

A CULTURAL APPROACH TO EARTHQUAKE COPING STRATEGIES: EXAMPLES OF TURKISH FOLK POEMS AND MEMORATES*



DEPREMLE BAŞA ÇIKMA STRATEJİLERİNE KÜLTÜREL BİR YAKLAŞIM: TÜRK HALK ŞİİRLERİ VE MEMORATLARI ÖRNEKLERİ

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ABSTRACT: The aim of this study is to ensure that the cultural dimension discussed among the strategies to cope with the earthquake and to propose the use of this cultural dimension in earthquake education. The documents of the study consist of Turkish folk poems and memorates. In the study, document analysis method, one of the qualitative data collection methods, was used; the data were interpreted with information obtained from descriptive analysis. As a result of the research, it has been observed that Turkish folk poems and memorates have supernatural, mystical, traditional beliefs and thoughts about earthquake. The positive cultural dimension related to the earthquake that is folk poems and in memorates is that unity and solidarity and glorify of the solidarity tradition. On the other hand, the negative cultural dimension is the belief that the earthquake is a punishment due to people violated the religion, tradition and custom. In addition, the social and political disintegrations that occurred during the earthquake were also interpreted as a negative cultural dimension. From this point of view, it is suggested that the cultural dimension of the earthquake is considered as an additional strategy in addition to the known coping strategies and is defined "cultural memory strategy".

Keywords: Folk poetry, memorate, earthquake, cultural memory strategy, Turkey.

ÖZ: Bu çalışmanın amacı; depremin sosyal ve psikolojik boyutunun arka planlarından biri olan kültürel boyutun, depremle baş etme stratejileri arasında tartışılmasını sağlamak ve deprem eğitiminde bu kültürel boyutun kullanılmasını önermektedir. Çalışmada doküman incelemesi yöntemi kullanılmış, betimsel analizle yorumlanmıştır. Araştırmanın sonucunda Türk halk şiirleri ve memoratlarının depremle ilgili doğüstü, mistik, geleneksel inanç ve düşünceler barındırdıkları görülmüştür. Halk şiiri ve memoratlarda bulunan en yoğun inanç ve düşünce ise depremin nedeninin Allah ve kader olduğudur. Bu anlatılarda depreme ilişkin olumlu kültürel boyut; halk şiirlerinde birlik ve beraberlik mesajlarının verilmesi ve dayanışma geleneğinin yüceltilmesidir. Olumsuz kültürel boyut ise depremin din, gelenek ve göreneğe aykırı davranışlar yüzünden verilen bir ceza olduğu inancının bulunmuş olmasıdır. Buna ek olarak deprem sürecinde oluşan toplumsal ve politik ayrışmalar da olumsuz kültürel bir boyut olarak yorumlanmıştır. İncelenen şiir ve memoratlarda depremle başa çıkma stratejisine uygun söylemlerin olup olmadığına bakıldığında ise sosyal destek arayışı, suçlayıcı/çaresizlik ve

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kadercı başa çıkma yaklaşımlarının Türk halk şiirlerinde ve memoratlarında en çok ifade edilen söylem olduğu sonucuna ulaşılmıştır. Bu sonuçtan hareketle depremin kültürel boyutunun bilinen baş etme stratejilerine ek bir strateji olarak kabul edilmesi ve "kültürel bellek stratejisi" adıyla tanımlanmasının tartışılması gerekmektedir. Bu amaçla da depremle ilgili inanç ve düşüncelerin folklor bilimciler tarafından öncelikle derlenmesinin gerekliliğini savunulmaktadır. Çalışmanın ikincil önerisi ise deprem riskinin bulunduğu öncelikli alanlarda okuryazarlığın daha düşük olduğu kırsal yerlerde, halkın belleğinde bulunan depremle ilgili yanlış inanç, davranış ve bilgilerin açığa çıkarılması ve bilimsel bilgi ve düşüncelerle karşılaştırmalı olarak yer değiştirmesini sağlayacak disiplinler arası bilimsel çalışma ve uygulamalarla, süreklilik gösteren yaygın eğitimler verilmesidir.

Anahtar Kelimeler: Halk şiiri, memorat, deprem, kültürel bellek stratejisi, Türkiye.

