

# ANALYSIS OF THE WORLDWIDE DISTRIBUTION OF THE 'MAN OR ANIMAL IN THE MOON' MOTIFS

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**Abstract:** For millennia, people have seen a man, an animal, or an object as they look at the moon. The motif of the 'frog/toad in the Moon' was recorded in writing in the *Book of Changes (I Ching)* over 2400 years ago. The 'man in the Moon' theme is found in old Norse literature in the *Younger Edda*. In Mesoamerica, the story of the 'rabbit in the Moon' is pre-Columbian. This study analyses the different versions by combining areal studies as well as structural and statistical analyses with information from ancient texts and archaeological artefacts. In particular, I compare the geographic distribution of the main motifs to the 2,278 motifs in Yuri Berezkin's database. In this context, I report on the observed similarities between the geographic distribution of the 'man or animal in the Moon' motifs and the two of the most widespread earth creation myths.

**Keywords:** Book of Changes, creation myths, Lady Dai, man/frog/rabbit in the Moon

The parallel development of an extensive electronic database and data analytics enables the analysis of myths at an unprecedented scale. The largest and most complete database contains 2,278 motifs from over 934 different peoples in all parts of the world (Berezkin 2015a). Its analysis permits the extraction of statistical information on the worldwide distribution of motifs. Myths are deconstructed into motifs, and the presence or absence of a motif in a given tradition is binary coded. The first global studies (Korotaev & Khalturina 2011; Berezkin 2013, 2017) using the Principal Components Analysis (PCA) have shown that the different motifs group within clusters corresponding to geographical regions. More advanced classification methods have been applied to the same data (Thuillard et al. 2018). The motifs are best classified into two main groups having an overlapping geographic distribution. Quite surprisingly, the two groups contain motifs with different themes. In the first group,

motifs are often related to man/woman. Motifs related to the moon and the sun are predominant in the second group, with motifs associated with creation myths ('earth-diver', emergence myth). This study focuses on the second group containing most of the moon and sun motifs and, more precisely, those about the distribution of the 'man or animal in the Moon' motifs and their possible connections to other motifs in the databank.

From an ethno-astronomical perspective, it is not surprising that the moon is a universal theme. The moon always shows the same side to the viewer and, therefore, the same pattern of dark spots associated with the Lunar Maria is visible at each full moon. Depending on the local traditions, the dark spots are interpreted as a man, an animal, or an object (Bascom 1981; Harley 1885; Berezkin 2015a, b). The most widespread animals seen in the moon are the rabbit (or hare) and the frog (or toad). The 'rabbit, resp. frog in the Moon' is well-documented, widespread, and therefore best suited for a comparative study. For this study, no distinction is made between hare and rabbit or between frog and toad. Statistical analysis would otherwise be arduous as toads and frogs are often wrongly identified in different records. In Eurasia, the frog and the turtle are often interchangeable (Poupard 2018). The 'water-carrier in the Moon' is found from Europe to the Americas, mainly in the northern areas. In one very widespread version, the Moon protects a poor, often mistreated girl fetching water, and takes her up to herself. In another version, the Moon punishes an arrogant young woman by taking her away. The Moon acts here similarly to a human who may pity someone or punish a person for misbehaving. Quite often, both versions are recorded in the same cultural area.

