

The Fimbulvetr Myth as Medicine against Cultural Amnesia and *Hybris*

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ABSTRACT: An increasing number of scholars has associated the Fimbulvetr myth with the dust veil event of 536 CE, due to several apparent consistencies between its representations in eddic tradition, contemporary historical accounts, and modern scientific evidence. In this article such consistencies are first summarized, with the aim of enhancing the debate and explaining why recording the dust veil event could have been important to its witnesses and to the creation of their cultural memory. Dendrochronological and archaeological evidence suggests that the 536 CE event was probably catastrophic, and this article argues that its memory may have been preserved and recorded in myth. The related myth may have had the purpose of handing down important teachings to future generations: the awareness that life is cyclically threatened by natural disasters, the value of humbleness before nature, and the hope that, no matter what happens, humankind is going to survive.

RÉSUMÉ : Un nombre croissant de chercheurs associent le mythe de Fimbulvetr à l'événement climatique du voile de poussière de 536 de notre ère, en raison de plusieurs cohérences apparentes entre les représentations qui en sont faites dans la tradition eddique, les récits historiques contemporains et les preuves scientifiques modernes. Dans cet article, ces cohérences sont d'abord résumées, dans le but d'enrichir le débat et d'expliquer pourquoi l'enregistrement de l'événement climatique du voile de poussière a pu être important pour ses témoins et pour la création de leur mémoire culturelle. Les preuves dendrochronologiques et archéologiques suggèrent que l'événement de 536 EC a probablement été catastrophique et cet article soutient que sa mémoire a pu être préservée et enregistrée sous la forme d'un mythe. Le mythe en question pourrait avoir eu pour but de transmettre des enseignements importants aux générations futures : la conscience que la vie est cycliquement menacée par des catastrophes naturelles, l'importance de l'humilité face à la nature et l'espoir que, quoi qu'il arrive, l'humanité survivra.

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1. Introduction

It has been recently debated whether the mythological representations of Fimbulvetr and Ragnarøkkr¹ correspond to actual catastrophes, such as the extreme weather events of 535–536 CE (e.g., Gunn; Gräslund; Gräslund and Price; see also Abram). This would be consistent with the scholarly hypothesis of a relationship between myth, cultural memory, and catastrophism² (Dorothy Vitaliano coined the term “geomythology”: see Vitaliano; Schoch and West; Piccardi and Masse; Cashman and Cronin; Sweatman; Maraschi 2019), according to which similar legends—such as flood myths—were indeed legendary records of major events that occurred in the past (Ryan and Pitman; Montgomery 2012, 2016). The idea is that such catastrophes may have been considered too important to be forgotten and were thus fixed in time by means of stories that could be easily passed down from generation to generation (Vansina; Barber and Barber; Cronin and Cashman). Both euhemeristic and etiological myths can contain references to geological events (Vitaliano; Bentor), but their interpretation as records of real natural phenomena has long been considered problematic (Dorson; Masse et al.). Notwithstanding, assuming that myths belonged to the domain of “fantasy” would not be just anachronistic, but also etic, in fact myths about natural disasters are currently regaining historical dignity (Firestone, West, and Warwick-Smith; Schneider and Salameh; Brückner and Engel). Myth is “not merely a story told but a reality lived,” as Bronislaw Malinowsky stated (100).

Socio-functional and psychological approaches to mythology have suggested that myths were not aimed at offering a representation of reality “as it actually was,” but “as it should have been” (e.g., Berger and Luckmann 127–28; Peterson 13; Csapo 142; Baklanov et al.; Larionova). Nowadays, as in the past, societies need to find explanations to catastrophes, for “all disasters, whether natural, technological, or human, provoke the desire [...] for the quick formulation of plans to prevent their recurrence. Such explanations are like myths” (Taylor), thus myths help the community to make sense of what they experienced (McLeish; Geering). Regardless of a society’s religion, the purpose of myth was to “impose order and meaning onto the mysterious phenomena of natural events which they observed in their daily lives” (Taylor). This article suggests that myth may have also had the purpose of warning future generations against *hybris* (Armstrong 63–64): “invariably, accounts of hubris [sic] convey warnings,” Dianne Trumbull remarks (342), listing several examples from Oedipus to Prometheus, from Lucifer to Dr. Frankenstein. The very term *hybris* derives from Greek mythology, and in that culture it “was considered to be one of the most dangerous traits one could exhibit,” as the story of Daedalus and Icarus shows (Diamandis and Bouras).

As Paul Connerton claimed, “our images of the past commonly serve to legitimate a present social order” (3): therefore, collective memory turns out to be a fundamental means to avoid the collapse of society. The purpose of this article is then to discuss the possibility that the North Germanic peoples may have wanted to preserve the memory of a catastrophic event, such as the dust veil of 535–536 CE, in order to make future generations aware of the fragility of existence (Masse et al.; Sweatman 156–57). Selected passages from the *Eddas* will be discussed with the support of written and—where possible—archaeological sources, in order to show that myths may have been essential tools to cope with cultural amnesia and to metaphorically represent the world as a “place of value” (i.e., “a place where all things have meaning,” Peterson 1).