Introduction

The inability to eliminate the causes of natural disasters, especially earthquakes, know when they will happen, and prevent their destructive effects has a negative impact on human thought and behavior in this century. When the reactions of people in the face of the unknown side of natural disasters are similar, a cultural dimension may arise. Moreover, the disaster mitigation methods and abilities of people with similar histories, geographies and cultures show similarity. Related literature in history and human societies has explained the causes of natural disasters through religious, mythical, traditional feelings and thoughts, and have developed punitive or protective rituals, discourses and strategies to prevent natural disasters. They expressed all of these precautions developed against natural disasters, their beliefs and thoughts by producing poems, songs, legends, memorates and stories and conveyed them to subsequent generations (Ögel, 1998: 433-441; Eliade, 2003: 57-179; Grandjean & Rendu et al. 2008; URL-1; Şenesen, 2016). Some studies indicate that these beliefs, thoughts and behaviors about natural disasters continue to have mythic, religious and traditional influences and that people still apply their beliefs and traditional rituals in dealing with disasters today (Chang, 2017; Appleby-Arnold & Brockdorff, et al. 2018). This shows the existence of a cultural memory related to disasters. Cultural memory, like a defense mechanism, works as well as personal memory, and uses unrealistic fictions while narrating disaster-related events and phenomena. In particular, non-scientific literacy people and society question the worldview in the meaning of disaster and produces religious, traditional, artistic and political narratives (Barber & Barber, 2012). For example, in the Erzincan earthquake of 1939 in Turkey, there was the belief that *Abdulvehhab Gazi had left the tomb, dispersed the red clouds hovering over Sivas Province, and protected Sivas Province from the earthquake* (Altun, 2008).

Some of these traditional narratives are blended with up-to-date information (URL2). For example, the August 17th, 1999 Marmara earthquake (M=7.4) in Turkey was converted into political and economic narratives that were played over Turkey, such as *the earthquake was a*

punishment for a deviant community or an artificial earthquake that generated by USA and Israel's military experiment (URL-3).

Similar rhetoric has been seen in Turkey's Istanbul where an earthquake occurred on September 26th, 2019. A considerable number of people have interpreted *the cause of the earthquake in social media as the use of interest in the economic system, the increase of adultery, homosexuality, or the warning of God to sinners who have turned away from Islam (URL-4).*

The related literature states that the cultural and folkloric dimension of the losses and gains arising from natural disasters constitutes a *disaster preparedness culture* and this culture affects the disaster preparedness process (Bankoff & Cannon et al. 2015; Yaman & Akyurt, 2013; Levac & Toal-Sullivan et al. 2012).

In some studies, cultural thought behaviors related to natural disasters were called *disaster subculture*. (URL-5, URL-6) Knowing this subculture that determines how people think and behave and what they believe in the natural disaster process can affect the disaster process positively or negatively. For example, the dialogue of non-scientific cultural thoughts and behaviors of the people and the scientific perspective can provide positive communication between disaster management authority and the public in coping with the earthquake. Therefore, folkloric material related to disasters is also valuable.

Studies on the Social Dimension of Natural Disasters in Turkey and Earthquake Coping Strategies

Although the studies were conducted in different fields of social science on natural disasters in Turkey, folkloric and cultural studies on the cultural dimension of disasters are almost nonexistent. Few studies have been conducted on the social and psychological aspects of disasters, without taking into account *the cultural background* (Karancı & Rüstemli 1995; Karancı & Rüstemli, 1999; Kasapoğlu & Ecevit, 2002; Çapar, 2016: 5-101). In these studies, the word of "culture" is mentioned and it is stated that only thoughts and behaviors related to disaster can be cultural.

In this study, especially Şakiroğlu's thesis on earthquake behavior (Şakiroğlu, 2005: 50-80) was the starting point. Şakiroğlu adapted the scale used by Duval and Mulilis (1999) in their field study on earthquake preparedness to Turkish, and interpreted *the strategies for coping with the effects of the earthquake* in Turkish. These strategies and exemplary discourses that the user of these strategies can develop are as follows:

Problem Solving/Optimistic Approach: Discourses developed to do what is necessary to solve the problem, to take action for help and to make a positive interpretation of the event,

Fatalistic Approach: To accept the earthquake as destiny, to ask for help from a mystical force and rhetoric such as I believe that God knows the best, I think my fate will not change, I pray for help.

