

Geo-mythology and Its Influences on Tourist Attraction (Case Study: Geological Phenomenon and Geo Morphology of Baba Gorgor Village, Kurdistan

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Abstract. Given the importance of agriculture in the economy and the increasing role of potato and onion in the diet, this paper predicts the consumption of these products using a statistical model. Therefore, based on single and multi-variable models, data from 1970-2013 was applied to predict potato consumption using double exponential adjustment model and ARIMA (2, 1, 3) model was applied to predict onion consumption in 2015-2018. The results not only show a suitable prediction based on error criteria for the above mentioned models, but also reveals the fact that the application of an annual series using appropriate and valid models can provide acceptable results. The comparison of these Predictions with actual values is a sign for the high prediction power of these models and confirm this claim. According to our study, it is anticipated that per capita consumption of potato and onion will reach to 31.4 and 18.9 kg at the end of the year 2018. Geological phenomena and morphological forms sometimes appear in special and unique shapes. In the past and even now in some cultures and subcultures, because there was no response and rational justification for their formation and to satisfy their curiosity, people resort to (draw on) some legends and superstitions in order to explain their formation. Considering this issue, Baba Gogor village in Ghorveh, Kurdistan, has been investigated in a new category called geo mythology due to the myths and beliefs, due to the activity of several springs which were very active in the past and now show limited activity, various unique travertine and tofu forms have been formed near the springs. Due to the diverse and unique activities of the springs, different beliefs and superstitions have spread amongst the inhabitants of the neighboring villages and even more distant regions. Each year, thousands of tourists from all over Kurdistan and even the neighboring provinces are attracted in the region. The present study aims to investigate geo mythology in the world in general and in Ghorveh specifically and continues to investigate the relationship between geo-mythology and tourist attraction. To this end, different field methods such as interview and questionnaire have been used. At first, using open-ended interview and questionnaire, superstitions and beliefs regarding to different geological forms and phenomena and the available geology of the region (Baba Gorgor Village) have been gathered and in the next step the researcher designed a combined questionnaire (open-ended and closed) and 50 participants (the tourists in Baba Gorgor Village) completed it. The data were analyzed using SPSS Software and in other word the role of mythology in attracting tourists was investigated. The results show that among the available forms and phenomena, the hill known as the Dragon has the largest role in attracting people. Also, if we explain for the tourists in a simple way (language) how the forms and springs operate, the tourists suspicions can be removed to some extent.

Keywords: Geo Mythology, Myth, Tourist, Superstitions and Beliefs, Baba Gorgor, Dragon Hill

1. INTRODUCTION

Geology and morphology have influenced the society, civilization and cultural diversity. In the past, people were closely connected with their natural environment. They have drawn on myths, stories and legends in order to understand perspectives and processes. Using the names such as devil, dragon and elf to valleys, mountains and caves can be seen in different parts of the planet and in different cultures. In addition humans have tried to describe the phenomena and forms based on their understanding of the nature. The names used for natural inanimate elements are in the geological framework (context). Part of the culture relate to geological phenomena is associated with religious beliefs of the people and metaphysics. Some of these names have been used for relative static elements (such as mountains), dynamics processes (such as travertine springs) and fossil. Some of these myths and stories provide us with valuable information about earthquakes, Tsunamis, floods and so on and also gives important information to understand geological and climate changes (Khosronejad, 1389, 211).

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Mythology as one of the braches (areas) of cultural anthropology attracted historians and anthropologists since early 18th century. (Meletinsky, 2000: 5). Myths and mythical narratives with their mysteries and contradictions mediate between human being and sacred time and divine entity. Myth and its recreation in the form of later narratives has stable, fragmental and mystified components. And in the later periods they accepted different personal interpretations (Satari, 1389:13). These components report (write) religious experience of the narrators such that man become closer to and more familiar with divine entity and sacred realm; because a profound (deep) religious experience always is the basis of all the rituals and mysteries . (Alyade: 204). The term geo-mythology has been used for the first time by Dorothy Vitaliano in 1968.) (Piccardi & Masse, 2007: 58). Geological phenomena sometimes show special forms with mysterious events and people used them to make stories and myths and form lasting (persistent) beliefs. This issue and identifying these myths and beliefs are addressed in a new field called geo-mythology. Adam stone (Adam Dashi in Azeri) refers to a special kind of elf Chimneys that have a cylindrical body and spherical head and it is similar to the human body. A lot of beliefs and stories about these forms have spread amongst the ordinary people. One of them is that a sinner (guilty) man has been punished by God and has changed into a stone (rock). Seven rocks (slates) standing on the way of Chalus Road have been known with a story similar to Seven Brothers story.

The above examples show that people have already deeply and continuously identified themselves with the nature and the earth and have embedded its phenomena in their culture. This highlights the importance of geo-mythology in introducing geo parks and developing geo-tourism.

Geo-mythology is of special importance in different resources and foreign scientific journals. Maybe Greece is the pioneer in this regard. In most studies in this country it has been tried to analyze and correspond today geological geographical and physical findings with the beliefs and legends formed in ancient Greece and also logical and illogical consistency between them has been examined. Theocharis and Mariokos, 2010 have studied old geological and geographical changes in Asopos River in Greece and they argued that the common geo-mythology beliefs in this region is rational (Piccardi et al, 2008). They bring together the findings of geochemical studies and those of historical, archaeological, mythological and geological studies in a rational framework and they have considered gas emitted from previous Delphi active fault due to seismic genetic activities in the region. The vapor reaches the earth's surface from underground lead to the formation of legends and beliefs Clendenon, 2009 in his study investigated Karst hydrology on the way of Karst rivers such as Arcadia and Arkoses in the old legends of Greece. In his study, he distinguished legends and beliefs relate to water called hydro-mythology from geo-mythology. The present study tries to investigate the relationship between these karst forms on the way of the two rivers with old legends and beliefs. Karst springs and the holes have been more emphasized. They believe that the springs are sacred and they belong to the gods and they have considered the holes as a symbol of evil.

