

1-1-2016

Going Berserk: Battle Trance and Ecstatic Holy Warriors in the European War Magic Tradition

Jenny Wade

California Institute of Integral Studies

Follow this and additional works at: <https://digitalcommons.ciis.edu/ijts-transpersonalstudies>



Part of the [Philosophy Commons](#), [Psychology Commons](#), and the [Religion Commons](#)

Recommended Citation

Wade, J. (2016). Wade, J. (2016). Going berserk: Battle trance and ecstatic holy warriors in the European war magic tradition. *International Journal of Transpersonal Studies*, 35(1), 21-38.. *International Journal of Transpersonal Studies*, 35 (1). <http://dx.doi.org/10.24972/ijts.2016.35.1.21>



This work is licensed under a [Creative Commons Attribution-NonCommercial-No Derivative Works 4.0 License](#). This Article is brought to you for free and open access by International Journal of Transpersonal Studies. It has been accepted for inclusion in International Journal of Transpersonal Studies by an authorized administrator. For more information, please contact the editors.

Going Berserk: Battle Trance and Ecstatic Holy Warriors in the European War Magic Tradition

Jenny Wade

California Institute of Integral Studies

San Francisco, CA, USA

Largely ignored in transpersonal studies to date, dark magic involves socially-transgressive processes called becoming-intense and becoming-animal that produce non-ordinary states useful in the arts, hunting, sex, and fighting. War magic, a form of dark magic that involves powers of destruction and invulnerability, is ubiquitous and universal, and one of its primary features is the production of helpful, nonordinary states in combat. *Berserkerang* (going berserk) is one such state, the latest documented in a long history of Indo-European ecstatic warrior cults. Berserkerang was the battle-trance of the elite consecrated warrior-shamans of Odin, god of magic, poetry, battle, and death. Distinguishing features of berserkerang include invulnerability to fire and bladed weapons, shapeshifting, superhuman strength, laughing at death, and transpersonal identification with comrades and Odin. Cross-cultural interpretations have tended to denigrate berserkerang, including modern arguments that attribute it to intoxication, genetic flaws, or pathology. Not only are such arguments inadequate to account for the data, but also the features of berserkerang are considered signs of spiritual attainment in various traditions up to the present day, and the techniques for achieving berserkerang remain in use in many spiritual traditions as well as on the battlefield.

Keywords: *war magic, invulnerability magic, berserk, shamanism, battle trance, shapeshifting, Odin, Amanita muscaria, ecstatic warrior*

Shamanism is “a family of traditions whose practitioners focus on voluntarily entering altered states of consciousness in which they experience themselves or their spirit(s) interacting with other entities, often by traveling to other realms, in order to serve their community” (Walsh, 2007, pp. 15-16). In the clan-based cultures from which shamanism emerged, serving the community involved safeguarding it from natural and supernatural enemies through war magic, from which malevolent (“black” or “dark”) magic derives. War magic involves ritual practices to “harness magical, spiritual, and social-psychological forces that result in an opponent’s misfortune, disease, destruction, or death” (Farrer, 2014, p. 4), including protective methods to counter the malign sorcery of enemies, such as invulnerability magic. Nevertheless, the presentation of shamanism in transpersonal studies has largely ignored war magic in lieu of a focus on healing magic (e.g., Eliade, 1958, 1976; Harner, 1980; Kalweit, 1988; Larson, 1988; Walsh, 2007).