Helplessness/Self Blaming Approach: To think that there is nothing to do, discourses describing desperation, fear and despair, rhetoric such as I do not understand my mistake, I feel helpless, discourses such as “I am the cause of the problem”,

Social Support Approach/Seeking Social Support: Waiting for or asking for help, rhetoric such as waiting for others to help me solve the problem, I am angry with those who cause the problem, asking my friends to solve the problem,

These strategies in Şakiroğlu's adaptation have been developed in the context of psychological strategies. However, psychology cannot be thought to be independent of culture and cultural memory, and there is no human nature independent of culture. Each strategy that developed to measure the psychological strategies developed by human beings against earthquakes of this scale is also cultural. If so, there may be a cultural dimension within these psychological strategies.

Another contribution to this argument of the study is the scale developed by Yöndem and Eren (2008) on coping with earthquake stress. In this scale, they stated that the religious coping factor might be related to a cultural response, but the scale did not measure this cultural response. In the scale, the search for a mystical power in coping with earthquakes was evaluated positively in one aspect and it was stated that seeing God as a punitive force negatively affected psychological health (p. 69). The participants of this scale showed their thoughts and behaviors *such as praying after the earthquake, taking refuge in God, accepting death as fate, and performing religious duties more after the earthquake*. It is clear that these religious behaviors are cultural. Moreover, Yöndem and Eren also suggested that individual coping should be controlled separately from cultural variables.

Studies on the Folkloric Dimension of Natural Disasters in Turkey

In order to be protected from the effects of the earthquake, the data that will enable cultural evaluation of the earthquake process are also found in Turkish folk narratives.

When the Turkish oral culture is examined, it is known that there is a tradition of producing narrative on an event and phenomenon affecting the individual and society and this is also transmitted from generation to generation. The narratives produced may be anonymous or production of a *folk poet; bard*. In Turkey, the tradition of minstrelsy come into play after the earthquake and folk *poems and songs; folk ballads, laments* on earthquake

are produced. These poems, which are the *literary heritage of the earthquake*, melodize with *traditional instruments* and turn into *folk music*. Apart from these poetry- *folk songs*, there are mystical, supernatural narratives that are believed to be real among the people, which is not clear who is narrating them among the public still; with the initial expressions such as “*as they say*”, “*a man saw it*”, “*a woman told me*” or “*I saw, I heard, I noticed*”. These prose narratives are called as *legende* or *memorates* in *Turkish folk literature*. Legends or memorates describe extraordinary, fantastic, mythical, mystical, instructive events in the form of prose that have happened in the past or present time, and the public respects the mystical heroes in these narratives. (Çobanoğlu, 2003: 22-76). Very few of these narratives related to earthquakes have been compiled by folklorists. Ruhi Kara (1994) has collected the most important and comprehensive review in his book *Tears of Erzincan*. In this book, there are 170 poems, laments and epics about the earthquakes that took place in Erzincan in 1939, 1983 and 1992. Folklorist Dogan Kaya studied the epics sang by the Sivas Folk Poets on the 17 August 1999 Marmara Earthquake (URL-6).

Turkish Folk Scientist Işıl Altun and Ersin Çelik compiled *Beliefs and Memorates of the 17 August 1999 Kocaeli earthquake* and archived these folk narratives, some of these narratives are presented in the paper titled *Beliefs and Memorates of the August 17 Earthquake* (2015). According to this paper, the people of Kocaeli believe and respect the metaphysical and mystical supernatural beings (*Hızır, Evliya*) related to the earthquake. Apart from these review studies, several studies can be mentioned on the socio-cultural dimensions of the earthquake. Sheridan (2007) examined folkloristic narratives about the earthquake in Turkey and mentioned “mythical narratives in the public imagery stemming from mythical fear caused by earthquake experience”.

Keneş (2011) examined the racist discourse in the media during the Van earthquake (2011); on the other hand, Tek (2018) examined how the cultural memory of the Varto Earthquake on August 17, 1966 is shaped together with socio-economic and ethnic problems. These last two studies are also notable in terms of showing how a natural disaster, namely the earthquake, triggers ethnic, social and economic problems in countries such as Turkey. Aslantaş (2015: 5-50), who examined the cause of the earthquake according to Islamic belief, stated that the earthquake was perceived as a divine warning and punishment given to those who did not abide by the morality in Islamic history.

