Abstract:
Nordic mythology from 13th century Iceland contains descriptions that provide traditional
depictions of the night sky, constellations, and the Moon. These were not only incorporated
within the mythology but also formed the basis for their gods: Odin was a god whose eyes were
the Sun and Moon, and Heimdall was a god of the Moon. Images that can be seen on the
Moon’s face establish the proof of this: the image of two swans said to swim within the Well of
Fate and the profile of a face said to have sliced into Heimdall, are both visible. Further to be
seen are Mimir, Hiuki and Bil, Heiddraupnir’s skull and Moongarm. The mythology also
contains reference to the twin stars Castor and Pollux, known as Thiassi’s Eyes, and Venus,
known as Aurvandíl’s Toe.
Introduction

Our understanding of ancient astronomy in Northern Europe has been limited because no record exists of the native constellations among the Germanic tribes in ancient times. They certainly did not know of the constellations of the south have become our standard ones today. However, it would be unusual to suppose they never had any, only that the knowledge of them has not come down to us.

Fortunately, the surviving mythology of Scandinavia has left us enough clues to allow us to piece together this forgotten knowledge of the past. At the time these myths were recorded in 13th century Iceland the people no longer believed in the old religion. However, even back during the Viking Age, before the year 1000 AD, when the religion was still strong, many of the beliefs held then seem already to have been understood only in abstract terms, while the naturalistic explanations they embodied went back even further.

It is now clear that the mythology of Scandinavia as we know it arose from a fusion of traditional local gods with several other more widespread traditions. While the myths attained their present form within the Iron Age, some elements and aspects of it go back even into the Stone Age, when humans were first trying to make sense of their universe.

Constellations and Stars

From what remains of the mythology we know that the people in ancient Northern Europe believed that the night sky was the vast canopy of a world tree, an ash that in Iceland was called
Yggdrasill. Here is how it is described in Gylfaginning: The ash is of all trees the biggest and best. Its branches spread out over all the world and extend across the sky (Sturluson 1987: 17). Not only is this well descriptive of the night sky, but it is also not conceptually unique in mythology; the creation of a very similar tree is told in *The Kalevala:*

At that old Väinämöinen
sings and practices his craft:
He sang a spruce topped with flowers
topped with flowers and leaved with gold;
the top he pushed heavenward
through the clouds he lifted it
spread the foliage skyward
across heaven scattered it.
He sings, practices his craft—
  sang the moon to gleam
on the gold-topped spruce, he sang
the Great Bear on to its boughs.
  (Lonnrot 1989: 105)

The shining stars were the hanging fruit of this tree, while the groupings of stars on its branches, recognized today as the constellations of Ursa Major, Cassiopeia, Hercules, Perseus, and Cygnus, were just as recognizable further to the north, but linked to different objects.

According to the poem “Grimnismal” (Grimnir’s Sayings) there were four stags that pranced on the branches of the World Tree and nibbled upon its leaves: There are four harts too, who gnaw with necks thrown back the highest boughs; Dain and Dvalin, Duneyr and Durathror (Larrington 1999: 56). These deer are actually four constellations. Although the specific
groupings of stars they were seeing are not known, there are four constellations that quite clearly resemble deer: first there is Ursa Major, which in ancient Siberia was known as a stag (Holmberg 1964: 426), another deer has Perseus as its head, the North Star forms the hind foot of a third, and the fourth is seen in Hercules with the star Vega as its eye (see Figure 1).

Figure 1.
Star chart of the Northern Hemisphere
Showing Northern-European constellations
(Deer name assignments are largely arbitrary)

The mythology also speaks of an eagle who sits upon the World Tree’s highest branches and a serpent named Nidhogg who gnaws upon its deepest root. The eagle is the same as the
constellation of Cygnus, which is often visible directly overhead during the summer. A hawk called Vedrfolnir is said to be perched between its eyes and this can also be seen.\(^1\) A squirrel named Ratatosk is said to run up and down the World Tree’s root (the Milky Way) carrying insults between the eagle and the serpent. It says in “Grimnismal”: Ratatosk is the squirrel’s name, who has to run upon the ash of Yggdrasill; the eagle’s word he must bring from above and tell to Nidhogg below (Larrington 1999: 56). This squirrel is the same as the prominent Greek constellation of Cassiopeia, with his feet and tall tail visible. The constellation of the serpent is the same as Scorpius, who resides just at the base of the tree’s root.