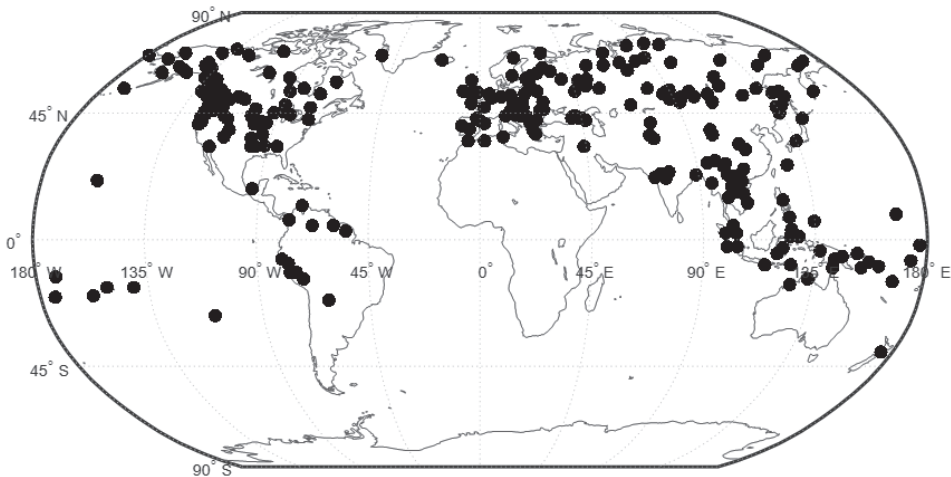
A large proportion of the myths in Berezkin's database was collected in the nineteenth and twentieth centuries and few in ancient times. Early recordings of a myth are essential as they prove its great antiquity and help to discuss its stability over several millennia. Ancient sources also furnish an upper bound to the time-origin of a myth. The peculiarity of the 'man or animal in the Moon' motif is that it has been recorded on several continents: in the *Younger Edda*, a collection of Old Norse literature brought together by the Icelandic scholar Snorri Sturluson around 1220 AC (Anderson 1879); in ancient Chinese divination books (third century BC but from pre-Confucius origin); and in Mesoamerica by Bernardino de Sahagún (Sahagún & Anderson 1975), originally published around 1579, in what is regarded as the first ethnographic research study in Mesoamerica. The two later sources anchor the motifs in pre-Columbian Mesoamerica and China to times before Buddhist influence.

In short, this study combines areal information, statistical analysis on the geographic distribution of the motifs, structural analysis of information from ancient written sources, and well-documented archaeological artefacts. The first

chapter discusses the similarities between the moon motifs and the over 2,500 other motifs, focusing on the ones with the highest and lowest correlation values (i.e., motifs with a similar and complementary geographic distribution). These motifs include the two most widespread creation myths. A structural analysis completes the area study in the second chapter. I show, using the earliest records of the motifs, that the 'rabbit in the Moon' motif is often related to the theme of life and death, while the 'water-carrier in the Moon' and the 'frog in the Moon' motifs are related to water. In particular, the 'water-carrier in the Moon' has a geographic distribution similar to the 'bird-diver' motif, a creation myth in which a bird brings back some mud from the bottom of the primeval sea. In most stories, mud grows or expands to become the earth once at the sea's surface. The third chapter succinctly analyses the oldest literary and archaeological sources on these motifs. Under the hypothesis that the motifs may have diffused or been brought into North America from Eurasia, the fourth chapter discusses the relative timing of their possible arrival.

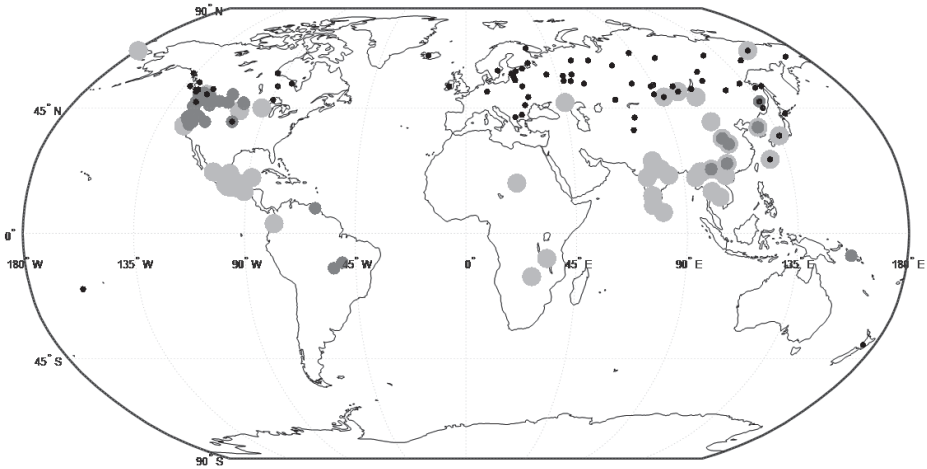
## **AREAL ANALYSIS**

Figure 1 shows the overall distribution of all the main motifs of the 'man or animal in the Moon.' The 'man in the Moon' is common in the northern hemisphere but rare in Africa and Australia.



**Figure 1.** *Distribution of the 'man in the Moon' motif.*

This study focuses on the ‘water-carrier in the Moon’, the most widespread version of the ‘man in the Moon’, and on the ‘animal in the Moon’ motifs. Figure 2 shows the motifs’ geographic distribution. The ‘water-carrier in the Moon’ version is recorded in Northern Eurasia, North America, Korea and Japan.