It is appeared that in Australia most studies have been done on the strong beliefs and Aborigines (the first inhabitants and Aurania natives). One of the examples that explain geo-mythology in Australia is the stories about the volcano which has been occurred 10000yeas ago in several parts of the country near the Queensland Lake (Dixon, 1972: 29; Rainforests Conservation society of Queensland, 1986:39).later due to the scientific activities and analyzing Silt and Crater of rainforest in Queensland, a terrible volcano happened 7600 years ago (Hamacher et. al., 2011:7).

The reality is that in our country, in spite of different ethnic groups and ethnicities and cultures no studies have been conducted in this regard yet and only Persian language literature researcher have done valuable works in this regard drawing on myth and legends and they in some way

have compensated the fault of the geologists and geographers but the available researchers that only focus on geo-mythology are not considerable.

If we consider land heritage equal to tourism regions in our country (Iran), then the attitude toward land heritage is mainly enclosed in introducing and describing geological phenomena and recognizing attractions. While, some individual attractions such as the salt domes and salt caves in Qeshm Island have been considered as a context to introduce and create geo-parks (Asadi et al 1387). Further some case studies have addressed geo-parks in Qeshm such as its effect on tourism economy (Ziari et al., 1387) (Khosh Raftar 1387), tourism management in geo-parks (Hematite Mehrabani 1387), (Sabouri and Arbabi 1387), virtual geo-parks (Mokhtari Malak Abadi, 1387), spatial analysis of geo-parks (Sohrabi et al., 1387),(Mahmoudi et al., 1387), introducing new geo-parks (Taheri and Biglari, 2009). These are some examples of studies conducted in Iran on land tourism and Geo Park.

Khosh Raftar (1390) in his research examined the various concepts of geo-mythology and this is the first scientific work in this area which has been conducted by geo- morphologists. He studied geo-mythology values of the three springs with calcareous salts in the north west of Iran (Tekab, Zanjan, and Ghorveh) and have analyzed the term "Dagon" in mythology point of view in the three areas.

Mehrshahi(1379) in his study outlined the various theories about the reasons of Zoroastrians shrines emergence in Yazd. He has proposed four theories in this regard. He described the most famous theory as follows: when the third Yazdgerd wanted to get rid of (escaping from) Arabs, their older girls and maids fled to mountains between Aghda and Ardakan . In the mountains it seems that they have disappeared like a magic (Miracle) or were buried in the mountains. And thus their dignity (purity) was preserved. The most famous girl was likely the girl of the third Yazdgerd which was known as the Persia Lady. Old women believed that even after a long time a colorful piece of the Lady dress has been seen which was turned into a stone (rock). When the place was inspected there was nothing but colored conglomerate. And perhaps this is what once was thought to be the Lady dress.

Shrine (tomb) of Emamzadeh seyed Jalaluddin who is known as Baba Gorgor is located in the village (Baba Gorgor village) , Ghorveh and there are also some geological and geo morphological forms that each year attract more than 30000 tourists and pilgrims. The layered travertine hill and a crack of longitudinal spring behind it from which water flows and is known as the Dragon in Baba Gorgor leads to the spread of some superstitions and beliefs among locals. People believe that that Emamzadeh had changed the Dragon into a rock (stone) by his sword.

There is an opening (a mouth) near the mineral spring from which underground gases comes out (exit). People take a vow in their heart and close the mouth (opening) with a cloth or something else. After a while gas pressure throws the clothes (fabrics) other materials into the air. This accompanied with a load noise. Some people believe that the louder the voice it is more likely the vow being accepted. Tongoz spring (the largest travertine spring in the area), scientifically has therapeutic properties. But people believe in its spiritual healing capacity. And it is considered holy (sacred) on their part. Emamzadeh's shrine is situated on one of the travertine hills of the area and some people believe that if someone put a stone between the travertine layers or the stones used in the shrine building, and the stone remains stable between the layers, this means that their needs have been met. This field study aims at investigating the impact of beliefs and superstitions on attracting tourists to Baba Gorgor village and identifying the most profound (the deepest) beliefs and superstitions which play the main role in attracting tourists. Also, it tries to determine the role of Emamzade's shrine (tomb) in attracting tourists to Baba

Gorgor village, identifying the factors that lead to the spread of these superstitions and beliefs through the village and determining the role of direct training (education) in fading away and removing the beliefs and superstitions.

Study area: Baba Gorgor village almost is located in $47^{\circ}54$ East longitude and $35^{\circ}17$ north latitude and 28km Northeast Ghorveh. Its mineral springs, various forms caused by them, and the shrine (tomb) of Emamzadeh Syed Jalaluddin are located 500 meters south of the village.



Figure 1. The location (position) of the study area.

Although there are different ideas, and even rumors and superstitions about the genealogy, identity and even the name of Emamzade but perhaps the most reliable resource in this regard is the book titled "Ghorveh Emamzadegan, Kurdistan" written by Dr. Mohammad Mehdi Fagh Bahr Al Oloumi (1390). In his book using the strong evidence, he argues that Emamzade shrine belongs to one of the descendants of Emam Sajjad (peace be upon Him) (Syed Jalaluddin) (Malaki & Karimi Soltani, 1391: 6).