2. Death and Destruction Must Not Be Forgotten

Recently, several scholars from different scientific fields have debated over the meaning of the early Neolithic monumental enclosures at Göbekli Tepe, Turkey. The site, by far the oldest megalithic structure ever found on our planet, has been dated to ca. 9530 BCE \pm 220 years (Dietrich and Schmidt). Despite some skepticism (Notroff et al.), a few scholars believe that the monument was—among other things—an observatory for monitoring the sky (Sweatman and Tsikritsis 2017a, 2017b; Burley). In their opinion, the proof is engraved and encoded in one of the pillars (n. 43): according to them, the complex iconography that was skillfully carved on that pillar was meant to commemorate a catastrophic astronomical event. This event, known as “Younger Dryas Comet Impact,” was probably triggered by a disastrous cometary impact that caused the mass extinction of Pleistocene megafauna in North America, an abrupt climate change that led to much colder conditions and immense floods (e.g., Firestone et al. 2007).

Given the aim of my article, such a debate is very stimulating, regardless of how it is going to develop. Why? Because it is *plausible* that, since very ancient times, humankind may have felt the need to record particular events. As will be shown later, and as a recent study about the myths of Cassandra and Prometheus has suggested, this may have been due to the tendency of humankind to forget lessons from the past, especially losing memory of natural catastrophes (Murayama and Burton 2015).

When a trauma or a shock is experienced, humankind does not necessarily react the way a single individual’s brain would (Horowitz, Wilner, and Alvarez; Young et al.). Collective memory has had the remarkably important purpose of testifying “the fact that a knowledge of the tradition made survival possible, for surviving meant drawing upon ancestral wisdom” (Bertman 32): communities make sense of disasters by developing explanations, “stories, language, descriptions” (Cashman and Cronin 408). There have been events that our ancestors deemed so fundamental for their history, their culture, their identity,

their descendants, that they felt the instinctive need to retain and pass them down (Hermann 2018, 78). Anyhow, it is questionable whether memories can be selected and specifically preserved for future generations. Yet, one of the most important anthropologists of the twentieth century argued that “myth fulfills in primitive cultures an indispensable function: it expresses, enhances and codifies beliefs; it safeguards and enforces morality; it vouches for the efficacy of ritual and contains practical rules for the guidance of man” (Malinowski 101). These purposes, if one agrees with Malinowski, are clearly intended to secure future generations from chaos and social collapse (Peterson).

This necessity may seem strange to our highly technological society, which instead is “terminally ill with amnesia” (Huyssen 1). Paul Connerton has connected our contemporary cultural amnesia to the scale of human settlement, a society based on speed, and to the repeated destruction of the built environment (2009, 99): all of this (intentionally) creates forgetfulness and oblivion (125). Such a perspective perfectly fits the situation and context addressed by this article: the worldview of those who composed the anonymous poems later collected in the *Elder Edda*, and which—in turn—would later lay the foundation for Snorri’s *Edda*. It was Snorri himself who admitted that the *Prose Edda* was written in order to prevent the Old Norse myths from being forgotten (Sturluson 2007, 5), even though he was probably more concerned about poetry than collective memory (Hermann 2018, 87). However, Snorri was likely aware that the source of his mythological knowledge had existed for centuries in the memory of peoples with “intricate memory techniques” (Glaser, Hermann, and Mitchell 4).³ In this sense, Old Norse mythology played the same role as other mythological traditions elsewhere: it featured foundational narratives that explained the origin of the world and of life, the existence of social hierarchies, etc. (Hermann 2018, 83). In fact, such a mythological framework did not lose its meaning after the introduction of Christianity in the North, whereas it “continued to have a foundational quality for some time” (83). As John Lindow claims, “The texts of Scandinavian mythology were set in the past, and through the mechanism of the ‘learned prehistory’ they could also be understood [...] as explanations of the foundation of the world in which medieval Icelanders lived” (1994, 55).

Oral memories must have been crucial if they were kept for centuries until Snorri’s time, so much so they were inset into mythological narratives, and these—in turn—formed cultural memory (Hermann 2018, 89). In the following sections I explain why the texts concerning *Fimbulvetr* may have played a key role in the society that produced them: the role of preserving the memory of a catastrophic event, just like the Göbekli Tepe’s pillars. In order to support my hypothesis, I will first provide a brief list of possible evidence suggesting that the mythological *Fimbulvetr* may correspond to the dust veil event of 536 CE.