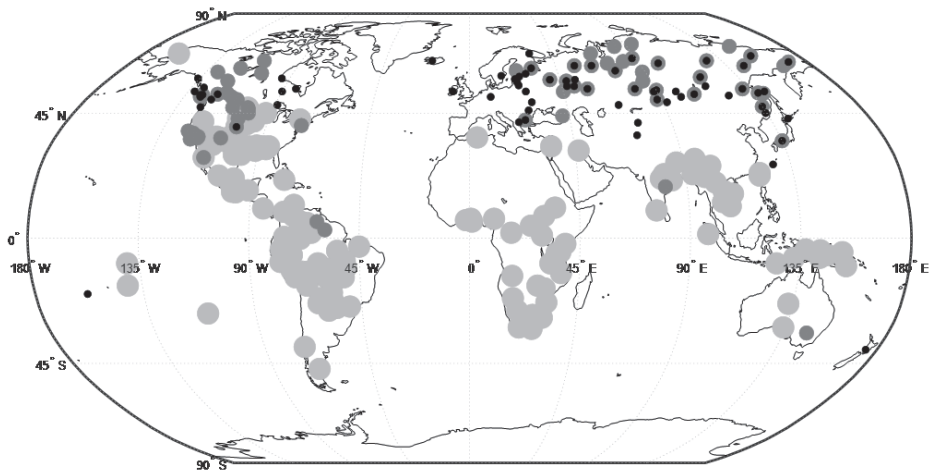


**Figure 2.** Distribution of the ‘water-carrier in the Moon’ (small black dots), ‘frog in the Moon’ (medium grey dots), and ‘rabbit in the Moon’ (large light grey dots) motifs.

The correlation value between two motifs is computed with the usual method (see the appendix). A high correlation indicates a similar geographic distribution. A negative value indicates that they tend to occupy complementary distributions. Table I (appendix) shows the motifs with the largest correlation coefficients to the ‘water-carrier in the Moon’. They mostly correspond to motifs found in northern Eurasian and American regions (Berezkin 2010, 2015a; d’Huy 2012; Frank 2015) and are often related to an element (water, fire, earth), a plant (bush, thicket), or an animal (bird, dog, bear). Two motifs in Table I are associated with famous episodes in the ‘obstacle flight’ (Boas 1895, 1914; Thompson 1955–1958 [1932–1936]). In the obstacle flight, the fleeing person throws objects behind to delay the chaser. The ‘man in the Moon’ is often ‘holding a bush’, a motif that one also finds in Shakespeare’s *Midsummer Night’s Dream* (act V, scene 1):<sup>1</sup> “All that I have to say, is to tell you that the lantern is the moon; I, the man in the moon; this thornbush, my thornbush; and this dog, my dog.” The ‘water-carrier in the Moon’ is well correlated to the ‘bird-diver’ motif in the northern regions of Eurasia and also to a lesser extent

in North America. The 'bird-diver' is an instance of the so-called 'earth-diver' myth (Napolskikh 2012). The 'earth-diver' is an animal that plunges into the primeval sea to bring up mud to form the earth. Depending on the tradition, the diver is a bird, a muskrat, a beaver, a crustacean, a wild boar, a turtle, or a frog.

The motif with the smallest correlation is 'mankind ascends from the underworld', a motif associated with emergence myths, in which the first people are not created but come to earth from the underworld (Le Quellec 2014; Berezkin 2007). Figure 3 shows the complementary distribution of the 'bird-diver' and the emergence motif.



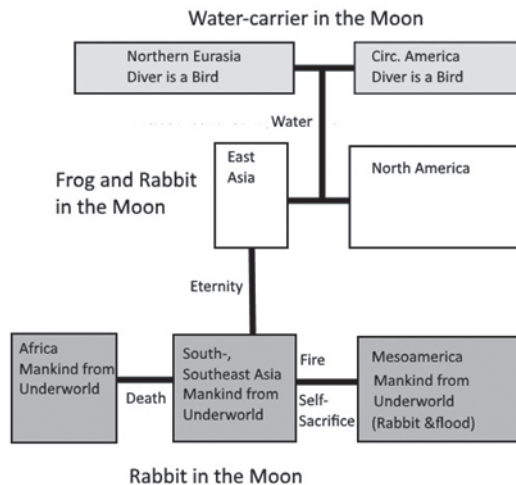
**Figure 3.** Complementary distribution of the 'water-carrier in the Moon' (small black dots); 'bird-diver' (medium grey dots), and emergence motifs ('mankind ascends from the underworld'; large light grey dots).