Method

In this study, one of the natural disasters, earthquake, was focused on and cultural memory of the earthquake in Turkey were examined. Turkey is an earthquake country; moreover it is a country with strong cultural and folkloric structure. Therefore, for Turkey to fight better against the

earthquake, it is valuable that the earthquake knowledge of the cultural dimension to be known, and the relevant cultural memory is revealed, and Turkey example may open cultural doors in coping with disasters all over the world. For this assertion of the study, folk poems and memorates representing the beliefs, feelings and thoughts of the people were examined. And in the discourses in these narratives, an answer was sought for the question whether there is a cultural strategy in dealing with the earthquake based on the discourses expressing the strategies to cope with the earthquake. This study was designed as a qualitative study, document analysis method. The documents of the study consist of Turkish folk poems, and memorates which are available in written and electronic sources. In this study, document analysis method, which is one of the qualitative data collection methods, was used and the data were interpreted with the information obtained from descriptive analysis. The research consists of 82 poems and 10 memorates found in books, archives and electronic resources.

Findings

According to the study carried out for the purpose of the study, it can be said that strategies in coping with the earthquake are used in Turkish folk poetry and memorates about earthquake. According to these findings, there is a more fatalistic coping strategy in Turkish folk poems and memorates:

Problem solving / Optimistic approach

The fact that the problem solving / optimistic approach strategy in dealing with earthquakes in the content of these folk poems and memorates have not been found yet means that the public narrators who were representatives of the people did not have positive feelings and thoughts about the earthquake process; accordingly, it can be said that they did not give cultural responses that facilitate the process during the earthquake.

Fatalistic approach

54 of the folk poetry examined in the study, the cause of the earthquake is connected to the belief in

Allah and destiny.

God sent orders,

He'd turn upside down

Extinguished many nests

Is this justice, fate

Don't you have mercy fate (folk poets (fp): Musa Baba, Kara, 1994: 7)

There is no rebellion to things coming from God,

As soon as the dead is dead

No one knows what I have been

10) *Your disaster is great, my dear Erzincan* (fp: Haşim Akarsu, Kara 1994:

God does what he does

The crazy deviate from the road

Arm breaks in rubble

Wail and moan brother (fp: İbrahim Aydın, Kaya, 2019: 10)

Those who come to the world will laugh one day

It will replace God's discretion

Many of them became slaves on the right way (fp: H.İbrahim Bacak, Kaya, 2019: 9).

This great power came from God

Babies crying what happened to our mother

The eyes of all hearers are filled

Mother Father Sister Friends Cries (fp: Şükrü Karataş, Kaya, 2019: 13).

Fate slaps and says no joke

No survivors under the rubble

There's no exact figure in the number of dead

Earthquake wrecked Marmara (fp: Zikri Aliyar, Topçu, 2013: 206).

Helplessness approach / Self-blame

In 25 of the folk poems, it was stated that the cause of the earthquake was a punishment *given by a creative (God) or mystical force because of the people's sins, morals and unconventional behaviors.*

Black smoke fall down on top of the sea,

Destructed places roads helpless

A thousand lives perished

Soared screams worshipers helpless (fp: Alimi, Kaya, 2019: 5).

My dead parents, my brother, my sister.

I'm desperate, there's no medicine

I'm so miserable I'm in need

The earthquake knew that I am poor (fp: Derdiyar, Kaya, 2019: 5).

We are sinful servants and fearful from God.

We'll ask you what we need to do.,

Hypocrisy has multiplied, we are always sinners. (fp: Hüseyin Doğan, Kara, 1994: 8).

*If he commands, he will destroy the whole world,
Broken people walk in nudity,
The Great God makes an example of this.*

*The Great God who made the thrashing
Who knows what rebellion there was
Even the wet burned by the dry
God Almighty, who creates out of nothing.* (fp: Casim Karataş, Karakaş, 2014: 664- 665).

Three of the poems state that the earthquake is a natural disaster.
*What should Marmara do to broken faults
We split the pain year by month
Hearts can't stand such ouf
Crushed bodies are helpless.* (fp: Alimi, Kaya, 2019: 5).

Social support approach /Seeking Social Support

Social support approach was found in 13 poems.

*It was destroyed, it was empty
The capital rushed to help*

...

*It was done by God's will Erzincan
Thanks to the government father is here any moment
Some have died and some have lost goods.
Sweet Erzincan is slowly coming to life.* (fp: Kara, 1994: 21).

*They look at tomorrow with suspicion
The dark cloud has fallen to your hopes
The Turkish people have come to their aid
Earthquake wrecked Marmara* (fp: Zikri Aliyar, Topçu, 2013: 206).