There are still yet other stellar objects that are brought to light by these old myths. One tells of the thunder god Thor helping out the hero Aurvandil by carrying him in a basket back from the frozen north. On the way his toe slipped out and became frost bitten, so Thor broke it off and threw it up into the sky to form a star. Because of a toe’s oblong shape this could only be the Morning Star. Venus is the only object in the sky that can be seen with the naked eye that always appears as a crescent. In addition, the Anglo-Saxon version of the name Aurvandil is Earandel, which has been interpreted to mean ‘morning star’ (Grammaticus 1980: vol. II 59). So this planet was known to them as Aurvandil’s Toe.

In another instance, a giant named Thiassi, who had carried off the goddess Idunn to attain youth from her eternal apples, was killed by the gods after they rescued the girl. To atone for this deed Odin took the old giant’s eyes and threw them up in the sky as reparation to the giant’s

\(^{1}\) Vedrfolnir appears in Snorri’s edda but not the *Poetic Edda*. It may come from a different tradition and be equivalent to the cock Vidofnir, who sits on the highest branch of the World Tree: perhaps the North Star or equivalent to the eagle.
daughter Skadi. These stars could only be the twin stars Castor and Pollux, but they were known in the north as Thiassi’s Eyes.²

**The Moon**

Just like in southern Europe, those people in the north also had their own explanations for the Moon. The myths say that beneath the great tree was a well called the Well of Fate, within which a pair of swans were feeding, from whom all swans on earth were descended. The water from this well is so holy, it made all things put into it go pure white.

> I know that an ash-tree stands called Yggdrasill,  
> a high tree, soaked with shining loam;  
> from there come the dews which fall in the valley,  
> ever green, it stands over the Well of Fate.  
> (Larrington 1999: 6)

This well is the Moon. Someone a long time ago recognized that the light cast by the sun into a well through the day looked just like the phases of the Moon. Also, if you know where to look, the two swans mentioned are clearly visible on its face (see *Figure 2d*).

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² This is appropriate for Skadi, a goddess of winter, as these stars at this latitude reach their peak at midnight in the middle of January, the harshest winter month.
There is another well in Nordic mythology in which the god Odin sacrificed one of his eyes. Odin was pursuing wisdom at a well defended by a giant named Mimir, and thus was known as Mimir’s Well. Mimir drank from these waters every day, which made him very wise, but when Odin came for a drink Mimir said he would grant him one sip but only in exchange for one of his eyes. The eye that was sacrificed produced the round glow of the Moon. Mimir too can be seen in the Moon since he is the same as the ‘Man in the Moon’ with his drinking horn, tipped up so he can imbibe the waters of the well (see *Figure 2a*).³ Odin retained his other eye and this was

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³ Thus references to the sons of Mimir might mean the planets.
the bright Sun, which moved through the sky as he rode upon his swift eight-legged steed Sneipnir, the fastest horse in the world.

Odin too was to have also drunk a mead of inspiration that according to the Poetic Edda he received from the skull of Heiddraupnir and Hoddrofnir’s horn. These too relate to the Moon, where the skull is visible on its face (see Figure 2f) and the drinking horn would explain the origin of its phases for the same reason a well would explain them.¹

One particularly large wolf named Fenrir was to eventually catch and consume Odin, which was foreshadowed each time there was an eclipse. During an eclipse of the sun frightened people would make a loud din of noise, clanging on pots and pans to scare the beast away. However, there are other wolves mentioned that are a threat to the Sun goddess and Moon god. It is explained that the reason the Sun and the Moon continue their course with such great speed is that there are two wolves chasing closely behind them, pressing them on their way: a wolf called Skoll follows after the Sun and another called Hati Hrodvitnisson chases the Moon. Sometimes this wolf is called Moongarm, as it says of him in Gylfaginning: He will fill himself with the lifeblood of everyone that dies, and he will swallow heavenly bodies and spatter heaven and all the skies with blood. As a result the sun will lose its shine and winds will then be violent and will rage to and fro (Sturluson 1987: 15). The shape of the front half of a wolf visible on the Moon might be the explanation for this (see Figure 2g).

There are other images too that can be seen in the Moon’s face, like the popular couple Jack and Jill. In the north they were known as Hiuki and Bil. It is said in the Snorra Edda that when they were coming back from a well called Byrgir, carrying between them a large tub called Saeg on a pole called Simul, they were taken up by the Moon (Sturluson 1987: 14). They are right

¹ The story of Odin and the mead is closely related to that of the Indian god Indra and the drink Soma. Soma was often associated with the Moon, that was sometimes thought to be a filling and emptying bowl.
there to see even now, with Jack holding his lantern and Jill holding a bunch of straw (see Figure 2e). So they were also known as Jack of the Lantern and Will of the Wisp.