## STRUCTURAL APPROACH

Let us now analyse the main 'animal in the Moon' motifs using a structural approach. The 'rabbit in the Moon' is recorded in regions associated with the emergence myth and in transition zones between the 'earth-diver' and the emergence myth (in parts of East Asia, the two creation myths are not recorded). In Africa, Rabbit is the messenger from the Moon, whose corrupted message brings death to humans (Le Quellec 2015). The relationship between the Moon,

the rabbit, and sacrifice in a fire is found in India and Mesoamerica (Thuillard & Le Quellec 2017). The Śāśa-Jātaka tells the story of a rabbit transformed into the Moon by the Buddha, thanking him for throwing itself into a fire. The rabbit is now seen ‘eternally’ in the Moon. In Mesoamerica, the story goes like this. After much hesitation, Teccistecatl (Moon) follows Nanauatzin (Sun) into a great fire. To punish Teccistecatl for his cowardice, one of the gods threw a rabbit into his face, which is always seen there (Bonney 1981; Sahagún 1975; Soustelle 1940). In East Asia and especially in China, an ancient myth relates a ‘rabbit, a toad/frog in the Moon’ to an elixir of eternal life.

In summary, ‘rabbit in the Moon’ brings death to men in Africa, sacrifices itself with much courage in India, is somewhat coward in Mesoamerica, and prepares a life elixir in East Asia. In East Asia, a frog is also associated with the Moon. In Northern Eurasia the ‘water-carrier in the Moon’ is correlated to the ‘bird-diver’ motif. Some Chinese versions of the ‘frog and/or rabbit in the Moon’ include a water pail. In North America, the frog often brings rain or is seen in the Moon with a water bucket (Berezkin 2010). In some Mesoamerican versions, the ‘rabbit in the Moon’ warns people of a coming flood or helps them during that flood. The ‘frog marrying the Moon’ motif found in North America (Lévi-Strauss 1968) does not seem directly related to the other ‘rabbit in the Moon’ stories. The diagram in Figure 4 summarizes the discussion.



**Figure 4.** The diagram shows the division of Eurasia and the Americas schematically into zones with similar creation myths: ‘diver is a bird’ (Northern Eurasia and Circumpolar North indigenous peoples in America) and ‘mankind from the underworld’ (bottom). The ‘water carrier in the Moon’ is well correlated to the ‘bird-diver’. In Africa, the ‘rabbit in the Moon’ is related to death’s appearance, in Mesoamerica and India to self-sacrifice, and in China to immortality. In Mesoamerica, the ‘rabbit in the Moon’ may help during a flood, a theme related to an abundance of water. (The solid line between the ‘rabbit’ and the ‘frog & rabbit’ layers is drawn between Asia ‘blocks’ due to geographic proximity.)

## ARCHAEOLOGICAL SOURCES

Dating the antiquity of a myth is very challenging. The 'man or animal in the Moon' motif is, in this perspective, quite exciting as it was recorded in written form quite early: in Mesoamerica, India, and in Nordic Europe in the early thirteenth century and in China as early as the third century BC. The 'water-carrier' motif is also quite widespread. Let us recall the traditional English nursery rhyme: "Jack and Jill went up the hill to fetch a pail of water". This rhyme may be related to an episode of the *Younger Edda* (Anderson 1879):