*Prime Minister Demirel rushed to help
As soon as the survivors run away,
All Turkish nation ready to help
Have mercy on the innocent babies, God*

Let's help the remaining brothers (fp: Casim Karataş, Karakaş, 2014: 665).

Although there is no direct help statement in her poetry lines, these deficiencies can only be eliminated with social support or assistance, and can be taken as an implicit expression of this search:

Erzincan does not recover in 85 months

Some remain poor, some remain very poor

This earthquake has been plundered. (fp: Aşık Hayali, Kara, 1994:23).

You're homeless, you're unemployed. (fp: A. Arıtürk, Kara, 1994:24).

Black smoke covered our plain,

The emigrant marched to Istanbul. (fp: H. Baştuğ, Kara, 1994: 44).

According to the findings, the following approaches were found in Turkish memorates:

The problem-solving/optimistic approach and the social support approach have not been found in any memorates. This situation can be attributed to the construction of memorates mostly based on *metaphysical thinking and beliefs*

One of the 10 memorates examined in the study explains the cause of the earthquake as *conspiracy theory* and one of them as *fate* (URL-7).

Helplessness approach / Self-blame

3 of the memorate are thought to be a punishment or reward given by the Creator (God) or a mystical power because of people's sins, immoral and unconventional behavior.

Memorate 1

The young people went overboard with their fun, took the Qur'an under their feet and blasphemed with disbelief. The actions of these young soldiers enraged Allah and there was an earthquake that night. (Archive-1).

Memorate 2

I pulled the petty officer's 11-year-old daughter out of the wreckage. When I pulled her out, the girl said, don't touch me, I'm fine, the sires (saints) looked after me. She had her father's gun in her hand, and we found out from the name on it that she was the petty officer's daughter. (Archive-2).

Memorate 3

Sultan Baba opened his arms to both sides, preventing the wave coming from the sea from coming over Değirmendere. And where his arms couldn't reach, they were damaged by the waves. (Archive-3).

Fatalistic approach

In 3 of the memorates, a fatalistic approach strategy was found.

Memorate 4

The boy came out of the wreckage unharmed when it was impossible to save him. The boy said he had a saint inside and gave him food and water for five days. (Archive-4).

Memorate 5

At that time, I received a prayer book and looked at the surah of Mulk. When I look at meaning, "the earth shakes and shakes, and are you sure it won't rain stones on your head." Actually, I could have predicted an earthquake. I didn't realize the situation. (Archive-5).

Discussion and Conclusion

Levi-Strauss says "nothing, not even a tiny pansy, in the fortress of social reality called culture is meaningless and has unconscious foundations" (2013: 8). In the 21st century, in the face of earthquakes or any natural disaster, the fact that people produce poems and memorates similar to their old ancestors can be explained by its historical existence or it can reveal the fact that culture cannot be fed from scientific knowledge. A disaster culture is created when partnerships of how people think and behave in the face of natural disasters are historically continuous. Folkloric tools such as folk literature; poems, memorates or beliefs are abstract images of culture. The folkloric poems and memorates (narratives) studied in this study can be interpreted as representative of the folkloric/ cultural reactions of the Turkish people to the earthquake. According to the results obtained from the findings, cultural responses to earthquakes as a natural disaster can be positive or negative, and these responses can also function as a strategy for dealing with earthquakes.

As a result, the public poems and memorates, examined supported the view that the feelings, thoughts, beliefs and behaviors about earthquakes as a natural disaster had religious and traditional influences. The proliferation of eschatological narratives, especially about supernatural persons and places, during the earthquake process can be considered an indication that society continues to produce folk poems and memorates in Turkey. This can also be interpreted as that these public poems and memorates serve to strengthen religious beliefs. The uncertain nature of the earthquake can cause people to produce poems and narratives similar to beliefs and thoughts of pre-scientific people.

The most intense belief and thought found in the narratives studied is that the cause of the earthquake is God or Destiny. This cultural dimension coincides with the fatalistic approach to coping. This approach has been used to suppress feelings of rebellion against the negative effects caused by earthquakes, or to provide easier acceptance of negative effects. Great fears and suffering were heard and experienced in the face of the earthquake, and help was asked from Allah or mystic forces through prayer to end them. Based on all these, as mentioned in the introduction of the article, people take shelter in their religious beliefs against earthquake stress and this situation has been interpreted as a wounded reaction. The reactions of people in the face of the earthquake, which is unknown and cannot be prevented, throughout history are existential as much as dependant on beliefs and religion. Thoughts of faith, religion, and existence are cultural because culture is shaped by common thought, feeling, and religion. In Turkish folk poetry and memorates, discourses about earthquakes are expressed with Islamic belief and concepts such as fate, Allah, prayer, and punishment of Allah. On the other hand, the interpretation of the clergy is needed regarding the idea of whether the earthquake is the punishment of Allah or not. Accordingly, after the earthquake, state officials as well as clergymen can support the public against the negative effects of superstitions.