The precedent for ignoring dark shamanism and war magic dates back to Bronislaw Malinowsky, who never mentioned them despite his living right next door to a shaman in order to protect himself from hostile sorcery while conducting his research (Farrer, 2013). Although anthropologists have been redressing this oversight for about 50 years, even major works on war magic in diverse cultures (e.g., Adolphson, 2007; Dalton, 2011; Farrer 2009, 2014; Price, 2002; Reid, 1988; Whitehead 2002; Whitehead & Wright, 2004) have had little impact on transpersonal studies. Such obliviousness seems oddly one-sided since most healing shamanic ceremonies involve protection from dark magic, and since the actual practice of dark magic may be embodied rather than limited to ephemeral spells and curses. In Guyana, for example, gangs of *kanaimà* shamans seize people (often easy prey, such as women or children) from behind, dislocating their shoulders or fingers in an initial attack followed months later by a fatal assault, in which the shamans force the victims’ tongues to be bitten by a poisonous snake, then

anally rape them with the tail of an iguana or armadillo until the intestinal wall is shredded and the rectum sufficiently ripped to be stuffed with bags of astringent herbs, bringing on a slow, agonizing death (Whitehead, 2002). The shamans later violate their victims' corpses to eat some of the liquifying remains for magical purposes. Motives for such assaults are typically power, status, jealousy, or revenge.

Not all war sorcery is as revolting as that of the *kanaimà* shamans. In fact, a quintessentially Western form of war magic, *berserkerang* (going berserk, the common English rendering of Old Norse *berserksgangr*), a virtually unknown bit of the spiritual heritage of people of European descent, features practices and qualities utilized by different religious traditions as signs of spiritual attainment. The battle trance represented by *berserkerang*, which died out during the Viking Age, was the last version of an Indo-European ecstatic warrior cult dating back to the Bronze Age (Speidel, 2002, 2004), yet the practices for cultivating it remain in use by different religious traditions and on the battlefield today. *Berserkerang* was a nonordinary, transpersonal state that provided a combat advantage in addition to its spiritual attributes.

The Origins of War Magic

People have always needed the power to survive physical threat, so it is natural that magical practices, inherently about acquiring power, would have coalesced to cope with danger (limited to warfare for this discussion). Humans share a repertory of aggressive displays with other vertebrates for con-specific conflict designed to frighten the opponent to the point of preferring to avoid confrontation (e.g., MacLean, 1973, 1990). For *Homo sapiens*, however, conflict frequently exceeds dominance displays to involve mass killing of fellow humans. But even in bellicose cultures it is not easy for humans to kill their own kind in close combat, the predominant form of warfare for most of human history, which employs bladed and blunt-force weapons in addition to short-range projectiles, such as slings, arrows, and throwing spears. The closer combatants are physically, the greater their need to dissociate from their humanity (Grossman, 1996). The opponent must be made into "other" in the attacker's mind, while the attacker must also become "other" so that the prohibitions against killing do not apply (Grossman, 1996; Roscoe, 2007).

Whereas religious forms of spirituality tend to promote socialization and morality for civilized living, a process called *becoming-human* (Deleuze & Guattari, 2004),

war spirituality promotes dehumanizing processes that put people into a liminal, socially-transgressive state, referred to as *becoming-intense* and *becoming-animal*. By dissociating from his humanity and, therefore, society's norms, the combatant has no conscience and no guilt over killing. (War is by no means the only venue for becoming-intense and becoming-animal; these processes are invoked in numerous activities, including hunting, theater, dance, sex, shamanic trance, sports, and martial arts; Farrer, 2009, 2014).

Over time instinctive defensive and aggressive behaviors became patterned activities to enhance becoming-intense and becoming-animal when people fought, that occur universally (Carlson, 2006; W. Miller, 1990; D. Miller, 2000; Lincoln, 1991; Roscoe, 2007). Loud noises and vigorous, threatening movements evolved into ritual behaviors for combat (Ehrenreich, 1997; Gibson, 2011; Jordania, 2011; Kogan, 1997; Nettle, 1961; Roscoe, 2007): 1) taunting and other forms of verbal aggression raise the combatants' anger before they physically engage; 2) rhythmically-organized vocalizations, such as singing and the battle cry, often amplified by horns and drums, invoke the gods, inflame mood, unify the group, communicate determination, and intimidate the opponent; and 3) repetitive, rhythmic group movements, such as war-dancing and marching, promote solidarity. War-dances performed in advance of battle invoke the gods and *esprit de corps*, and when performed in front of the enemy blunt the opponent's will to fight. A familiar warrior magic display that combines taunting, war cries, and dance is the Maori *peruperu haka*, versions of which have become the trademark of Pacific Rim sports teams (notably the New Zealand All Blacks). The war *haka* involves swaying, stamping, grimacing, sticking out the tongue, widening the eyes, grunting, crying, slapping the body, and brandishing weapons. Originally it was performed in unison to loosen up the body, promote solidarity, and invoke victory from the war god Tumataueng; it was also danced on the field to intimidate the enemy.