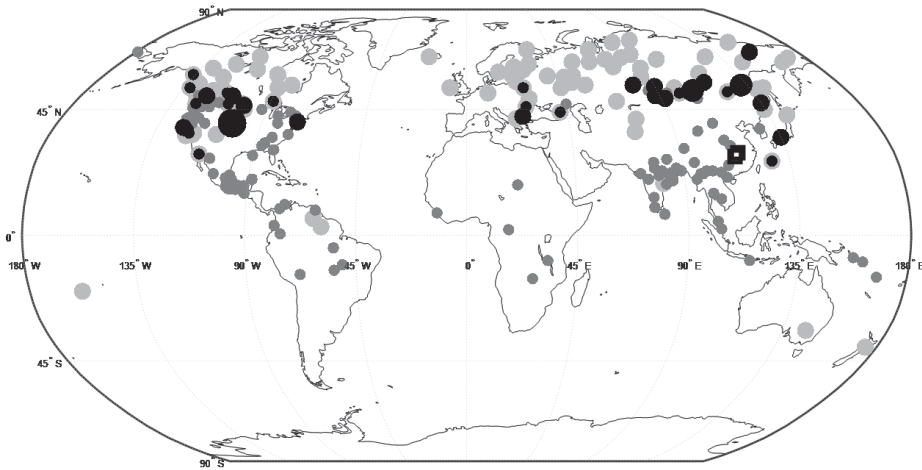
*Moon guides the course of the moon and rules its waxing and waning.  
He took from the earth two children... Bil and Hjuke, as they were going  
from the well ... carrying on their shoulders the bucket called Sager and  
the pole Simul... These children always accompany Moon, as can be seen  
from the earth.*

In China, some ancient texts written on bamboo slips include both the 'frog in the Moon' and the 'man in the Moon' and are represented on artefacts preserved in archaeological records. Mawangdui is the tomb site of Lady Dai, who died in the second century BC. A silk banner was found among the many finds. A section of the banner, shown in Figure 5, represents Heaven with a moon crescent, a frog/toad, and a rabbit. While the connection between the moon, the frog, and the 'rabbit in the Moon' is undisputed, other representations on the banner are debated (Silbergeld 1982).



**Figure 5.** Detail of the Lady Dai banner showing a toad/frog in the Moon with a rabbit (second century BC), courtesy of Hunan Provincial Museum, Changsha. The black-and-white image is digitally processed using Matlab to enhance the contour of the frog on the Moon.

An ancient divination book, known in the Western world as the Book of Changes, was discovered at the same site. Incidentally, the book contains hexagrams. The famous mathematician Leibniz (Swetz 2003) recognized them as a natural representation of binary mathematics. The book includes the story of the flight of Heng E to the Moon. In 1993, at Wangjiatai, the discovery of bamboo slips from the Gui cang, another divination text believed to be forever lost, stirred the scholarly world. Shaughnessy (2014) published a translation of it. The manuscript is older (mid-third century BC) than the Mawangdui text (Sun and Chen 2009). The text reads, “Yi requested the medicine of immortality from the Western Queen Mother, Heng E stole it to flee to the Moon.... Heng E subsequently consigned her body to the Moon, and this became the frog.” No mention of a rabbit here. According to Shaughnessy, the Gui cang predates Confucius. Comparing the two texts suggests that the ‘frog in the Moon’ may have preceded the rabbit in China. The high frequency of frog motifs in Neolithic potteries and studies on homonymies strengthen this hypothesis (Zhang Jian 2004).



**Figure 6.** Distribution of the a) ‘water-carrier in the Moon’ and ‘bird-diver’ (large light grey dots); b) the ‘animal in the Moon’ together with other related motifs: ‘diver is a crustacean, turtle or frog’, ‘cosmic turtle or frog’ (medium-size grey dots). A dot indicates that there is at least one motif among the motifs in a) resp. b). The black dots are traditions sharing motifs in a) and also in b). Their size is proportional to the number of shared motifs. The squares indicate the approximate position of Mawangdui (Lady Dai Banner) and Wangjiatai (Gui cang on bamboo slips).

Seeing a ‘frog or a rabbit in the Moon’ is a little bit odd but plausible. However, seeing a man (or woman) carrying a water pail is quite strange. How did such

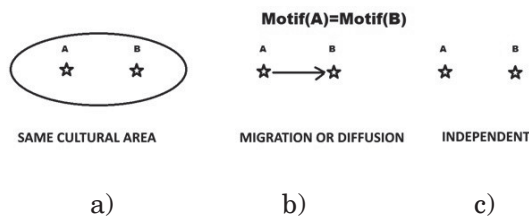


a motif become so widespread? The story of Heng E contains an instance of the 'man in the Moon' and the 'frog in the Moon' motifs. The frog is almost universally related to rain and water. Knowing this association, finding a 'water-carrier in the Moon' seems less strange. The analysis suggests that the 'frog in the Moon' transformed into a 'water-carrier in the Moon' possibly in East Asia. The following chapter on dating furnishes further support for this hypothesis.