There are two different narratives (quotes) about why Emamzadeh is known as Baba Gorgor. The first is that when emamzade seyed Jalaluddin was praying, suddenly a natural phenomenon occurred (appeared) in the region. His son said to Him (while He was praying) Baba Gorgor (it means "father look"). The second story says that there is a hole in the tomb (it means gas exit hole) and the boiling water always sounds like gorgor. So tomb was called Baba Gorgor (Bahr Al Oloumi, 1390. P.103). on the other hand, in the Islamic era, titles like papa (baba), mama, katoon and the king (shah) were common and symbolic in such rituals, and spiritual and mystical doctrine. These titles show the high sacred and spiritual rank of the people they describe (Minorsky, 1986: 260).

The northern part of Ghorveh and around Bijar is considered as the place in which young (new) volcanoes in the late Pliocene era and early Quaternary are active. This inactive volcano currently appears as numerous mineral springs and gases exit around them. Mineral springs which were very active in the past and currently are relative active in north eastern part of Ghorveh and in south of Baba Gorgor village lead to the formation of sedimentary layers and rarely integrated and mass travertine forms which play an important role in the area topography (kaimi, soltani and Khosronejad, 1391,16).

Deposits resulting from the past hot springs and currently cold springs form various sedimentary forms. Calcium bicarbonate that flows as a solution between the underlying lime stones when it reaches the surface loses its CO_2 . Calcium carbonate is deposited as insoluble, thus on land at the mouth of lime springs, calcium carbonate is formed in two ways (forms): travertine and tufa. According to the following formula, its main factor is removal and consumption of CO_2 . It means anything that leads to the removal of carbon dioxide and forms lime or calcium carbonate $CaCO_3$ (Rezaei Moghadam et al, 1389: 5)

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In the study area, various forms such as longitudinal stacks, dome-shaped hills and intermediate forms between the two can be seen. Mahmoudi (1353) considered the original form of the area unevenness (roughness) relate to the form of water and gas exit pores and cracks and states that mainly circular cavities , dome-shaped hills and long cracks (gaps) forms long stacks. The most famous longitudinal stack is called Dragon zone of Baba Gorgor. The stack which is more than 300 meters long, 50 meters high, and between 4 to 7 meters wide, is the result of a longitudinal crack (gap). Locals think that this track is the track of Emamzadeh Syed Jalaluddin's sword on the Dragon back (figure 2b).

Hydrogen sulfide gas exit hole (cavity) is located on a rock foot and the tomb of Emamzade is built on it.

This cavity has a mouth with a diameter of 15 cm that during the rainy season and immediately after rainfall (rain) throw water droplets along with gas to the radius of 15 meters but in the dry season only Hydrogen sulfide gas comes out of it with intensity(figure 2a).

There are currently 3 active springs in Baba Gorgor village and the largest spring with high capacity is called Tangz or Dangez (in Turkish means sea). Tangez spring is in a circular basin form and its perimeter is 70 meters. In terms of depth from around to the center of Tangz is divided into three areas: shallow, deep and very deep. The basin water is yellow, sometimes is orange and sometimes its color is red. The water tastes sweet, sour and acerb. The two other springs have low capacity but will never dry.

2. METHODOLOGY

In this study we used a combination of field methods. Considering the study objectives, primarily through interviews with tourists and locals and using an open-ended questionnaire, beliefs about the springs, cystic forms, gas exit, etc were derived (extracted). In the next step, the main questionnaire was designed based on the findings of the initial open-ended questionnaires and interviews. This questionnaire is a combination of the open and closed questions. 50 questionnaires have been distributed among visitors and tourists for a month from 14.7.92 to 11.8.92 especially on Thursdays and Fridays and the participants filled them in (completed them). The questionnaires were then analyzed using SPSS Software. Characteristics of the studied population are as follows:

Gender: of the total participants, 44% were females and 56% were males (figure 3a). **Education:** of the total participants (population), 10% were illiterate, 32% had junior high school degree , 14% were under diploma, 16 % were diploma, and 28% were above diploma (figure 3b). **Age:** 16% of the total participants were under 20 years, 48% were between 20-30 years old and 36% were above (over) 40 years old (figure 3c).

Location: of the total population under study, 28% live in the neighboring villages, 46% reside in neighboring cities, especially Ghorveh, 8% reside in the province cities other than Ghorveh and 18% reside in the neighboring provinces.