Such practices, documented in ancient Greece and Akkadia (Burkert, 1992; Speidel, 2002, 2004) and enacted today (Pieslak, 2009; Roscoe, 2007), can provide a physical advantage in the field. For instance, since the 16th century, when rhythmic drilling became standard training in some cultures, soldiers who drilled routinely defeated larger forces trained without drills (McNeill, 1995). Jordania (2011) cited the 19th-century example of the Imam Shamil, military and spiritual leader of the Dagestania people, whose warriors had withstood an

80-day siege by the Russian empire, with losses in the thousands on both sides. The few surviving Dagestanians were surrounded and overwhelmingly outnumbered. Instead of surrendering or fighting to the last man, Shamil began singing and dancing a traditional dance until all his fellows joined him. Accelerating the dancing and singing to a peak, the Dagestanians broke out of their stronghold, swords flashing and screaming war cries. Despite the odds, the shock and ferocity of their attack prevailed, and most of Shamil's troop fought their way clear.

Jordania (2011) has argued that prehistoric defensive, rhythmic, polyphonic singing was ubiquitous because a very specific harmonic style, which creates a loud, piercing, dissonant sound, is found among isolated peoples in Asia, Africa, Europe, the Pacific Islands, and South America. He further asserted that its function was "to put our distant ancestors into a very specific altered state of consciousness," the advantageous "battle trance" state (p. 98) characterized by: analgesia that reduces pain; fearlessness; the neglect of personal survival instincts for a group goal; and supernatural strength. Jordania postulated that the increase in endorphins and oxytocin during a life-threatening situation blocks pain and fear while amplifying group trust and exhilaration at being part of a bigger unity, a transpersonal identification. People can go into battle trance suddenly and instinctively in high-demand conditions (such as when a parent sees her child in a life-threatening situation) or through deliberate cultivation using ritual means. Today American soldiers in Iraq rely on rock and heavy metal music played at deafening volume to generate warrior spirit (Pieslak, 2009; Roscoe, 2007), but in traditional societies, ritual cultivation of battle trance was—and still is—the purview of warrior-shamans.

Berserkerang is a Norse pagan battle-trance tradition, the latest descendent of an Indo-European ecstatic warrior cult represented in the *Rig Veda*, the *Iliad*, and Assyrian and Roman sources, among others (Kershaw, 2000; Speidel, 2002, 2004). Price (2002) relates the berserk tradition to a circumpolar shamanic war-magic culture spanning the Pacific northwest, Siberia, and Baltic and North Sea, including the Sami peoples based on material finds and oral history traditions, but its roots are well established in other cultures. Berserkerang per se is known from hostile Christian writers describing events centuries old and poorly understood by the time they were recorded in the 13th-14th centuries. Only one fragment (*Eyrbyggja saga*, 28) may be traceable to heathen times, but even this is doubtful (Simek, 1993). Christianity was mandated in