Considering the research (Cashman & Cronin, 2008: 407 - 418) which argues that beliefs have a positive psychological effect in understanding the earthquake process, the poetic ones from Turkish folk poems and memorates can also be considered as relief by describing the disaster in this context. The approach of distancing from the source of stress, that is, from the earthquake, can also be considered as equivalent to the culture of "referring the earthquake to God" in the public discourse.

As a negative judgment of the poems and narratives, the literature also supports the finding of a punishment for those who act contrary to religion, tradition and custom and the belief of the apocalypse. (Bode, 1977; Eliade, 1993: 57; Paradise, 2005; Grandjean, 2008: 200; Adiyoso & Kanegae, 2013; Duman, 2016: 134-179).

The negative cultural dimension in the poems and memorates is the belief that the earthquake is a punishment for those who act contrary to religion, tradition and custom. In this dimension, the complaint from both God and the people who do not conform to religion and tradition and who break the order can be regarded as an accusatory/helplessness approach. In addition, social and political dissociation during the earthquake process can also be interpreted as a negative cultural dimension.

The positive cultural dimension of the earthquake in these poems and memorates is that the poets of the people give messages of unity and togetherness in their poems, ask for help from the state powers and glorify

the tradition of solidarity. This dimension can be interpreted as a social support approach.

The glorification of solidarity and neighborly traditions as a positive result in public poems and memorates supports the finding of increasing solidarity and solidarity feelings and behaviors reached in social research related to the earthquake (Bozkurt, 2000: 5-20).

In *Problem solving/optimistic approach*, some data can be interpreted according to this approach when taken as discourses developed to do what is necessary to solve the problem, to act for help and to make a positive interpretation of the event. The fact that some narrators sought help from government officials after the earthquake or found the help to be positive can be considered as a relatively optimistic approach.

As a result, the existence of similar discourses in dealing with earthquakes in folk poems and memorates suggests the existence of similar strategies in cultural memory. This suggests that the cultural dimension of the earthquake should be discussed or defined as “cultural memory strategy” in the name of communities coping with the earthquake, apart from personal and psychological coping strategies. However, more public narratives need to be reached to define this new strategy. In the research process, there has been difficulty in reaching the public narratives about the earthquake, so it is suggested to carry out systematic and comprehensive compilation studies with folkloric methods.

The third proposal of the study is to reveal the cultural memory related to earthquakes especially in places with lower literacy and earthquake risk, and then to carry out research and studies to replace displaced beliefs, mythical thoughts, behaviors and information in comparison with scientific knowledge and thoughts

The absence of a study on how beliefs and unscientific thoughts and behaviors related to earthquakes in Turkey affect the earthquake process culturally, and the possibility that people's thoughts, beliefs and behaviors can create cultural, social and economic fault fractures, can also stimulate good or bad structures by passing these narratives from generation to generation.

Admittedly, this cultural change is not easy. It takes a long time and the concerted effort of different disciplines. For this purpose, continuous widespread training can be planned with the cooperation of Central and local governments and non-governmental organizations.