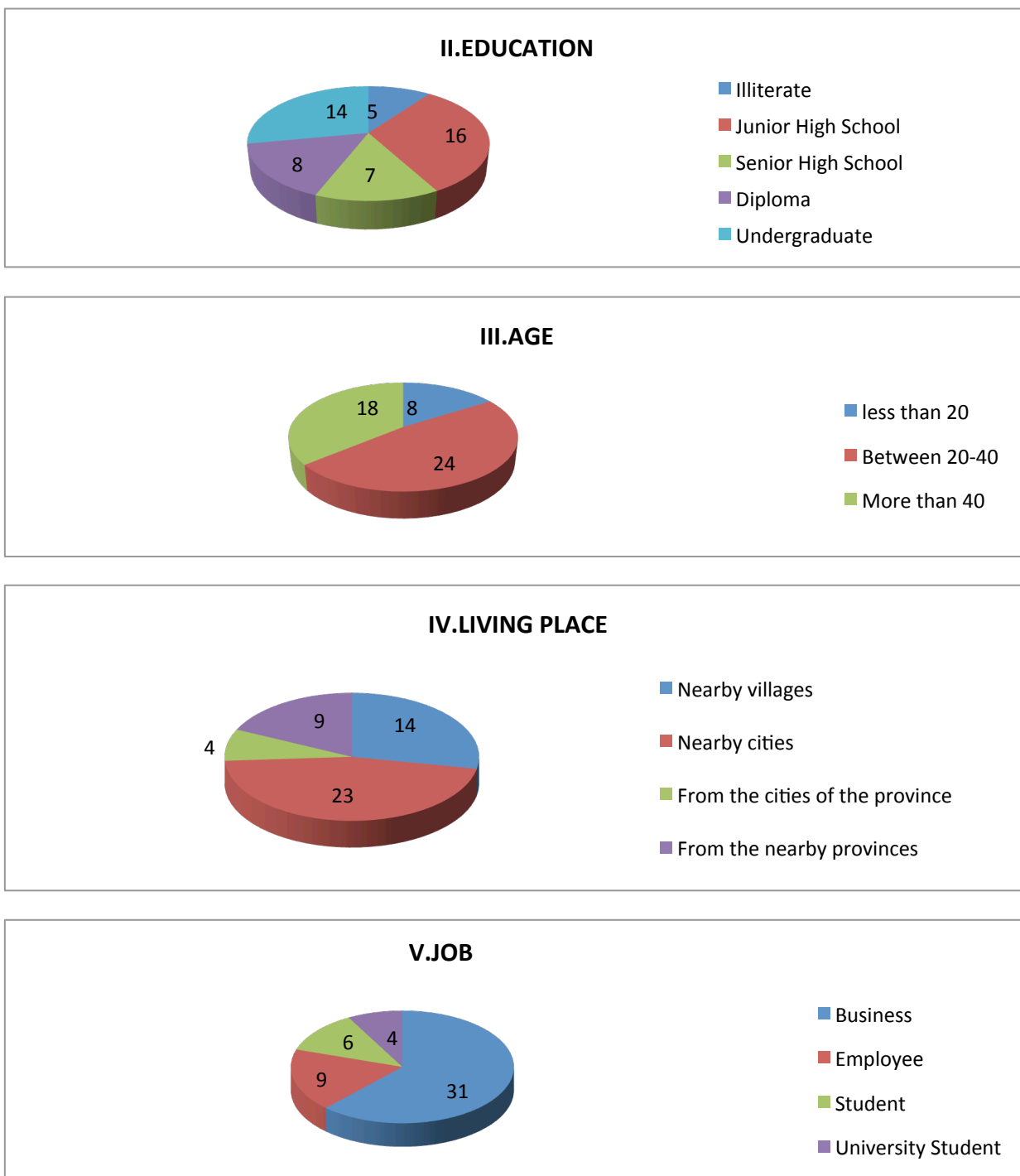


Figure 2. Population characteristics.

Results: questionnaires which distributed among population (tourists and pilgrims) include 10 questions. Then an analysis is as follows:

A: The first question was a multiple-choice question which asks participants about their motivation to travel to this place (figure 4). 14% of participants reported their motivation making pilgrimage to baba gorgor which 20% of the participants reported their motivation to visit the springs, travertine forms and gas emission cavities. 64% reported that they visit this place for both reasons. 2% of participants have reported other reasons. The remarkable point is that the number of geo-tourists was more than religious tourists. Analyzing questionnaires show that most tourists from neighboring provinces and other cities of the province have reported visiting springs, Dragon hills and gas exit cavities (holes) as their motivation to come there. Most participants who expressed making pilgrimage or both making pilgrimage and seeing the springs and travertine forms as their reasons to visit the place reside in Ghorveh or neighboring villages.

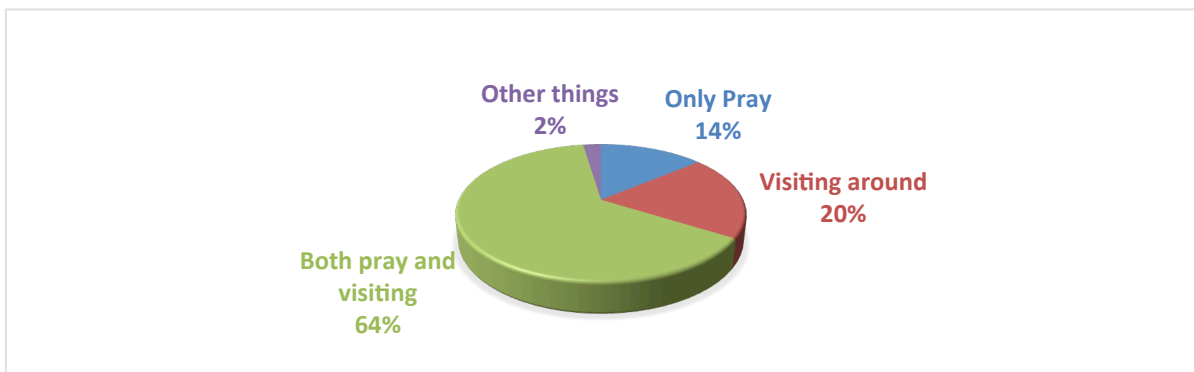


Figure 3. The main motivation to go to Baba Gorgor village.

B: The second question, which is in line with the first question introduces to assess the importance of making pilgrimages to the shrine of Seyed Jalaludine and its role in attracting pilgrims and religious tourists in the village also has two options (figure 5). 68% of these participants said that making pilgrimages to the shrine was important for them and 32% said it was very important for them.

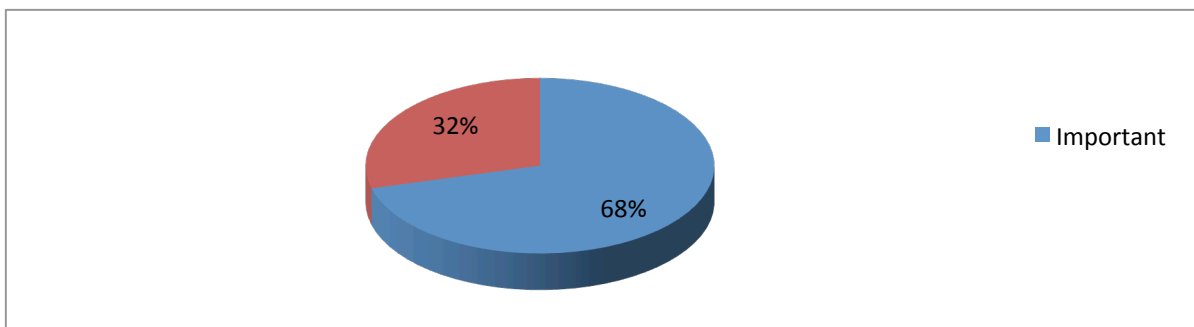


Figure 4. The importance of making pilgrimages to the shrine of Seyed Jalaluddin.