Iceland in 1000 CE, and berserks were outlawed by 1015 in Norway and by the Grágás, the medieval Icelandic legal code. No organized berserk war-bands existed by the 13th century when Christian historian Snorri Sturluson (1987, 1990) wrote down what he knew of the pagan oral tradition before it was entirely wiped out, nor when even later Christian transmitters recorded the sagas of events occurring from 200-500 years earlier. By this time—and by these sources—berserkers were stereotyped as either the elite bodyguards and front-line shock troops of famous kings, in keeping with their traditional high status as holy champions (e.g., *Egils saga Skalla-grímsonnar*, *Vatnsdæla saga*, *Hrólfs saga kraka*), or as uncouth, brutal outlaws who forced duels on weaker opponents and/or demanded their women (e.g., *Grettis saga*, *Hervarar saga ok Heiðreks*). Even in the "outlaw" texts, scholars have discerned evidence that the berserks were enacting ritual challenges to adolescent males as part of a pagan warrior initiation ceremony, including a death or ancestor cult (e.g., Blaney, 1972; Danielli, 1945; Davidson, 1988, 1990; Hasenfratz, 2011; Kershaw, 2000) misunderstood and distorted by Christian transmitters. In fact, Indo-European sacred warriors had been marked out from the rest of society by various means for millennia, including by ritually distinctive grooming (Kershaw, 2000; Miller, 1998) and being forbidden to own land or farm (later confused with outlawry; Blaney, 1972; Kershaw, 2000). Consecrated warriors were supported by the community, especially the chieftain to whose court they belonged, for centuries before the Viking Age (Blaney, 1972; Kershaw, 2000). For instance, stories of the berserk-style Irish heroes Cú Chulainn and Finn and his warrior band reflect their right to take property and women. Tacitus, writing of the Chatti tribe in 98 CE, described sacred warriors' duties and privileges:

Every battle is begun by these men. They are always in the front rank, where they present a startling sight... . None of them has a home, land or any occupation. To whatever host they choose to go, they get their keep from him...until old age leaves them without enough blood in their veins for such stern heroism. (*Germania*, 31)

The meaning of berserkerang can only be appreciated within its culture, but given the bias of Christian transmitters, earlier pagan observers of European battle practices, like Tacitus, augment the record. Price (2002) has argued convincingly for similarities among shamanic traditions in circumpolar cultures ranging from Europe

to the Pacific Northwest, as Speidel (2002, 2004) did for a Indo-European ecstatic warrior tradition in the heroic mode from the second millennium BCE to the Viking Age. Thus accounts and material finds from a variety of sources support not only the ubiquity of this type of war magic among northern European peoples but also provide greater insight about how it was practiced.

Odin's Warriors

Berserks were the warrior-shamans of Odin, god of magic, poetry, battle, and death. His name comes from the Old Norse *óðr*, which scholars have often glossed as *fury*, after Adam of Bremen (a hostile missionary; *Gesta Hammaburgensis ecclesiae Pontificum* 4.26), but which also means *mind*, *intelligence*, or *soul* as well as *poetry*, *eloquence*, and *inspiration* (e.g., Davidson, 1988, 1990; Simek, 1993; Sturluson, 1987; from the proto-Indo-European root **uat-*). Odin is the god of mental powers and spiritual awakening, not merely fury, which is only one form of animating excitement.

Odin is a shapeshifter, as his numerous sobriquets indicate, such as Many-Shaped, Swift-in-Deceit, and hard-to-translate names that contain the root *changing*.

It was said that he understood such tricks of cunning that he could change himself and appear in any form he would....

Odin often changed himself; at those times his body lay as though he were asleep or dead, and he then became a bird or a beast, a fish or a dragon, and went in an instant to far-off lands on his own or other men's errands. (*Heimskringla*, Ynglinga Saga, 6-7)

Limiting discussion to relevant portions of Odin's warrior magic for the scope of this paper, his powers included: clouding the mind with fear and confusion, or the reverse, instilling courage and mental clarity; weakening or strengthening the body; magically constraining movement ("the fetters"); breaking or strengthening weapons and armor; and invulnerability magic. For example, Odin lists some of his battle enchantments:

That third [spell] I know if my need be great
To fetter a foeman fell:
I can dull the swords of deadly foes,
That nor wiles nor weapons avail....