3. Mythology, History, Science: The Sources

3.1. Fimbulvetr in the *Eddas*

The “Great Winter” is described in both the *Elder* and Snorri’s *Edda*. In *Völuspá* it is the event that ushers to Ragnarøkkr, i.e., the beginning of the end. The *völva* prophesies that the catastrophe would be announced by Baldr’s death: then, in the following summers the sun would turn black and the weather would become violent: “Svart var þá sólskin of sumur eftir, // veður öll válynd” [sunshine becomes black all the next summers, // weather all vicious] (*Völuspá*, 12; *Poetic Edda*, 9). Gods and giants would be killed, Óðinn included. This literary depiction alone is rather meaningful. The myth of Baldr’s death has reached us in several versions, which could be an indicator of its very early origins (technically, it could be as old as the time of the dust veil event). But—most interestingly—it turns out that a significant number of gold bracteates featuring representations of Baldr’s myth were hastily interred in 536 CE (Nordvig and Riede 307–12). The connection between the two facts is curious, at the very least: so coincidental, in fact, that one may be led to believe that the burial of said bracteates was a sacrifice to propitiate the gods in a time of fear and desperation (Axboe 2007; James 149; Nordvig and Riede 310–11).

In *Vafþrúðnismál*, references to the “Great Winter” are less detailed, but seem consistent with the aforementioned prophecy. Here, the giant Vafþrúðnir tells Óðinn about Ragnarøkkr and its consequences for the gods and humankind: “Hvaðan kemur sól á inn slétta himin // þá er þessa hefir Fenrir farið?” [From where will a sun come into the smooth heaven // when Fenrir has destroyed this one?] (*Vafþrúðnismál*, 66; *Poetic Edda*, 44). The sun, he explains, would be seized by Fenrir, to later be replaced by a new sun. Only two humans would survive—Líf and Leifþrasir—by hiding in Hoddmímir’s wood and living on *morgindögg* [morning dew]. To these two representations, a few verses of a shorter prophecy (*Völuspá hin skamma*, which survived as an interpolation in *Hyndluljóð*) adds that violent snowstorms devastated the landscape and killed the gods:

Haf gengur hríðum við himin sjálfan,
líður lönd yfir en loft bilar,
þaðan koma snjóvar og snarir vindar,
þá er í ráði að rögn um þrjóti.
(404)

[The ocean rises in storms against heaven itself,
washes over the land, and the air yields;
from there come snowstorms and biting winds;

then it is decreed that the gods come to their end.]
(*Poetic Edda*, 25)

Although fragmentary, the mosaic gives a clean image of a catastrophic event, which caused a dramatic climate worsening, the breakdown of social order, the discoloration or disappearance of the sun, followed by its replacement with a “new” sun. Snorri’s version of the Fimbulvetr event draws upon this tradition, adding a few details (Hultgård). He describes snowstorms, violent frosty winds, three consecutive winters with no summer in between, during which the sun would be weak. These would be preceded by three more consecutive winters that would make society collapse. Then the sun and the moon would disappear, eaten by the wolves, and the stars would fade away as well. Terrible earthquakes would shake mountains and trees, followed by massive floods (Sturluson 2005, 49–50).

The poems of the *Elder Edda* and Snorri’s *Edda* offer a preliminary portrayal of Fimbulvetr. We will get back to it later, after introducing sources and evidence of what actually occurred on 536 CE from the perspective of contemporary observers and modern scientists.

3.2 536 CE in Historical Sources

The dust veil event was observed and commented on by contemporaries in several sources from Europe, the Middle East, and China. Here, I will not analyze them in detail, for this has been already done by other scholars in recent times. This section aims to summarize those sources written in Europe, together with the most important details they feature (see also Newfield 449–52; Arjava).

The northernmost reference to the catastrophe is from Ireland: the *Annals of Tigenach and Ulster* and the *Chronicum Scotorum* report a famine in 536 CE (maybe a doublet of another famine recorded for 539) (*The Chronicle of Ireland*, 94–95). These are the only occurrences of “failures of bread” in early Irish history (431–911 CE)—an interesting fact, undoubtedly. In Ostrogothic Italy, Cassiodorus describes a dramatic series of ominous signs: the sun and the moon lost their brightness (the former actually turned blue), shadows on the ground became faint, temperatures considerably decreased (381–82). He specified that this was due to an event of some kind that had started the year before and was not the consequence of an eclipse (a phenomenon with which he and other intellectuals were familiar). He added that people were terrified because of the disruption of the natural cycle of seasons, as they were going through moments of perpetual frost and then unexpected drought; this brought devastation to the cultivated fields. In line with the typical “providential” interpretation of celestial phenomena of Christian intellectuals, he read all these signs as an ominous message from God (Maraschi 2018c): nonetheless, the situation was so critical that he went beyond

this “positive” perspective and called for practical measures to address the problem.