C: The third question which was introduced to determine the level of believes in the formation of geological phenomena (based on the common superstitions among the people) and also to find the strongest and the most common superstitions among people showed interesting results (figure 6). 20% of participants expressed that they believe in all geological phenomena and ideas about how they are formed and they believe that they meet their needs and vows. 32% selected the option "changing the dragon into a rock". 16% selected sticking the stone to the

rocks of travertine layer and meeting the needs and finally 10% selected the option throwing out objects of gas exit cavities (holes) and meeting the needs.

The most important point is that only 22% of participants expressed that they don't believe in the available geological phenomena and superstitions and the most important was changing the dragon into a rock.

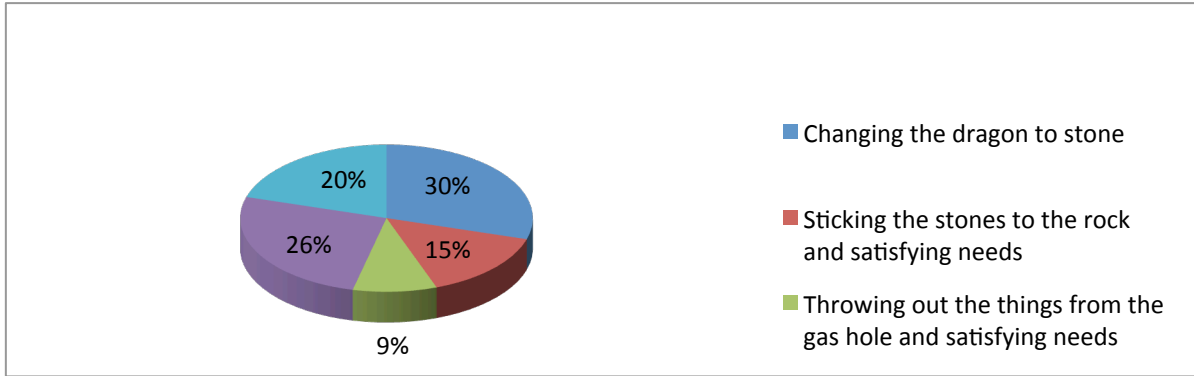


Figure 5. Believing in phenomena and the common beliefs about them.

D and E: The fourth and the fifth questions which were of the open-ended questions of the questionnaire asked the participants about the financial benefits of this place and the money they pay to visit the place. This question was introduced with the assumption that may be some people have spread these wrong beliefs and superstitions in order to meet their financial interests. The answer was classified and analyzed (figure7). The data of figure 7a shows that 54%

Participants have not spent any money in this area. 24% of participants have spent less than 5000 tomans, 6% between 5000 to 10000 tomans , 14% between 10000 to 20000 tomans and only 3% more than 20000 tomans.

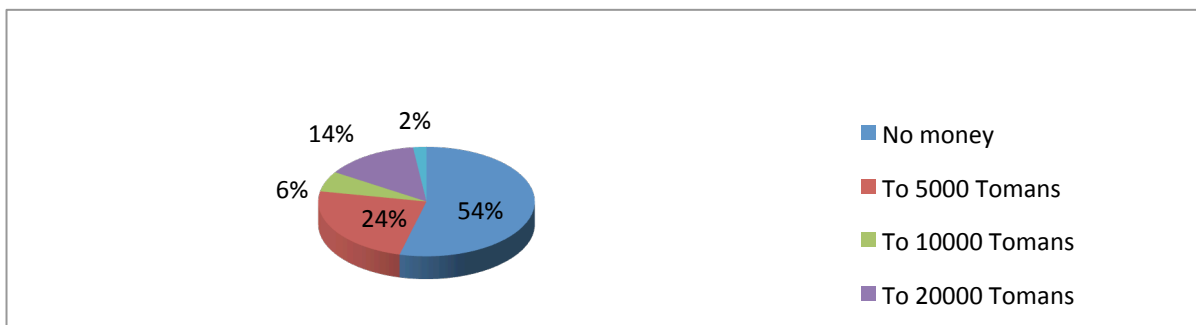


Figure 6a. The amount of money spent by the participants in the studied area.

12% of the population has reported that the only money they have spent in this place was the vows they put in Emamzade enshrine. 20% have spent some money to rent a house and buy food and 14% have spent money for both their vows and food and house. Analyzing the questions 4 and 5 revealed two points. In spite of the high potential of these places to attract tourist, the cost of travel to this place is low compared to other tourist's attractions. This is due to the long distance, lack of resources (facilities) and lack of adequate investment. so the proposed hypothesis that some people are trying to promote superstition to reach financial interest is rejected.

