will continue to exist (Eliade, 1995: 79). Besides, in Japanese mythology, there are unique narratives about earthquakes. According to a belief that has been popular since the sixteenth century, an earthquake is caused by a giant cat or catfish living underground. This catfish, called "Namazu", carries the islands of Japan on its back. This fish is under the control of a demigod named "Takemikazchi". God holds the head of the fish under a heavy stone to prevent it from moving. However, when the god is distracted, the fish moves. With this movement of Namazu, strong earthquakes occur. Most people are afraid of Namazu but they still believe that it will bring material wealth. The legend of the catfish has become widespread, especially in times of aggravated economic conditions. Prayer is described in a way that represents the renewal of the world, where the poor will take the gold of the rich (Ashkenazi, 2003: 220-221).

In Roman mythology, Luplter decides to destroy all of humanity due to the evil of humans. Luplter first wants to set the world on fire, then abandons this decision. Later, Luplter

sets heaven on fire and punishes the world with a flood. It occurs in all places with severe storms, floods and earthquakes. Thus, all people in the world lose their lives as a result of Luplter's punishment (as cited in Kubat, 2020: 221-244).

According to M. Sever, states that in Chinese and Indian mythology, the world is considered an imaginary being and stands on the tortoise. According to Chinese mythology, the heavens are hemispherical, while the earth is quadrangular (Simşek, 2022: 49-79). In Indian mythological narratives, India is depicted as a land rich in symbols with deep cultural significance. In Indian mythology, the earthquake is associated with the earth being held by four elephants standing behind a tortoise, and the tortoise is balanced on a cobra. When any of these animals move, the earth trembles and shakes. Çoruhlu states that the turtle symbolism was seen in ancient Chinese and Indian mythologies. In Indian imaginations, there is a snake that holds the world above the sea along with the turtle. In Hinduism, it is accepted that there is a thousand-headed snake under the lowest layer of the earth (2002: 99).

The turtle is a symbol of strength, wisdom, patience, endurance and longevity. According to the Altaic-Turkish-Mongolian communities, a golden tortoise carries a mountain in the middle of the universe on its back. The turtle, which is disturbed by the sun, lies on its back and this brings the end of the world (as cited in Aksoy, 2022: 56-72). Eliade argues that myth had functions that expressed beliefs and explained moral principles for primitive civilizations (1993: 34). He emphasizes that myths do not consist of an empty series of events.

Natural disasters are associated with earthquakes, that is, myths of eschatology, myths of re-creation. According to Bayat, mythology is the interpretation of beginning and end, that is, eschatology and creation, in other words, cosmogony and eschatology (Bayat, 2007: 120). In fact, it is not possible to distinguish between the myths of cosmogony and eschatology with sharp lines. The myths of eschatology speak of both an end and destruction, as well as a new beginning, or cosmogony. Eschatology includes narratives about the end of things and their return to the beginning. Thus, it represents a cycle where destruction occurs as the cycle starts anew (Eliade, 1993: 75-76). Therefore, all the myths of eschatology are directly related to the myths of cosmogony. Because cosmogony is creation myths. Therefore, even if the world comes to an end with the myths of eschatology, a new world can be established with a new creation.

Conclusion

The term mythos and mythology is usually sacred or religious in nature. It is used for narratives about the origin or creation of a natural, supernatural, or socio-cultural phenomenon that is more social than individual. On the other hand, in the paradigm of values, it is perceiving, shaping, symbolizing the world, to put it briefly, it is the reflection of life and events. According to the paradigm of meaning, myth is a way of thinking, a state of thought. In this sense, myth is the reality about the world itself and arises as a result of dialectical logic. Therefore, in mythological time, all the facts of life are perceived with mythological consciousness. Myths are not only a branch of science that interprets ancient times, but also

the science that controls the environment, the society we live in, and the behaviour of people, and is transmitted from generation to generation through symbols within oral culture.

An earthquake is an environmental event that occurs when fault lines break. However, the occurrence of earthquakes has mostly been interpreted culturally by societies, especially in periods when science has not yet been able to explain this natural phenomenon . Although almost no human contribution has been made to the occurrence of earthquakes, which are natural disasters, the occurrence of earthquakes has been associated with the behaviour of people. Earthquakes have been tried to be explained through myths constructed through different symbols in different societies. In mythological narratives, on the other hand, symbols include explanations of the origin of a sacred, social, and more natural, supernatural, or socio-cultural phenomenon. In other words, myths tell how reality comes to life.

Earthquakes have deeply affected human life since ancient times. The occurrence of events that people could not cope with and that affected them very much was attributed to divine causes. Mythological narratives include explanations about the causes of earthquakes Interpretation of earthquakes in cultural values; It can vary depending on each society's own experiences, beliefs, and history. Like all natural disasters, earthquakes have an important place in mythological narratives with symbols developed depending on the physical conditions of the settlements where societies live. In narratives, earthquakes are often interpreted as the anger of the gods or the movement of supernatural forces. In mythological narratives, it is also stated that earthquakes are a warning message sent by the god or gods to humanity. Moreover, beyond the warning, it was also seen by the immortals as a kind of means of punishment for humanity.