The Byzantine scholar Procopius, who recorded the Graeco-Gothic War of 535–553 CE, writes that in 536/537 both the sun and the moon lost their brightness, like during an eclipse—but this phenomenon lasted considerably longer, that is, an entire year (IV.14, 328–29). The Byzantine administrator John the Lydian confirmed Procopius’ account in *Liber de Ostentis et Calendaria Graeca Omnia* (25). In the ecclesiastical history of John of Ephesus, who was writing from Turkey, the sun is similarly described as darker and the sun’s rays as barely visible for eighteen months (the account has been preserved in an eight-century chronicle by Pseudo-Dionysius, and the years associated to the event are 530–531 (*Pseudo-Dionysius of Tel-Mahre*, 65). A very similar account is given by the Syrian monk known as Pseudo-Zachariah Rhetor, who was probably writing from Turkey as well: he tells that both the sun and the moon lost their brightness in 536–537, and the weather became particularly moist (370). He also adds that the Syrian winter was severely cold and snowy in those years. On top of this, the continuator of Marcellinus Comes’s *Chronicle* writes that in 536 an unusual drought devastated western Asia pastureland and caused the forced migration of tens of thousands of people from Iran to Syria (39). The collection of biographies of early medieval bishops known as *Liber pontificalis* goes as far as to say that in the same year the entire world was hit by a huge famine (145–46), which even led to episodes of cannibalism in Italy.

Early medieval chronicles were certainly not new to this sort of rhetorical association between celestial phenomena and natural disasters, but this does not imply that said accounts were not the result of actual observation (Maraschi 2018c). As Timothy Newfield puts it, there is little doubt that something very strange and threatening occurred in and after 536 CE (452). These accounts become particularly interesting when compared with evidence from modern studies, as will be shown in the following section.

3.3 536 CE According to Science

After a few attempts to associate the literary depictions of Fimbulvetr and the climate changes during the transition between the Late Bronze Age (1100–500 BC) and the Early Iron Age (500–150 BC) (e.g., Bergeron et al.), several consistencies have been found between said depictions and historical accounts of the 536 CE dust veil. A key contribution in this sense is that of Bo Gräslund (Gräslund; Gräslund and Price), which has been reinforced by archaeological and dendrochronological evidence of one or more massive volcanic eruptions in 536 CE (Larsen et al.; Zachrisson; Tvauri). Scholars assume that the impact of the eruptions may have been massive enough to cause notable societal changes in several areas of Europe: the matter has been—and still is—particularly debated

(Stothers 1984a; Baillie 1994; Koder; Houston; Arjava; Axboe 1999, 2007; Gao, Robock, and Ammann; Larsen et al.; Löwenborg; Abbot et al.; Churakova et al.; Dahlin and Chase; Luterbacher and Pfister; Büntgen et al. 2016). As the light and warmth of the sun became weaker due to the dust veil, vegetation stopped growing in 536 and showed signs of very limited growth in the following years (Scuderi; Baillie 1999; d'Arrigo et al.; Arjava 78; Gräslund 108–12). An extraordinary cataclysm had summer temperatures drop drastically for more than a decade; rainfall and humidity increased, and so did evaporation, leading to rivers overflowing (Büntgen et al. 2011; Gräslund and Price 438).

Based on such studies, it is safe to assume that the event that caused the 536 dust veil had a deep impact on contemporary societies. The question is: was this event so catastrophic that northern peoples felt the need to fix it in mythology? And, if so, what was their purpose?

4. Memory, Myth, and Volcanoes

In order to analyze witnesses' reactions to situations that can be compared with the 536 CE event, let me take into account other examples of past volcanic eruptions. Oral traditions and mythologies related to volcanoes are numerous (Cashman and Cronin 408): this is true for cultures in the South West Pacific, Hawaii, Central America, North America, and the Aleutian Islands, for instance. Massive eruptions can be catastrophic, "and resultant trauma of such events challenge the world-views of both the individuals and communities they affect" (408). Communities then search for proper "maps of meaning" (to use Peterson's words): yet, reactions differ depending on a number of factors, such as the adaptability of the society to its own environment and its ability to recover from a catastrophe (Oliver-Smith; Hoffman and Oliver-Smith; Cashman and Cronin, 408). Psychologist A. J. W. Taylor holds that explanations (whether scientific or supernatural) are fundamental for a society to recover from disasters, lest such recovery be inhibited or delayed.

Recent and less recent cases can be addressed in order to examine the reaction of societies to volcanic eruptions. The Laki eruption of 1783–84 in southern Iceland, which consisted of eight consecutive months of lava flows and explosions, had a considerable impact on people living on the island and in the Northern hemisphere for a few years. Even though it was hardly as massive as the Eldgjá eruption in the first half of the tenth century, it joined its force with another contemporary eruption of the close-by Grímsvötn volcano. According to volcanologists, "the disastrous effects" of such eruptions "were seriously felt over a much larger part of Iceland, affecting vegetation, animals and peoples," and the atmosphere over the island "was overloaded with fine ash and acidic aerosol droplets" (Þórðarson and Self 261). Even though "the lava flow itself did not cause any direct loss of life" (261), a three-year period of famine ensued (1783–86),

alongside severe winters and several diseases that further wore the population out. The result was that 22% of Icelanders (10,521 people) and tens of thousands of Europeans died during the event (Þórarinnsson 1979; Hálfðánarson), as the ash fall affected large parts of Western Europe and surface temperatures in the Northern hemisphere dropped by 1-2°C (Þórðarson and Self 261; Angell and Korshover).