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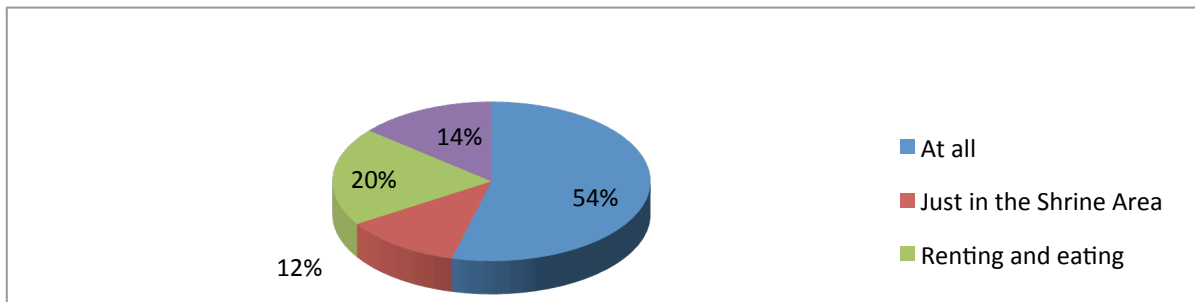


Figure 6b. The allocation of money for the related activities in Baba Gorgor.

F: The sixth question aimed at identifying the deepest (the most profound) beliefs that attract tourists and geo-tourists to this area, and in fact identifying those beliefs and superstitions that are the most common ones amongst people and encourage them to visit this area (figure 8). Among the beliefs and superstitions prevalent among the people, changing the Dragon to a rock (stone) by Emamzade syed Jamaluddin's sword is the most popular. (34% of the participants). 10% believed that the treatment capacity of the spring water, 26% of participants believed that they needs are met by sticking the stone to the rocks under Emamzade shrine or throwing out objects from gas exit cavities (holes), 14% believed in all of the above and finally 14% they don't believe in those superstitions and their only aim was to visit the place and making pilgrimage to the Emamzade shrine. The remarkable point is the spread of the deep beliefs and superstitions amongst the participants. More than 84% of the participants believe in one of the common beliefs and superstitions and public training (education) is necessary.

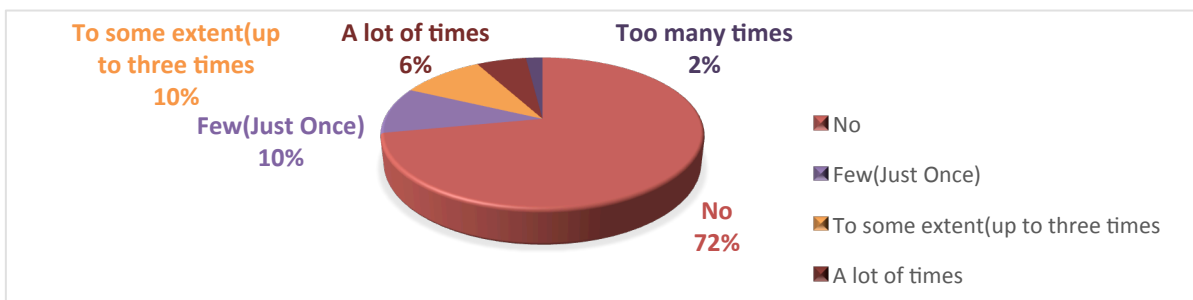


Figure 7. Identifying the beliefs that have the greatest impact in terms of attracting tourists to the village.

G: The seventh question have introduced in line with the sixth one and ask the participants if they believe in any of the items mentioned in the sixth question have they heard or seen any dignity (keramat) about them and in fact seeks to identify the origin of the common beliefs and superstitions about the geological phenomena in the area. As figure 9 shows, more than 14% of participants expressed that so far they have not heard or seen any dignity of geological phenomena in this area. 10% of the participants have reported three cases. 6% have chosen the option much (countable) and too much (countless). An interesting point is the high number of people who still believe in common superstitions despite the fact that they haven't seen or heard any dignity (keamat) about geological phenomena. Another point is that analyzing questionnaire show that 100% of those who have chosen the option much and too much were local people or were from neighboring villages and aged between 50 to 80 years.

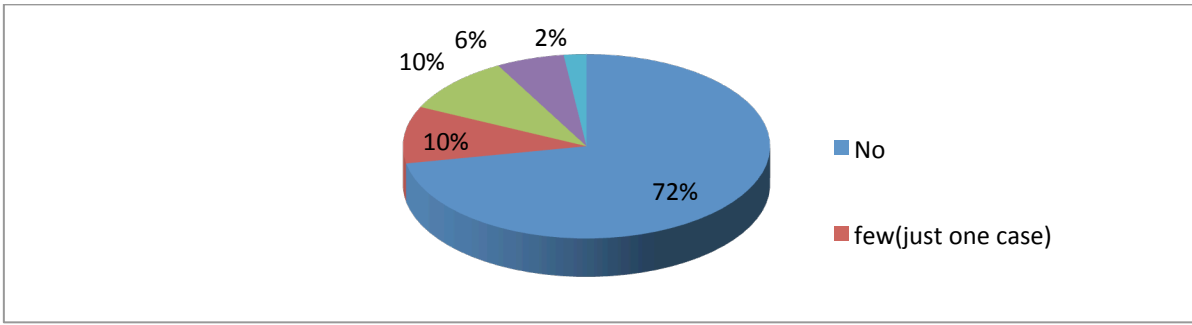


Figure 8. Dignities heard about geological phenomena on the part of the participants.

H. The eighth question is also one of the open-ended questions of the questions of the questionnaire and designed to assess to what extent this place is welcomed by geo-tourists and pilgrims which certainly is very important in future planning to improve facilities in this area. This question has two parts: the first part asks tourist how much does s/he likes to visit this place? And the second part asks him/he how often does s/he visit this place during the year? After analyzing the eighth open-ended question, following results obtained.