Although the causes of earthquakes are scientifically understood today, individuals who believe that earthquakes occur as a form of divine punishment are still encountered. Earthquakes are particularly associated with societal deviation or the desecration of the sacred. It can be argued that interpretations found in mythological narratives are being reinterpreted and reproduced within the framework of monotheistic belief systems.

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References

- Akman, E. (2012). The "yellow/red bull" Belief in the Turkish mythology and folk poetry. *Journal of Turkology*, 22(1), 1-16. https://doi.org/10.18345/tm.77404
- Aksoy, E. (2022). Mythological analysis of the tortoise figure and its use in Anatolian weavings. *Van Yüzüncü Yıl University Journal of Social Sciences Institute* (55), 56-72. https://doi.org/10.53568/yyusbed.1111578
- Altun, I., & Çınaroğlu, M. (2020). "The end times" phenomenon and eschatologia mythe. *Millî Folklor*, (128), 28-40.
- Altuntek, N. S. (2009). Yerli'nin bakışı, etnografya: kuram ve yöntem. Ütopya.
- Arıkan, Y. (1998). It's about Hittite Mythology. Development of Social Sciences in Turkey and Faculty of Language, History and Geography Symposium Proceedings. Ankara University.
- Armstrong, K. (2018). Mitlerin kısa tarihi (D. Şendil, Trans.) Alfa.
- Ashkenazi, M. (2003). *Handbook of Japanese mythology*. ISBN 1-57607-467-6; 1-57607-468-4 (e-Book).
- Aşcı, M., Oymak, R. & Çabaş, Z. (2017). Ground vibration (earthquake) of earth surface in Turkish. *Turkish Studies International Periodical for the Languages, Literature and History of Turkish or Turkic*, 12(21), 59-72.
- Atay, T. (2016). Din hayattan çıkar. (6th ed.) İletişim.
- Batır, İ. & İnce, C. (2023). The views of religious officials on earthquakes as a type of disaster. *Journal of Bitlis İslamic Studies*, 5(2), 98-119. https://doi.org/10.53442/bider.vi.1382052
- Bayat, F. (2005). Mitolojiye giriş. Karam Araştırma ve Yayıncılık.
- Bayat, F. (2007). Türk mitolojik sistemi: ontolojik ve epistemolojik bağlamda Türk mitolojisi 1. Ötüken.
- Berberian, M. (2014). Earthquake folklore and legends. in Developments in earth surface processes, (pp. 99–104). https://doi.org/10.1016/b978-0-444-63292-0.00005-3
- Bokhari, S. S. & Masood, M. T. (2018). Study of mythology: In the context of structuralists theoretical framework. *International Journal of Applied Research*, 4(2), 91-94.
- Braudel, F. (2007). Bellek ve Akdeniz: tarih öncesi ve Antik Çağ (A. Berktay, trans). Metis.
- Bultmann, R. (2006). Tarih ve eskatoloji (E. Kuşçu, Trans.) Elis.
- Bultmann, R. (2013). Mitoloji ve hermenötik sorunu (C. Batuk & E. Kuşcu, Trans.). Eskiyeni.
- Bulut, A. & Küçükefe, B. (2019). Ticaret, ekonomik durum ve mitolojideki yansımaları. In O. Şimşek (Eds.) *Uluslararası poli ti k ikti satta tari hsel ve güncel tartışmalar*. Gazi, pp. 215-233.
- Bulut, M. & Sezener, A. (2019). The story of sedentary life from Dumuzi-Enkimdu to Kabul and Abel. *Turkish Studies*, *14*(6), 3071-3081. https://doi.org/10.29228/TurkishStudies.23495
- Bulut, M. & Öztekin Alpaydın, M. (2004). Anlam ve eylem bakımından tarihsel perspektiften şiddet kavramının algılanışı ve dönüşümü. In *Kadına karşı* şiddet *içeren eylemleri suçları işleyenlerin kriminolojik profili*. Özel Ofset, pp.156-199.
- Çınaroğlu, M. (2008). *The invesment about eschatology myths history at Turkish culture*. (Unpublished MA thesis), Kocaeli Üniversitesi). Kocaeli Üniversitesi Sosyal Bilimler Enstitüsü.
- Coruhlu, Y. (2002). Türk mitolojisinin ana hatları. Kabalcı.
- Cömert, B. (2010). Mitoloji ve ikonografi (3. Eds) De Ki.
- Eliade, M. (1993). Mitlerin özellikleri (S. Rifat, trans). Simavi.