At the time, the Laki event was associated with a supernatural cause: God. In his famous “fire sermon” about the eruption, the clergyman of Síða district Jón Steingrímsson mixed scientific observations with Christian interpretations of the meaning of the phenomenon in eschatological terms, and the sermon “was said to have actually stopped the menacing lava flows from destroying his church” (Black et al., 962). In the 1870s several Icelanders left their native island and founded “New Iceland” in Canada as a consequence of—among other factors—the eruption of the Askja volcano (Vanderhill and Christensen; Wolf): again, they did not create a disaster myth, for the world they were living offered them sufficient explanations. Furthermore, even though their consequences were not as dramatic, the eruptions of Eyjafjallajökull in 2010 and of Grímsvötn in 2011 “not only alerted European governments to the risks posed by volcanic ash but also to those that could arise from so-called low-probability, high-impact sulfur-dominated volcanic events such as the C.E. 1783–1784 Laki eruption” (Schmidt et al., 15710). Yet, none of these events led their witnesses to produce enduring myths.

An important historical precedent is the aforementioned Eldgjá eruption of ca. 934-940 CE, which is considered the largest volcanic eruption of the Common Era. A recent article has put forward a hypothesis that contrasts with the present article’s, while making a very similar point: according to Clive Oppenheimer and other scholars, the above-quoted stanzas in *Völuspá* may well be a mythological representation of the Eldgjá fires. In their opinion, the prophecy “contains literary references to the Eldgjá eruption and [...] these assume wider significance in the context of Iceland’s conversion to Christianity” (377). On the one hand, this interpretation is solid, even though it cannot be ultimately proven valid; on the other hand, forty years ago Sigurður Þórarinnsson suggested that, instead, *Völuspá* may have referred to the Katla eruption of 1000 CE (Þórarinnsson 1981). From a methodological perspective, each hypothesis reinforces our point: natural disasters and their related climatic consequences may have been recorded on the level of myth for different reasons. Oppenheimer attributed this process to the Christianization of Iceland, which occurred around the year 1000 CE: “in calling attention to experiences and memories of the Eldgjá eruption as signs that the old pagan ways were doomed, *Völuspá* suggests that the eruption acted as a catalyst for the profound cultural change brought about by the conversion to Christianity” (378). Considering that the composition of *Völuspá* likely dates around the late tenth century (Simek 366), it is perfectly possible that the poem may have been conceived as a reaction to such an eruption. Yet, the surviving Icelandic historical

sources that may refer to this event are scarce and indirect, which is rather puzzling considering the massive impact of the eruption (*Landnámabók*, 328-33; *Íslendingabók*, 1).

The idea that there can be traces of volcanic activity or paleoseismic events in Old Norse mythology is not groundbreaking (e.g., Phillpotts; Mörner), nor is its association with the Eldgjá fires (Stothers 1998; Nordvig 2015, 2017). Recently, Mathias Nordvig has argued that *Vǫluspá* represents a “mythic sequence that detailed the eruption in response to it” (2018, 539). This and the aforementioned positions point toward the same direction as this article’s, but, in order to better sustain this hypothesis, there is the need for further observations and comparisons. In Nordvig’s words, *Vǫluspá* may have been a “response to the experience of the eruption itself” (544): mythologized descriptions of such events allowed discussion of social, moral, and religious matters (Chester; Piccardi and Masse; Chester and Duncan; Chester, Duncan, and Sangster), and the poem perfectly fits within this scheme. Nordvig suggests that mythologizing the eruption had two important purposes: making the event more memorable, and providing an explanation that linked it to the supernatural sphere (2018, 545). Yet, there could be something else.⁴

5. The Fimbulvetr Myth: A Gift to Cure Cultural Amnesia?

It is no novelty that myth serves the purpose of preserving and perpetuating a society’s cultural memory. “Memory exists [...] in the mythology, just as mythology exists in memory,” writes Pernille Hermann (2018, 78). She adds that Old Norse mythology played a pivotal role in shaping the cultural memory of northern peoples. If we assume that the dust veil event of 536 CE could have been perceived as a life-threatening, apocalyptic disaster, contemporaries may have had good reasons to record it in mythological stories and pass them down to future generations (e.g., Ryan and Pitman; Montgomery 2012, 2016). Yet, myths can have didactic purposes (Harwood) and warn future generations that unexpected catastrophes can sweep life away in the blink of an eye: arguably, it is an important lesson (Sweatman, 156–58).