## RELATIVE DATING OF MOTIFS USING THE CONTINUITY HYPOTHESIS

Figure 6 shows the distribution of the a) 'water-carrier in the Moon' and 'bird-diver'; b) the 'animal in the Moon' together with other related motifs: 'diver is a crustacean, turtle or frog', 'cosmic turtle or frog'. The cosmic turtle or frog is a motif related to a giant turtle, tortoise, or frog supporting the world. The black dots in Figure 6 show traditions sharing motifs typical of northern regions (a: large light grey dots) and motifs mostly associated with southern regions (b: medium-size grey dots). The transition is quite sharp in Eurasia. Tungusic-speaking groups represent the majority of the cultures at the interface. The transition zone extends west of Europe and east of Japan. On the west of Eurasia, the main languages spoken by the peoples at the interface belong to the Turkic family of languages. Napolskikh (2012) suggests that the 'earth-diver' myth was brought into Europe by the Avars along the Eurasian steppe corridor. Alternatively, the presence of an apparent corridor may be the result of invasions over the cultural border between ethnic groups. As shown by Avilin (2018) for the 'Moon carrier' motif in the case of Belarus, its presence or absence is related to elements of spiritual cultures.

Quite interestingly, one observes two transition zones, one in the Americas and the other in Eurasia. Let us discuss what could explain such an observation. Figure 7 shows three simple mechanisms that may explain the puzzling similarity observed between motifs in remote areas.



**Figure 7.** A motif may be shared by two remote peoples a) having shared the same cultural area; b) after migration or diffusion from neighbour to neighbour; c) independently of each other (chance).

A motif may be shared if at some time: a) two peoples (say A and B) were in the same cultural area, or b) a population migrated to a far-off region and brought the motif along, or c) the motif diffused from neighbour to neighbour and was subsequently 'erased', creating a gap in-between. Finally, the two motifs may be the same simply by chance and represent 'independent internal developments' in each cultural zone (Fig. 7c). It is often difficult to decide between the different hypotheses (Boas 1896; Fraser 1965; Littleton 1974; Segal 1999). In the absence of convincing proof for the contrary, one should assume that a motif has developed independently in two separate regions.

However, let us discuss possible arguments favouring the common origin of some motifs recorded in Eurasia and the Americas. Seeing a 'water-carrier in the Moon' with an object in the hands seems quite unlikely. The same holds for the following creation myth: a small quantity of earth taken by a bird from the bottom of the primeval sea expands and becomes the earth. It would be astonishing if these motifs developed independently in both Eurasia and the Americas. Several seemingly unrelated motifs have a geographic distribution similar to the 'water-carrier in the Moon', both in the Americas and Eurasia. Motifs related to the flight obstacle ('comb becomes a thicket' and 'whetstone becomes a mountain') have a very similar geographic distribution in both Eurasia and the Americas (the 'comb becomes a thicket' is present in about half the instances of the 'water-carrier in the Moon', and more than 25% of the 'whetstone becomes a mountain' (see Table II in the appendix).

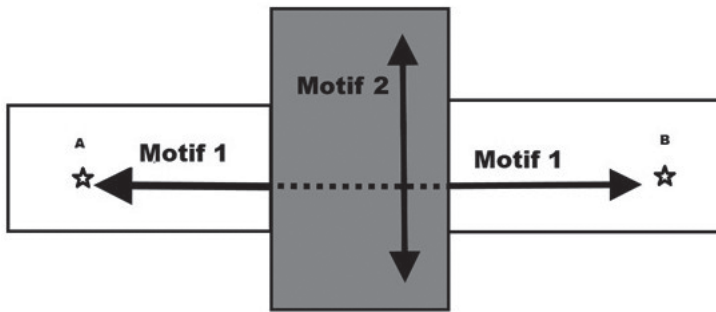
In some other cases, drawing conclusions is more complicated. The 'swan-wife' and 'Moon the protector' motifs are such instances. One finds the motifs in similar regions in Eurasia. The motifs are recorded in circumpolar North America. In those regions, neither the 'earth-diver' nor the 'water-carrier in the Moon' are recorded. Did these motifs develop independently? Did they get 'decoupled' from the 'earth-diver' and the 'water-carrier' motifs during a passage into the Americas? It is difficult to reach a firm conclusion.