Eliade, M. (2005) Dinler tarihi (İnançlar ve ibadetler morfolojisi). Serhat.

Emiroğlu, K. & Aydın, S. (2009). Antropoloji sözlüğü. Bilim ve Sanat.

Erdem, F. (2020). *The tradation of divination in the ancient Mesopotami* [Unpublished Doctoral Thesis] Pamukkale Üniversitesi Sosyal Bilimler Enstitüsü.

Erel, T. L. & Zabcı, C. (2007). Poseidon, the god of the sea, who makes earthquakes. *Journal of Archaeology and Art*, 126, 71-79.

Esin, E. (2001). Türk Kozmolojisi'ne giriş. Kabalcı.

Etter, R. J. (2011). A devotional: honoring Thor and family. Lulu Enterprises.

Geertz, C. (2010). Kültürlerin yorumlanması (H. Gür, Trans.) Dost.

Gravers, R. (2010). Yunan mitleri (U. Akpur, Trans.) Say.

Güleç, Ç. (2018). Coğrafya eğitiminde mitolojinin kullanılması. *Eğitim ve Toplum Araştırmaları Dergisi/JRES*, 5(1), 162-179.

Karagöz, Ş. (2005): Eskiçağ'da depremler. Ege.

Karakurt, D. (2011). Türk mitoloji ansiklopedisi: Türk söylence sözlüğü. ISNB: 978-605-5618-03-2. E-kitap.

Kluckhohn, C. (1959). Recurrent themes in myths and mythmaking. *Daedalus*, 88(2), 268-279.

Kubat, L. (2020). Flood description and reflections in art. IBAD Journal of Social Sciences, 2020(6), 221-244 https://doi.org/10.21733/ibad.637382

Liritzis, I.; Westra, A. & Miao, C., (2019). Disaster geoarchaeology and natural cataclysms in world cultural evolution: An overview. *Journal of Coastal Research*, *35*(6), 1307–1330. https://doi.org/10.2112/JCOASTRES-D-19-00035.1

Ögel, B. (2014). Türk mitolojisi II (5. Eds.) Türk Tarih Kurumu.

Öksüz, G. (2021). Ana hatlarıyla Rus mitolojisi. Çeviribilim.

Övünç, Ş. (2019): "Theories about the occurrence of earthquakes from Antiquity to the Middle Ages". *Mavi Gezegen*, 27, 7–13.

Özey, R. (2006). Afetler coğrafyası. Aktif.

Page, R. I. (2017). İskandinav mitleri (3. Eds.). (İ. Yılmaz, Trans.) Phoenix.

Roux, J. P. (2011). Eski Türk mitolojisi (M. Y. Sağlam, Trans.) Bilge Su.

Sharpe, E. J. (2000). Dinler tarihinde anahtar kavramlar (A. Güç, Trans.) Arasta.

Şahin, K. & Ağbaht, F. (2021). Representation of Daphne and Apollo myth in postmodern consumption. *Turkish Studies-Language*, 16(4), 2543-2560. https://dx.doi.org/10.7827/TurkishStudies.52316

Şahin, K. & Öz, A. Ş. (2022). Antik Yunan Mitlerinin İzinde: Engellilik Algısına Dair Bir Okuma. In İ. Kalaycı, G. Kalmış, & C. Aydeyer (Eds.) *Tarih-kültür ve medeniyetten izler*. Kitap Dünyası, pp. 21–50).

Şimşek, E. (2022). Türk Halk Kültüründe Kaplumbağa. In D. Ayaz, E. Akçiçek, & H. Arıkan (Eds.), *Kaplumbağalar*, Vol. 7, Ege Üniversitesi Yayınları Çevre Sorunları ve Araştırma Merkezi, pp. 49-79.

Turak, Ö. (2018). Bull and trident: An investigation of the origin of Poseidon. MASROP, 12(1), 35-48.

Tümertekin, E. & Özgüç, N. (1997). Beşeri coğrafya insan-kültür-mekân. Çantay.

Wilkinson, P. (2014). Efsaneler ve mitler (E. Lakşe, Trans.) Alfa.

Yıldırım, K. & Nişancı, H. (2023). Earthquakes in Anatolia from antiquity to the 10th century. *Journal of Eurasia Dossier*, 14(1), 112-136.

Electronic resources

Ekşi Sözlük, 27 January 2019. https://eksisozluk.com/17-agustos-depremi-efsaneleri--5920029?p=10 Ekşi Sözlük, 1 June 2022. https://eksisozluk.com/17-agustos-depremi-efsaneleri--5920029?p=10 Ekşi Sözlük, 1 June 2022. https://eksisozluk.com/17-agustos-depremi-efsaneleri--5920029?p=10 You Tube, 13 March 2023. https://www.youtube.com/watch?v=ckkGAJ3naFQ



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