If it is true, following Jan Assmann’s idea that myth and history can overlap and the past be fixed in both of them without any relevant distinction (2011, 59), it can be assumed that the Fimbulvetr myth may refer to actual historical events. Myths can contain memories, knowledge, science: it is likely that these literary representations stemmed from observation of the skies, the sea, etc. (Berezkin; Reid, Nunn, and Sharpe; d’Huy and Berezkin; Sigurðsson 2018, 392–93). Then, the question is: is Fimbulvetr consistent with the characteristics of the dust veil event? The answer can only be speculative and based on impressions. However, the eddic representations of Fimbulvetr seem surprisingly consistent with the consequences

of one or more massive volcanic eruptions. Among them, one may note interesting parallels between the above-listed three groups of sources:

Myth (Fimbulvetr)	Contemporary historical accounts (536 CE)	Scientific and material evidence (536 CE)
wolves swallow the sun and the moon	the sun and the moon lose their usual brightness; the sun turns blue; shadows on the ground fainter; the stars disappear	one or more massive volcanic eruptions: a thick dust veil covers the sky for 12-18 months
the stars fade away	the stars disappear	the dust veil screens the stars (as it does with other celestial bodies)
series of three consecutive winters	the cycle of seasons gets altered, perpetual frost, crops devastated	climate-induced agricultural disasters, famine
the weather becomes “vicious”	temperatures decrease considerably, extreme weather conditions	exceptional cooling
the gods are killed, society collapses	people terrified, mass migrations	important societal changes, frenzied bracteates deposition, demographic contraction, settlements abandoned
the ocean surges up	-	increased rainfall, humidity, evaporation: floods
the sun is eventually replaced by a new one	-	the ash veil dissipates and sunlight is no longer screened

As mentioned before, this is the domain of pure speculation, but one may hardly fail to observe curious correspondences. My primary aim is more subtle, though, and concerns the reasons why a society could have decided to record a similar catastrophe in myth. Collective memory is a gift for future communities, and future communities need “maps of meaning” (Peterson): they need to learn fundamental lessons concerning justice, prosperity, values, just as children need to learn lessons on the difference between right and wrong. Myths contained teachings and ethical values intended for future communities, to make sure they will not be like children without a guide: to avoid that they make mistakes that would change their life for the worst, irreparably (Assmann 1995, 26; Ranković 15–18; Sigurðsson 2018, 394). This is true for mythological traditions from all over the world (e.g., Haas, Peekna, and Walker; Barber and Barber; Reid and Nunn), and in all likelihood for Old Norse mythology as well (Assmann 2006; Nordvig 2018, 539).

The dust veil event of 536 CE may well fall into Jan Assmann's definition of "memory space" (2006, 28), that is, a space where old memories are stored and can be accessed via written texts. Mathias Nordvig has recently suggested that the same mechanism would very sensibly work with oral traditions written down only centuries later, as in the case of Old Norse mythology (2018, 540). For instance, the poem *Völuspá* addresses important general themes such as morality and religion (McKinnell), and a mythological representation of massive volcanic eruptions connected with the Ragnarøkkr myth would fit within both moral and religious discourses (Nordvig 2018, 544): moral and religious values are fundamental matters when society is threatened by natural or supernatural disasters (544).⁵

Myth helps to preserve memory, but also to *explain* phenomena which could not be justified otherwise (Nordvig 2018, 545; Maraschi 2018c). Natural, supernatural, and celestial phenomena could often provoke a deep emotional reaction in the observers (Maraschi 2018c), whence the need to insert them in the society's cultural framework (i.e., to describe them by resorting to familiar categories). I do not mean to over-stress the consistencies between the scientific and literary evidence of the dust veil event of 536 CE and Fimbulvetr. They are persuasive, beyond any doubt: literary references to the disappearance of the sun and the moon, to the worsening of the weather, to the unleashing of the elements, match very closely the historical accounts of climatic and celestial events of 536 CE and the scientific evidence of one or more volcanic eruptions that occurred in the same year. Several studies have been able to connect mythological stories to historical events in the last few years, but Barbara Rappenglück has remarked that, if in most cases geological and archaeological evidence can be dated, myths cannot (270). Therefore, in order not to merely "ascribe..." Fimbulvetr to one's "favourite cosmic catastrophe" (270), it is not my intention to insist on this aspect: I deem it more important to emphasize *how plausible it is* that such consistencies may not be accidental, and *why* that would be the case.

When recently addressing the issue of "cultural amnesia," Paul Connerton associated it with our society. "Modernity has a particular problem with forgetting," he notes (2009, 1). In his view, the West has given birth to a society that promotes cultural amnesia and breaks the bonds that had held the community together for centuries. He believes that amnesia has been institutionalized, for consumers have no time to remember, and do not need to either. No statement can be more meaningful in the context of this contribution: whoever may have recorded the dust veil event in the mythological story of Fimbulvetr—assuming that this happened—had far greater concerns than consumerist-driven ones (Murayama and Burton 126–27).