48% of the participants have reported that they would like to visit this place 5times or more than 5 times a year. 20% of the participants have reported that they would like to visit there 4 times a year and 22% also have reported that they would like to visit this area. The remarkable point is acceptance and popularity of this place among ordinary people. Despite the fact that there is a long way to get there and also in spite of the lack of primary facilities, over 90% of the participants have expressed they would like to visit this place more than three times a year (figure 10a). The results of the responses to the question that how many times a year they would like to visit this area? is illustrated in figure 10b. 18% of the participants reported that they visit this place 5times or more than 5 times a year. 20% and 34% of the participants have reported that they visit this area 4 times and 2 times a year respectively.

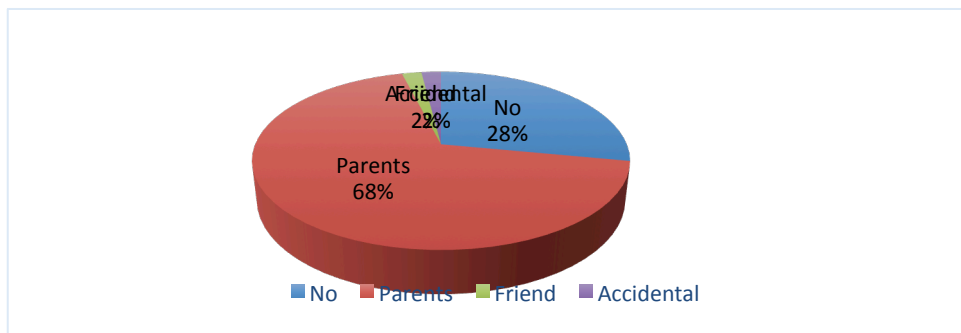


Figure 9a. The level of interest to travel annually to Baba Gorgor village.

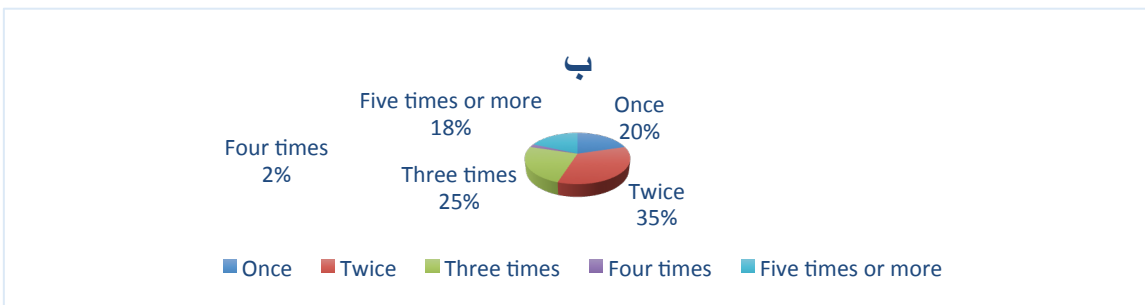


Figure 9b. The number of annual travel to Baba Gorgor village.

I: the ninth question is in line with the fourth and fifth questions and tries to understand the origin of the misconceptions and superstitions about the geological phenomena in the region and also they are asked how they believed in this things and from whom and which sources they received these information. 68% of the participants have reported their parents as the first source of these beliefs. Analyzing the questionnaires show that those who selected this option were mostly residents of Ghorveh and neighboring villages and those who selected NO (9) option were from other provinces.

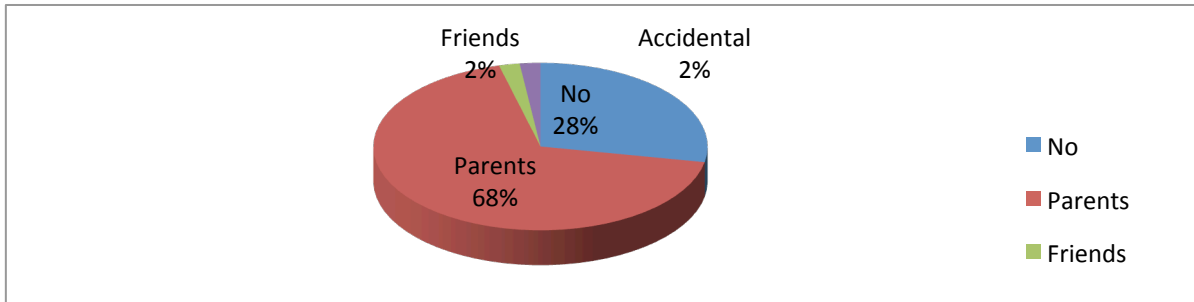


Figure 10. Identifying the factors which lead to transfer of superstitions and beliefs among people.

J: The tenth question is the main objective of this study after giving full and detailed explanation about the origin of geological phenomena in this place, participants have answered them and it has produced interesting results. Before explaining the data obtained from this question, it should be pointed out that in anthropology the aim of such studies is not changing the people views, culture and beliefs but the aim is explaining them and because the aim of this study is different this question has been proposed. Another point here is that in our survey we walked for hours and talked to the participants for hours and it is no exaggeration to say that it took us several months to reach to these results (figure 11). The aim of this question is investigating the ways to fight against these false beliefs.

Under the present conditions and considering current facilities we should inform people using understandable and respectful language after hearing participant's answers and asking and collecting their answers it was found that 60% of them have chosen the option "I have been extremely affected ". 20% have selected the option I have suspected the available beliefs. 4% said that they should think about it and 16% have chosen the option "I have not been affected at all".