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REFERENCES

- Adiyoso, W. & Kanegae, H. (2013). The preliminary study of the role of Islamic teaching in the disaster risk reduction (a qualitative case study of Banda Aceh Indonesia). *Procedia Environmental Sciences*, 17, pp. 918-927
- Altun, I & Çelik, E. (2015). *17 ağustos depremine ait inanışlar ve memoratlar*. 5th *International Earthquake Symposium*. Kocaeli. Turkey, 10-12 (in Turkish).
- Altun, I. (2008). Kocaeli’de türbelerle ilgili inanış ve uygulamalara örnek: “Sultan Baba”. *Atatürk Üniversitesi Türkiyat Araştırmaları Enstitüsü Dergisi*, 15(37), 177 (in Turkish).
- Appleby-Arnold, S., Brockdorff, N., Jakovljević, I. & Zdravković, S. (2018). Applying cultural values to encourage disaster preparedness: Lessons from a low-hazard Country. *International Journal of Disaster Risk Reduction*, 31, pp. 37-44.
- Arslantaş, N. (2015). *İslam tarihinde depremler ve algılanma biçimleri*. İstanbul: İz. (in Turkish).
- Bankoff, G., Cannon, T., Krüger, F. & Schipper, E. L. F. (2015). Introduction: Exploring the links between cultures and disasters. In *Cultures and Disasters*, pp. 17-32. London: Routledge.
- Barber, E. W. & Barber, P. T. (2004). *When they severed earth from sky: how the human mind shapes myth*. New Jersey: Princeton University.
- Bozkurt, V. (2000). *Deprem ve toplum*. İstanbul: Alfa. (in Turkish).
- Campbell, J. (2003). *Yaratıcı mitoloji tanrının maskeleri* (Çev.: Kudret Emiroğlu), İstanbul: İmge.
- Çapar, T. (2016). *1999 Marmara depremlerinin etkilerinin travma sonrası gelişim modeli çerçevesinde değerlendirilmesi*. Ankara: Hacettepe Üniversitesi Sosyal Bilimler Enstitüsü Yüksek Lisans Tezi, 5-101. (in Turkish).
- Cashman, K. V. & Cronin, S. J. (2008). Welcoming a monster to the world: Myths, oral tradition, and modern societal response to volcanic disasters. *Journal of Volcanology and Geothermal Research*, 176 (3), pp. 407-418.
- Chang, Y. L. (2017). Exploring naga images: Textual analysis of Thailand’s narratives. *Journal of Mekong Societies*, 13 (1), pp.19-35.
- Çobanoğlu, Ö. (2003). *Türk halk kültüründe memoratlar ve halk inançları*. Ankara: Akçağ. (in Turkish).
- Duman, Z. M. (2016). *Sosyolojik açıdan deprem ve din*. İstanbul: Rağbet. (in Turkish).
- Duval, S. T. & Mulilis, J. P. (1999). A person relative to event (PrE) Approach to negative threat appeals and earthquake preparedness: A field study. *Journal of Applied Social Psychology*, 29, 3, pp. 495-516.
- Eliade, M. (2003). *Dinsel inançlar ve düşünceler tarihi*. C. 1, (Çev.: Ali Berktaş), İstanbul: Kabalıcı. (in Turkish).
- Grandjeana D., Rendu, A. C. L., MacNamee, T. & Scherer, K. R. (2008). The wrath of the gods: appraising the meaning of disaster. *Social Science Information*, 47 (2), pp. 187-204.

- Kara, R. (1994). *Erzincan'ın gözyaşları (deprem ağıt ve destanları)*. Ankara: Özyurt. (in Turkish).
- Karakaş, A. (2014). Sözlü tarih-folklor ilişkisi bağlamında üç âşık destanı. *Turkish Studies*, 9/6, 655-676. (in Turkish).
- Karanci, N. A. & Rüstemli, A. (1995). Psychological consequences of the 1992 Erzincan (Turkey) Earthquake. *Disasters*, 19 (1), pp. 8-18.
- Kasapoglu, A. & Ecevit, M. (2002). Impact of the 1999 East Marmara earthquake in Turkey. *Population and Environment*, 24 (4), pp. 339-358
- Keneş, Ç. H. (2011). Depremi görünürleştirdiği yeni ırkçı söylemler: "İlahi Adalet" ve "Kürt Depremi". *İletişim Araştırmaları*, 9 (1-2), 47-72. (in Turkish).
- Levac, J., Toal-Sullivan, D. & O'Sullivan, T. L. (2012). Household emergency preparedness: a literature review. *Journal of Community Health*, 37 (3), pp. 725-733.
- Ögel, B. (1998). *Türk mitolojisi I*. Ankara: Türk Tarih Kurumu. (in Turkish).
- Oliver-Smith, A. (1996). Anthropological research on hazards and disasters. *Annual review of anthropology*, 25 (1), pp. 303-328.
- Paradise, T. R. (2005). Perception of earthquake risk in Agadir, Morocco: A case study from a Muslim community. *Global Environmental Change Part B: Environmental Hazards*, 6 (3), pp. 167-180.
- Rüstemli, A. & Karanci, N. A. (1999). Correlates of earthquake cognitions and preparedness behavior in a victimized population. *The Journal of Social Psychology*, 139 (1), pp. 91-101.
- Şakiroğlu, M. (2005). *Variables related to earthquake preparedness behavior*. Ankara: Middle East Technical University, Department of Psychology, Unpublished MS Thesis.
- Şenesen, İ. (2016). Adana halk kültüründe gökyüzü ile ilgili halk inanışları üzerine karşılaştırmalı bir inceleme. *Asia Minor Studies*, 9, 64-92. (in Turkish).
- Sheridan, A. A. (2007). Kentte mitsel korku: "Fısıltı" depremleri. *Milli Folklor*, 19 (75), 126-133.
- Strauss, C. L. (1986). *Mit ve anlam*. (Çev.: Gökhan Yavuz Demir-2013), İstanbul: İtaki.
- Tek, A. (2018). Felaketin belleği: '66 Varto depremi ve etrafında oluşan kolektif hafıza. *Kebikec: İnsan Bilimleri İçin Kaynak Araştırmaları Dergisi*, 45, 145-170. (in Turkish).
- Troll, V. R., Deegen, F. M., Jolis, E. M., Budd, D. A., Dahren, B. & Schwarzkopf, L. M. (2014). *Ancient oral tradition describes volcano-earthquake interaction at Merapi Volcano, Indonesia*, pp. 137-166. Published online: 15 Nov 2016.
- Yaman, Ö. M. & Akyurt, M. A. (2013). Sosyal hizmete kültürel yaklaşım: 2011 Van depremi örneği. *İstanbul Üniversitesi Sosyoloji Dergisi*, 3 (26), 105-144. (in Turkish).
- Yöndem, Z. D. & Eren, A. (2008). Deprem stresi ile baş etme stratejileri ölçeğinin geçerlik ve güvenilirlik çalışmaları. *Türk Psikolojik Danışma ve Rehberlik Dergisi*, 3 (30), 60-75. (in Turkish).