Three "items" of cultural heritage are passed from one generation to the next, generally speaking: 1) material objects and natural resources; 2) standardized

ways of acting: 3) words or verbal symbols (Goody and Watt 28). Jack Goody and Ian Watt held that the third “item” is particularly valuable, for it includes categories such as space, time, goals, aspirations—and one may add anxieties (Maraschi 2018a, 28–29). The main advantage of language over the other two “items” of cultural heritage is that language most comprehensively preserves experiences, moral principles, mental attitudes, knowledge, and beliefs of a social group. Needless to say, transmitting such heritage through oral language implies adjusting its contents to the society’s culture and worldview: so, for instance, the wolf was associated with ensuing catastrophes in Old Norse culture, whence—perhaps—the role of Fenrir or Sköll in the Fimbulvetr myth (Langer). The problem is that it is not clear how supposedly meaningful stories could have been handed down to future generations for hundreds of years, if not under standard narratives and key formulas (Lord; Harris; Sigurðsson 2004). In fact, as consistent as the characteristics of Fimbulvetr and of the dust veil event actually look, it could be observed that some among them match sources from late antiquity describing various kinds of celestial phenomena, as well as passages from the Gospels such as Mk 13:24–25 (Nordvig and Riede 308–10; McKinnell 21–25). Such possibilities cannot be ruled out. At the same time, the opposite possibility—that is, that descriptions of celestial phenomena, whether mythologized or not, may be the result of direct observations—should not be dismissed either, for the repetition of certain formulas may have also been due to similarities between said phenomena and to the witnesses’ respective cultural background (Maraschi 2018c).

Oral societies, unlike our modern society, need to remember, because memory and language are the only ways to preserve and perpetuate key facts and values for the community: “what continues to be of social relevance is stored in the memory,” Goody and Watt remark, “while the rest is usually forgotten” (31). Oral transmission of cultural heritage occurs face to face, generation to generation, and during this process the pieces of information that are no longer relevant are eliminated (67). This is a necessary form of amnesia—a deliberate way of selecting memories—unlike what happens in literary societies. Inconvenient memories can be erased (Mitchell 2014, 167): Peter Burke calls this “social amnesia” (57), which can also be an act of censorship. In fact, the past can be created and preserved by both remembering *and* forgetting it (Glauser x; Mitchell 2014, 171). Certain facts can be forgotten (e.g., victors can forget victories), whereas others cannot (losers cannot forget defeats) (Burke 54). Burke explains this mechanism by observing that in case of dramatic events, the social group wants (and perhaps needs) to relieve them. The same thing happens in ritual: societies preserve the memory of dramatic events and overcome the related sense of existential anxiety by elevating these onto the level of myth and ritual (e.g., the eucharistic sacrifice of the Lord’s body; Heidegger, 127–29; De Martino 2007, 82; 2012; Maraschi 2018a, 28; 2018b; 2018c, 29).

The Fimbulvetr myth seems to match this picture, even though the “space” through which it has reached us (eddic poetry and Snorri’s *Edda*) must have altered it to some extent. Snorri preserved memories from the past to “secure continuation of the skaldic tradition,” and thus respected that past, wanting to “counteract the fragility of memory” (Hermann 2009, 291). Certainly it was a biased act of preservation: the pagan past was considered a stage in history that had been replaced by Christianity, at some point. It was an actual transfer between the pagan oral and Christian written culture (297–98), which implied authorial choices and selections (Clunies Ross 1992). It is fair to assume that the Fimbulvetr myth has reached us in a different form than the original, but that does not necessarily affect its inner social function. “The generation and constant refinement of these stories, told and retold over centuries,” Jordan Peterson remarks, referring to mythical narratives, “allows us to determine ever more clearly just what proper and improper behaviour consists of, in an environment permanently characterized by the interplay between security and unpredictability” (75). In this sense, the Fimbulvetr myth allows us to determine an essential factor in a community’s experience: the potential occurrence of catastrophes that could threaten the community itself. If it is true that Fimbulvetr corresponds to the 536 CE dust veil event, it could be because its witnesses felt the need to record such an event and its dramatic consequences.⁶ As the case of Göbekli Tepe may suggest, catastrophes give a society the chance to reflect on its present and future, on the fragility of existence, on the need to teach future generations the value of humbleness. The devastating effects of the volcanic dust veil may have represented a historical foundation for the society that produced the Fimbulvetr myth, for its collective memory: if this is true, preserving its memory and passing it down to future generations must have been crucially important (Le Goff 55).