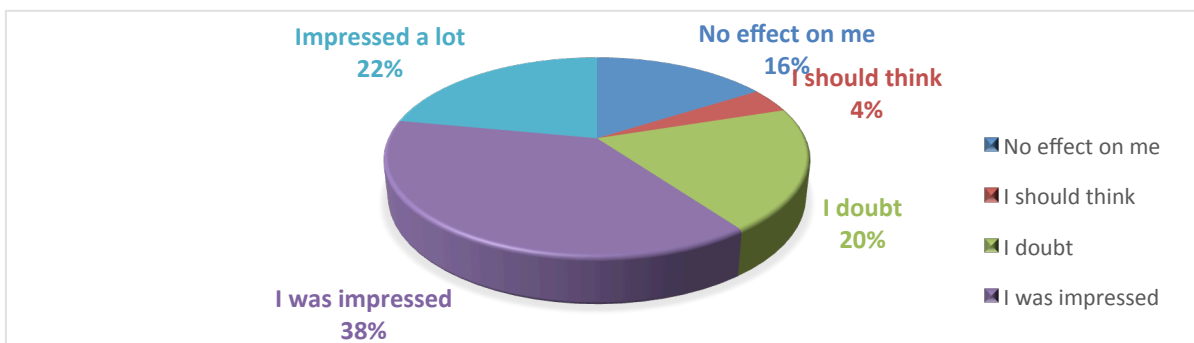


Figure 11. The reaction of participants to the provided explanations about the way of formation of geological forms and phenomena and geomorphology of the region.

3. CONCLUSION

People may be able to find relief from fictions which is thoroughly imaginary; this depends on how their minds have grown and how strongly they are believed in these imaginations. Those who are more positive or less sensitive to the superstitions need to connect their imaginations to something concrete and non-abstract. From this perspective, it is possible to divide fictions and imaginations into two categories which belong to two completely positive poles.

- 1- Imaginations in which people and situations are thoroughly artificial (fictitious) and are created in the minds of people. They are represented in the place and time which cannot be examined.
- 2- Imaginations that are based on undisputed facts or innovations that are so old to be accepted unquestionably and are no more debated (Loofer, Delasho, 1386: 4.).

It seems that the proximity of the region to the Shrine of Emamzade Jalal-Al-Din and also its unique forms and being located on one of the hills have led to the formation of deep and traditional beliefs amongst the inhabitants of the region. One of the springs inside which the water is boiling because of the existing gases, is located at the bottom of Emamzade tomb hill and at the side of Dragon hill and gas exit hole on the other side of Travertine hill of Emamzade tomb. Many superstitions about geological phenomena and geomorphology spread because we couldn't explain how they have been formed. As Roton (1381, 16) says, the myths are allegories of our surrounding world phenomena. It means that myths are not history but they are the natural history.

The hills unique landforms and especially, Dragon hill, boiling springs in the past, color and boiling due to gas emission and the unique taste and also gas emission from all over the region in the rainy seasons and the muddy surface of the ground can be seen with unaided eyes. Because people were unable to explain these geological phenomena and geomorphological forms and also because of the proximity of the region to the tomb of Emamzadeh, different superstitions and beliefs have been spread amongst the region inhabitants. So people believe that the longitudinal travertine hill is a dragon which had been turned into a rock by Emamzade (myth) and they argued that the crack behind the longitudinal hill from which the spring water comes out is the result of Emamzadeh's sword strike (hit).

Investigating this natural and cultural region in Ghorveh (the holy spring of Baba Gorgor) shows that local people consider it as a holy place and they make their vows in this place in the hope that the holiness of the place meet their needs and vows. The legend that a dragon was killed by Emamzadeh added to the vagueness and the holiness of the place. The legend (myth) is not true historically and the story was created through people imagination but it added to the holiness of the place and its basic function is contributing to social cohesion and solidarity of the region inhabitants. Although the holiness of the spring have been faded due to developing science and technology, but over the time as people become more informed and knowledgeable, this place is no longer a holy place or a myth and it has turned into a place for having fun and spending spare time which long ago its religious aspect was more prominent.

From the viewer's point of view, the natural conditions of the region and the spring was prone to emergence of this myth and holiness and inhabitants represent their solidarity and identity by the concepts they attribute to this natural phenomenon and show their distinction and attachment. Another function of this region was making sense on settlement and also its coordination with other neighboring elements and symbols is correlated with religion, economic conditions and etc. the difficulty of economic conditions in the region needs a relaxing and soothing factor so make a vow and praying in this place and believe in its holiness bring about peace for the region inhabitants.

Geo-mythology and Its Influences on Tourist Attraction (Case Study: Geological Phenomenon and Geo Morphology of Baba Gorgor Village, Kurdistan

In terms of tourist attraction, the holiness of the spring (the myth that explain the origin of the spring) and the therapeutic effects of the water should be considered by officials (authorities) and using appropriate advertisements explain the superstitions in this regard and the spring should be regarded as a historical and cultural element not a real (concrete) factor and thereby attracts more tourists.

Just because superstitions and beliefs lead to tourist's attraction, we are not supposed to quit training people and removing false beliefs and superstitions, but if meaningful training and giving information is understandable on the part of ordinary people, then more tourists are attracted to the region. Here are some suggestions:

1. By analyzing the results of figure 12, the impact of training on reducing and even removing rooted beliefs and superstitions is clear.
2. Therefore, employing expert guides in the region to explain the forms and the way of their formation, producing and distributing the brochures in which the way of formation of the forms and phenomena is explained in a simple way (language) or placing signs (board) near each of the forms and phenomena which explain their Way of formation are suggested.
3. Despite the high potential of the region to attract tourists, unfortunately, the available facilities and infrastructure is very primitive and negligible. By building bathrooms that warm the spring water, restaurants, amusement parks and etc. , the region can be regarded at regional and even national scale as a tourist hub. Nowadays, despite the lack of adequate facilities, travelers from the neighboring provinces travel to the region (figure 3d).
4. It is suggested that for superstitions and beliefs that relate to the ground surface forms and landforms, the term geo-mythology being used instead of geomorphology. These forms are part of geomorphological and also geographical forms because they show the relationship between man (human) and environment and also geographical phenomena.

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