Electronic References

- URL-1: Akman, E. (2012). Türk mitolojisi ve halk şiirinde “Sarı/Kızıl Öküz” inancı. *Türkiyat Mecmuası*, 22 (1), 1-16. <http://www.iudergi.com/tr/index.php/turkiyat/index>, (in Turkish).
- URL-2: Taylor, A. J. W. (1999). Value-conflict arising from a disaster. *Australasian Journal of Disaster & Trauma Studies*, 1999-2. <http://www.massey.ac.nz/~trauma/issues/1999-2/taylor.htm>, (last accessed on 19 September 2019).
- URL-3: <http://www.hurriyet.com.tr/gundem/isikara-marmara-depreminde-komple-iddialarini-yalanladi-15915874>;
<https://www.yeniakit.com.tr/haber/buyuk-marmara-depremi-ve-gizlenen-gercekler-165726.html>;
<http://www.hurriyet.com.tr/haberleri/suni-deprem> (last accessed on 10 September 2019).
https://twitter.com/Tugce_official/status/1177577008022380544;
<https://twitter.com/onurylmz1453/status/1177194829144633345>
- URL-4: Oliver, 1996; <https://www.netlaw.bg/en/a/culture-and-risk-management-in-man-made-and-natural-disasters-carismand> (last accessed on 1. September 2019; Troll & Deegan et al. 2014).
- URL-5: Valentin R. Troll, Frances M. Deegan, Ester M. Jolis, David A. Budd, Börje Dahren & Lothar M. Schwarzkopf, 1914) Ancient oral tradition describes volcano–earthquake interaction at merapi volcano, indonesia, Pages 137-166. Published online: 15 Nov 2016; <https://doi.org/10.1111/geoa.1209>. <https://www.tandfonline.com/doi/abs/10.1111/geoa.12099> (last accessed on 10 September 2019).
- URL-6: http://turkoloji.cu.edu.tr/HALK%20EDEBIYATI/dogan_kaya_sivasli_asiklar_marmara_depremi.pdf (last accessed on 2 September 2019).
- URL-7: <https://www.yeniakit.com.tr/haber/buyuk-marmara-depremi-ve-gizlenen-gercekler-165726.html>;
<http://www.hurriyet.com.tr/haberleri/suni-deprem>

Personal archive documents - in Turkish.

- Archive-1: Işıl Altun’s Archive (2005).
Archive-2: Işıl Altun’s Archive (2005)
Archive-3: Işıl Altun’s Archive (2005).
Archive-4: Işıl Altun’s Archive (2005).
Archive-5: Işıl Altun’s Archive (2005).