6. A New Deucalion, a New Pyrrha

However, the eruption could have also been a chance to send a message of hope, as the myth of Líf and Leifþrasir clearly suggests (O’Donoghue 94). This is no banal detail, and would be consistent with Haraldur Bernharðsson’s interpretation of the term “Ragnarøkkr.” After all, Líf and Leifþrasir are not much different than Deucalion and Pyrrha. This myth, which can be found in the Greek poet Pindar and in Ovid’s famous *Metamorphoses*, is clearly connected with the biblical story of Noah’s flood (Griffin 40-41; Ryder) and shares its main moral message (Griffin 41). Deucalion and Pyrrha, who lived in a mythical time that Greek and Roman poets imported from the Near East, are given the chance to save their lives and give birth to a new era for humankind (Smith 243–44). As geologists are gradually leaning towards a catastrophist conception of the history of humankind (Soennichsen), Líf and Leifþrasir—just like Deucalion and

Pyrrha—may suggest that local and/or global disasters have repeatedly scarred the experience of our ancestors. “It appears that humanity’s rich legacy of flood stories reflects a variety of ancient disasters,” observes David R. Montgomery, for “the global pattern of tsunamis, glacial outburst floods, and catastrophic flooding of lowlands [...] fits rather well the global distribution and details of flood stories” (2012, 248). Just as flood myths may refer to different local floods rather than to a global catastrophic one (Frye 36–37), the dust veil event did not coincide with the end of the world either. Rather, it may have been interpreted as a forewarning about the “periodic destruction at long intervals of the surface of the earth,” as Plato famously stated about the disappearance of Atlantis (Plato 22d, 10; see also Schneider and Salameh). In his view, this was an essential lesson to learn, for after every disaster, every time, “you start all over again and regain your childlike state of ignorance about things that happened in ancient times both here and in your part of the world” (Plato 23b, 10–11). This is why, perhaps, recording catastrophes in myth may have been important: myth can preserve their memory, can give them meaning and value, and warn humans against hybris.

In fact, the *Völuspá* references to Fimbulvetr belong to the future, not to the historical past: it is a prophecy, meaning that the catastrophe has not happened yet, and it is bound to occur in the future (Lindow 2014, 53). In other words, Fimbulvetr has yet to happen: the prophetess seems to imply that it will, at some point. She may be telling the future members of the community that they can never feel safe, that they should never become arrogant and feel emancipated from the elements. She may be telling them that even the gods will perish, that society will collapse, that the world will nearly end, but that not everything will be lost. Two people will survive, and human beings will start over again and “regain their childlike state of ignorance.” Can the *Eddas*—in accordance with Plato’s wishes—cure our modern cultural amnesia and hybris as well, and remind us that life is constantly hanging by a thread?

NOTES

1. “Twilight of the powers.” This is the spelling used in *Snorra Edda* and in *Lokasenna*, whereas the form used in *Völuspá* and other eddic poems is *ragnarök*, “doom of the powers.” See Sturluson 2005, 131. Haraldur Bernharðsson suggests that the second element of the word is linked with two other terms: *rök(k)* and *rök(k)r*. They could still be translated as “twilight,” but not necessarily in a negative sense (from light to darkness): the interpretation could also be “renewal of the divine powers,” i.e., the rebirth of the earth (34).
2. In opposition to the uniformitarianism’s paradigm. See Renfrew and Bahn 15–18, 204–207; Montgomery 2012; 2016, 134.
3. Snorri’s idea about the value of memory (symbolically represented by Mímir) above thought (Hœnir) emerges in various passages, such as the prologues to *Heimskringla* and to the *Edda* itself, as well as the epilogue in *Skáldskaparmál* (Hermann 2014, 17–20;

Clunies Ross 2014). Even though Mímir seems to possess both memory and thought, the Æsir considered them complementary, essential for maintaining worldly order, and thus for avoiding chaos. The Æsir are the bearers of a high culture based—indeed—on both memory and wisdom. Óðinn’s ravens Huginn and Muninn also mythologically represent thought and memory, and again the latter is thought to be superior to the former overall (Mitchell 2018).

4. Not all natural disasters are recorded in stories and myths, but the emotional impact of massive volcanic eruptions should not be underestimated either, not even in modern times. It is argued that one of the most famous monsters of recent literature—Frankenstein—was conjured up during 1817, the “year without summer,” after mount Tambora, in Indonesia, blew itself up and inspired the pen of Mary Shelley in Switzerland (D’Arcy Wood; Stothers 1984b; Clubbe): famines, cold, and unusual wet and dark summer ensued, that also led Lord Byron to compose the poem *Darkness*. Another masterpiece of our era, Edvard Munch’s *The Scream* (1893), was probably inspired by the 1883–84 eruption of the Krakatoa volcano (Olson, Olson, and Doescher): science has provided explanations, but has not freed humankind from terror and anxiety before impressive natural phenomena.
5. It should also be noted that *Völuspá* may have been influenced by the Book of Revelations to some extent (North; McKinnell; Steinsland; Nordvig and Riede 310).
6. Dramatic at least on the basis of dendrochronological and archaeological evidence.

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