Let us consider the 'rabbit in the Moon' and the model in Figure 7b. If one assumes a single origin for the motif, then one concludes that the motif originated either in Africa or Eurasia, as diffusion from Mesoamerica is highly unlikely. The structural analysis supports such a scheme as the motifs in Eurasia and Africa share common concerns with life (eternity) and death. The 'frog in the Moon' seems to have originated in East Asia (independently or concomitantly to the earlier presence of the 'rabbit in the Moon?'). At a later time, the rabbit was added to the frog motif in some of the myth's versions featuring Heng E.

The absolute dating of the appearance of ancient motifs in a region is tough, not to say almost impossible in most cases. The relative dating of two motifs is, however, possible, provided the hypothesis below is confirmed:

**Continuity Hypothesis (Fig. 8):** If an area with a given motif (1) is separated from another by a large region with a different motif, then one assumes, following the migration/diffusion model, that the second motif appeared later and recovered part of the continuous area of the first motif.

The hypothesis has often been used (Le Quellec 2014; Thuillard & Le Quellec & d'Huy 2018), and I sketch it here again. It is not difficult to construct situations in which it does not hold, but the hypothesis is often reasonable as it is the simplest explanation in conditions described in the model in Figure 7b.



**Figure 8.** Considering two motifs with a geographic diffusion as above, if the continuity hypothesis (see text) holds, then motif 1 is older than motif 2.

In the present discussion, the application of the continuity hypothesis under the migration/diffusion model leads to the following relationships:

- The transfer of the emergence motif into North America is prior to the 'earth-diver' motif.
- The passage of the 'bird-diver' and the 'water-carrier in the Moon' motifs to North America is posterior to the passage of the 'animal in the Moon' motif.

The significant number of complex motifs found in Eurasia and the Americas strongly suggests a diffusion of the motifs though some examples do not rule out the possibility of independent cultural development. Several researchers (Berezkin 2010; Witzel 2012; Le Quellec 2014) have proposed that some motifs reached North America with the first migratory wave, a quite plausible hypothesis in the emergence myth considering its presence besides Eurasia in South America, Australia, and Africa. As a side note, excluding the early passage of a motif generally requires historical indices, but sometimes another hint may

help. For example, the motif 'Orion is a hunter' is recorded in Eurasia and North America. Orion was invisible in Beringia until ca. 6000 BC and, therefore, an early passage of the motif with the first migration wave from Beringia after the last glaciation maximum can be excluded (Thuillard & Le Quellec & d'Huy 2018).

I suggest the following scenario by combining all pieces of information. Assuming a single origin of the motif, the 'rabbit in the Moon' originated either in Africa or Eurasia. The 'frog in the Moon' seems to originate in East Asia independently from the 'rabbit in the Moon'. The 'frog in the Moon' motif is already in the archaeological record prior to the Buddhist influence in China. At some time, the rabbit is added to the frog motif. The water-carrier motif is found in Western Europe and Eurasia, and most likely reached North America later than the 'animal in the Moon' motif. Assuming the unique origin of the myth leads us to suggest that in East Eurasia the frog motif transformed into the 'water-carrier in the Moon'. An independent origin of the two motifs cannot be excluded. A clear boundary is observed in Eurasia between the northern areas with a 'bird-diver' and a 'water-carrier in the Moon' and the more southern regions with no diver or a turtle or frog, crustacean or wild boar diver and a 'frog or rabbit in the Moon'. The boundary is associated with Tungusic-speaking peoples. A corridor along the Eurasian steppes is characterized by the coexistence of northern and southern motifs. The corridor possibly served as a means of penetration for a large number of motifs into Europe.

## ACKNOWLEDGMENTS

I would like to warmly thank Professor Yuri Berezkin for sharing access to his database, and Roslyn M. Frank for very helpful discussions.

## APPENDIX: CORRELATION BETWEEN MOTIFS

The electronic catalogue of folklore and mythological motifs (Berezkin 2015b and online access in the reference) is the most comprehensive source of material for large-scale studies on the geographic repartition of myths. The data are binary coded with the columns and lines corresponding respectively to the different motifs and traditions. The data are completed with an approximate location of each tradition. The similarity between the distribution of two motifs is characterized by the Pearson correlation factor defined on  $n$  samples as  $\frac{\sum_1^n (x_i - \bar{x})(y_i - \bar{y})}{\sqrt{\sum_1^n (x_i - \bar{x})^2} \sqrt{\sum_1^n (y_i - \bar{y})^2}}$ , with  $\bar{x}$  as the average value.

