



LETTER TO EDITOR



A Sample of a Mytho-pathologic Study: The Story of Rostam and Esfandiyar

The story of Rostam and Esfandiyar is one of the few great epics in which the form of death is of great importance. In this epic, Esfandiyar who is the prince of Iran battles against Rostam (A Persian hero) and is killed. The specific form of death in this story is quite similar to two other great deaths, i.e. Achilles in Greek¹ and Siegfried in German mythology². On one side, there is an invulnerable hero with whom none of the champions could compete. On the other side, he has a weak point in the body. Knowing about the weak point, the enemy eventually kills him. However, the story of Rostam and Esfandiyar can be significant from another point of view, as well. A two-headed arrow made of Tamarix comes down Esfandiyar's both eyes and kills him. Our main objective is to study the death of Esfandiyar mytho-pathologically. Could the two-headed arrow kill Esfandiyar in reality according to the descriptions of Shahnameh (The book of Kings, written by Ferdowsi between c. 977 and 1010 CE; describes the Iranian mythology and Persian ancient history with poem) or the story follows the structure of a myth with

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1- Pinsent, 1387/2008.

2- Anonymous



its specific characteristics? Could there be traces of reality embedded in the story mytho-pathologically?

In order to answer these questions, the process of death should be reviewed. According to *Shahnameh*³, Rostam could not beat invulnerable Esfandiyar and became helpless. Therefore, Zal returned to Simorgh (the Phoenix). Simorgh advised Rostam that the only way to kill Esfandiyar was to throw a two-headed arrow made of a special, holy Tamarix tree into his eyes. The arrow should be heated in fire and immersed in *raz* water (aab-e *raz*/ lit. grape juice). Rostam acted accordingly and succeeded killing Esfandiyar. It is worth mentioning that the arrow should have particular characteristics to be functional; it should be made of the specific Tamarix tree, and be submerged in *raz* water.

Tamarix is a tree that grows in several parts of Iran and as its roots can reach water, it has a long life. The distinguishing feature of the tree considering the present study is its sharp branches.

Raz water is interpreted as either wine or poison. The combination of Tamarix branch and *raz* water shows that Simorgh did not seem to believe that Tamarix branch could solely be fatal and thus it had to be smeared with something else like wine or poison. The next question is about the trauma caused by the arrow made of the Tamarix branch. First, let's look at the problem mythologically: according to the story, the trauma should be fatal and cause substantial bleeding but it should not have an immediate, direct effect on the speech center because we know that Esfandiyar and Rostam had a conversation after Esfandiyar was injured and before he died. Hence, the brain and eye anatomy needs to be reviewed.

The human eye is located in an orbit⁴. Apart from the eye, there are ocular muscles, optic nerve and vessels inside the orbit that transport blood to the eye. Any damage to the artery can justify the bleeding that Ferdowsi describes. However, an arrow, like Rostam's, that directly penetrates the eye does not only injure the eye but also damages retro orbital tissues by passing through the socket. The orbitofrontal cortex is the most important tissue of the region crucial for decision making⁵. Slightly behind this area in the left hemisphere is the Broca's area that is the center of speech⁶. Damage caused by an arrow to the brain can cause an injury to the Broca's area, and accordingly to the speech zone, due to the direct injury or the resulting bleeding or edema unless the right hemisphere is injured. However, the Tamarix arrow penetrated both eyes

3- Ferdowsi, 1993.

4- Turvey *et al.*, 2012: 525-36.

5- Bechara *et al.*, 2000: 295-307.

6- Price, 2000: 335-359.



of Esfandiyar as illustrated in the book (Figure 1). Based on the mentioned facts, the two-headed arrow could not have let Esfandiyar talk if it had damaged the Broca's area. Another important point is that this damage could not be lethal because injury to none of the tissues of the retro orbit can end in death; therefore, the arrow should be smeared with something. As mentioned earlier, Simorgh advised Rostam to smear the arrow with *raz* water or wine. However, there is another interpretation suggesting that *raz* water is Kianseh Lake (Today, known as Hamoon Lake)⁷. Yet, neither wine, nor the Lake water can kill one if they come in contact with brain tissue or blood. Thus, it can be concluded that smearing an arrow with *raz* water was the magic and ritual aspect. This analysis is quite compatible with the story. The invulnerable Esfandiyar is blessed by Zarathustra. As Simorgh tells Rostam, whoever kills Esfandiyar will have an ominous fate. So, his death would not occur by only an arrow and a wound; in fact, magic should also have a role and this is exactly what we see in the story of Shahnameh. The above mentioned mytho-pathologic analysis shows that all elements of the story of Rostam and Esfandiyar belong to the world of myths.

7- Akbari *et al.*, 2009: 1-20.

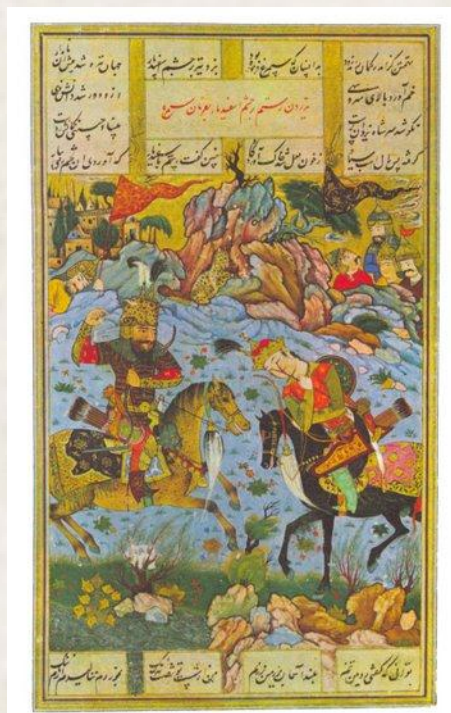


Figure 1. Rostam and Esfandiyar (Tahmasbi Shahnameh)

This study can help to promote the new science of mytho-



pathology⁸. Another question beside the main mytho-pathology question is if a myth is pathologically compatible with the real world conditions. A myth is peeled off through time to correspond with the terms of a specific time. In other words, a myth is permanently retrieved in a culture. A myth with the power of surviving through frequent retrievals at the time can continue to exist. Now, mytho-pathology can determine the extent to which a myth can medically comply with the real world in retrievals and its evolution.

Our study showed that although the story of Rostam and Esfandiyar is at the top in view of spiritual delicacies, it pathologically moves within the framework of mythological arguments.

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8- Naser Moghadasi, 2014: 1157-1158.