In other parts of Northern Europe there were different explanations for the Sun and Moon. For some people the Sun was known as Bertha (bright) and was seen as a lovely goddess, while the Moon was called Heimdall (world’s illuminator), a powerful god who guarded the rainbow bridge that led to heaven. It says of him in Gylfaginning:

He needs less sleep than a bird. He can see, by night just as well as by day, a distance of a hundred leagues. He can also hear grass growing on the earth and wool on sheep and everything that sounds louder than that. He has a trumpet called Giallarhorn (loud horn) and its blast can be heard in all worlds. The head is referred to as Heimdall’s sword. (Sturluson 1987: 25)

The ‘Man in the Moon’ was the god himself, and its white glow explains why he was known as the white god (see Figure 2b). The phases of the Moon were explained here not as a well in the sky as mentioned before. Instead, when the Moon appeared as a crescent it was thought to be Heimdall’s great horn, Giallarhorn, used to blow a loud call at the end of the world when giants would come to besiege heaven. When there was a quarter-moon it was seen to be the god’s bright smile from his name Gullintanni (shining teeth), and when it was a half-moon it was thought to be one of his great ears. The myths say that Heimdall, like Odin, also made a sacrifice but of his ear, which explained its presence in the sky. As it says in the poem “Voluspa” (Prophesy of the Seeress):
She knows that Heimdall’s hearing is hidden\textsuperscript{5} under the radiant, sacred tree; she sees, pouring down, the muddy torrent from the wager of Father of the Slain

(Larrington 1999: 7)

The reference to his superior hearing arose because the half-moons were thought to be his large ears. His need for little sleep relates to how the Moon is often out during the night when everyone else needs to sleep. It is also says in Skaldskaparmal that just as the sword was referred to as ‘man’s doom’ the head was known as ‘Heimdall’s doom’ or ‘Heimdall’s sword’, because it is said that he was pierced with a man’s head (Sturluson 1987: 76). If Heimdall was the ‘Man in the Moon’, the head that pierced him is the one seen in profile on the Moon’s surface (see Figure 2c). This serves to confirm that this god was a god of the Moon.

**Sun, Moon and Fire**

The German deities Bertha, Heimdalli and Lodur (god of fire) were mentioned in the *Gallic War* of Julius Caesar over two thousand years ago, who had military engagements with the Germans before seeking his political dictatorship in Rome. To him they were Sol, Luna, and Vulcan. These three gods are commonly associated in Norse myth as Freyia, Heimdall and Loki in the myth of the theft of Freyia’s necklace and are mentioned together by Saxo in his history:

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\textsuperscript{5} The word ‘hearing’ is said by Snorri to be a kenning for ears.
Tradition has it, however, that it was from Dan that our royal pedigree flowed in glorious lines of succession, like channels drawn from a spring. His sons were Humbli and Lother, their mother Grytha, a lady whom the Teutons accorded the highest honor. (Grammaticus 1979: vol. I 14)

Here the revered goddess Grythα⁶ would be Bertha with her sons Humbli and Lother corresponding to Heimdall and Loki. Humbli is also said to be the father of Dan and Angul, progenitor gods of the Danes and Angles. “Rigthula” names Dan and Danp wherein Heimdall is the father of mankind.

Conclusion

What the study of the mythology of the people of Northern Europe tells us is that the night sky was something both important and mysterious to them. With all of the goings-on in the sky, it is no wonder that early people believed that they were seeing heavenly objects and gods existing in a far-off world. The human mind was all that was needed to develop these into stories that explained their meaning and led to the Nordic mythology that we know of today.

The writings of this mythology help us understand prehistoric beliefs about the night sky, constellations, and the Moon in Northern Europe. It also formed the basis for their gods, including Odin and Heimdall. Images that can be seen on the Moon’s face establish the proof of this: the image of two swans said to swim within the Well of Fate and the profile of a face said to have sliced into Heimdall. This, in turn, permits us to understand the origins of the mythology

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⁶ The German Bertha seems to have gone into the north as Gertha, so that the giantesses Gerd (Gerth) and Grid (Gryth) would also originally have been Berth and Brid, thus equivalent to Bertha.
better, while also allowing us to provide better explanations for the written myths and the evolution of these beliefs through time.

**Sources**