With the advances in big data, more advanced similarity measures on binary vectors were developed (Choi & Cha & Tappert 2010). Their effectiveness has been compared (Zhang Bin & Srihari 2013) in complex recognition problems. Excellent results are obtained with the binary Pearson correlation factor. In the following, I explain how the correlation factor is applied to the data. Let us consider three motifs: A1, A2, and A3. A binary number (0 or 1) codes the presence or absence of a motif in the different traditions (or peoples).

A1:	1	1	0	0	1	0
A2:	1	1	0	0	1	0
A3:	0	0	1	1	0	1

The vectors A1 and A2 are the same. Their correlation factor is 1. The vectors A2 and A3 are negatively correlated with a factor equal to  $-1$ . The correlation factor is a good indication of whether two motifs have a similar geographic distribution (positive correlation factor) or a complementary distribution (negative factor). The correlation factor does not tell us if the motifs appear in the same tale. For this, a more in-depth analysis is required. Table I shows the motifs with the largest correlation coefficients to the 'water-carrier in the Moon'. The different motifs are enumerated in the descending order of the correlation values.

**Table I.** List of the motifs with the largest correlation factors to the 'water-carrier in the moon'. Twelve out of twenty motifs are found both in Eurasia and the Americas.

Motif	Correlation factor to 'water-carrier' binary vector
Water-carrier in the Moon	1.00
Person with an object in hands	0.69
Man in the Moon	0.44
Thunder pursues his enemy	0.43
Holding a bush	0.42
Comb becomes a thicket	0.41
Creator goes away for a while	0.40
The dog's part	0.40
Some earth is concealed	0.39
Female spirit of fire	0.39
Whetstone becomes a mountain	0.35
Swan-wife	0.38
Person turns into bear	0.38
Moon the protector	0.38

Dog is the guard of man	0.37
Quarrel of mouse and bird	0.37
Strange names of the babies	0.37
The diver is a bird	0.37
Milky Way is the way of birds	0.36
The theft of fish	0.36

I have also analysed the composite motif ‘water-carrier, or frog or rabbit in the Moon’. The motifs with the largest correlations are ‘female spirit of fire’, ‘thunder pursues his enemy’, and ‘the earth-diver’ (in this order, not considering Moon-related motifs). Again, one observes the correlation between the ‘water-carrier, the frog or turtle in the moon’ and the earth-diver.

**Table II.** List of the number and percentage of traditions in which the ‘water-carrier in the Moon’ and the motif in the first column are both recorded: columns 2–3 Eurasia (Oceania, Africa); columns 4–5 the Americas (the percentage refers to the number of instances of the ‘water-carrier in the Moon’).

<b>1</b> <b>Motif</b>	<b>2</b> <b>Number of instances in Eurasia, Oceania, Africa</b>	<b>3</b> <b>Percentage of instances with both ‘water-carrier in the Moon’ and second motif in Eurasia, Oceania, Africa</b>	<b>4</b> <b>Number of instances in the Americas</b>	<b>5</b> <b>Percentage of instances with both ‘water-carrier in the Moon’ and second motif in the Americas</b>
Water-carrier in the Moon	55	100%	14	100%
Person with an object in hands	93	96%	33	100%
Man in the Moon	166	100%	85	86%
Thunder pursues his enemy	54	56%	8	0%
Holding a bush	15	24%	2	14%
Comb becomes a thicket	80	58%	16	43%
Creator goes away for a while	51	47%	0	0%
The dog’s part	26	33%	0	0%

Some earth is concealed	19	27%	0	0%
Female spirit of fire	54	53%	14	7%
Whetstone becomes a mountain	35	38%	14	29%
Swan-wife	55	51%	15	14%
Person turns into bear	25	31%	0	0%
Moon the protector	35	42%	9	0%
Dog is the guard of man	45	42%	0	0%
Quarrel of mouse and bird	29	33%	0	0%
The diver is a bird	40	45%	30	29%
Strange names of the babies	70	53%	0	0%
Milky Way is the way of birds	27	33%	3	0%
The theft of fish	63	49%	0	0%

## NOTE

<sup>1</sup> See <http://www.literaturepage.com/read/shakespeare-midsummer-night-53.html>, last accessed on 30 September 2021.

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