That fifth I know, if from foeman's hand
I see a spear sped into throng,

Never so fast it flies but its flight I can stay,
Once my eye lights on it.
(*Hávamál*, 148, 150; Hollander's translation)

Odin's magic was shared by his warrior-shamans:

In battle Odin could make his foes blind or deaf or terrified and their weapons were as nothing more than sticks; but his own men went about without armour and were mad like hounds or wolves, and bit their shields and were strong as bears or bulls; they slew men, but neither fire nor steel would deal with them. This was called a berserk's-gang. (*Heimskringla*, Ynglinga Saga, 6)

Scholarly opinion (e.g., Blaney, 1972; Geraty, 2015; Price, 2002; Guðmundsdóttir, 2007) has remained hopelessly divided about whether *berserk* means *bare of shirt* (*sark*) for fighting without armor or completely bare-chested; or *bear-shirt* for the donning of animal skins in a shamanic rite of transformation. Odin's warriors were likened to bears (single-combat champions? Davidson, 1988, 1990; Speidel, 2002, 2004) and to wolves (*úlfheðnar*, *wolf-skins* often translated as *wolf-warriors*, who fought as a group? Davidson, 1988, 1990; Price, 2002; Speidel, 2002, 2004), Odin's totem animal. Both berserks and *úlfheðnar* represent the same battle trance, regardless of combat style.

Berserker gang reflects a strong Indo-European war sorcery heritage involving: stunning the enemy with terror; rendering their weapons harmless; scorning to wear armor; shapeshifting into predator forms; and invulnerability to fire and blades (Speidel, 2004). (The formulaic language referring to berserks, *á þá bitu eigi járn*, translates as "iron would not bite them," e.g., *Egils saga Skalla-grímsonnar*, 9; *Grettis saga*, 2.) According to Speidel (2002), the earliest description of this kind of war magic occurred in a poem celebrating the victory of the Assyrian Tukulti-Ninurta over the Babylonians in 1228 BCE:

They are furious, raging, taking forms strange as
Anzu [a magical bird-god].
They charge forward furiously into the fray without
armor,
They had stripped off their breastplates, discarded
their clothing,
They tied up their hair and polished (?) their...
weapons,

The fierce heroic men danced with sharpened
 weapons.
 They blasted one another like struggling lions, with
 eyes aflash (?),
 While the fray, particles drawn in a whirlwind,
 swirled around in combat. (p. 255)

Odin determines the outcome of battles, and with the Valkyrie goddesses, selects the outstanding heroes among the slain who deserve glorious afterlife in Valhalla disporting themselves until they will fight the forces of evil at the cataclysmic battle of Ragnarök. Heroes were immortalized on the earthly plane by having their deeds sung in poetry so that their memories never perished. The desire for everlasting fame commemorated in poetry was a prime motive for Indo-European warriors (e.g., Duchesne, 2009; Fortson, 2010; Gurevich, 1995; Poliakov, 1987; Speidel, 2004). Champions engaged in conspicuous acts of bravery, laughing at danger and scorning to protect themselves—especially in conditions of certain death—to win immortality.

To fight in such a [berserk] style was a ritual, acting out a myth. Groups of wolf-warriors and berserks had their own weapons, tactics, and war dances... Their excesses meant glory: Wolf-warriors, berserks... no doubt won the “unwiling glory” held out by the *Iliad* and the *Rig-Veda*. (Speidel, 2004, p. 193)

Berserks held the most valued and dangerous roles in armed forces, serving in the king’s bodyguard and/or in the vanguard. The earliest historical account of berserks was written in the ninth century by Harald Hairfair’s court *skald* (poet) Þorbjörn hornklofi describing the king’s consolidation of Norway and his deployment of berserks as shock troops. It is one of the few contemporary accounts since most were recorded from oral traditions centuries after the events they describe by Christians to whom the old ways were incomprehensible and anathema. In one section, the poet uses the device of a dialogue between a Valkyrie, a warrior-goddess associated with Odin, and a raven, Odin’s familiar and battlefield scavenger. The Valkyrie asks the raven:

“Of the berserks’ lot would I ask thee,
 thou who batten’st on corpses:
 how fare the fighters
 who rush forth to battle,
 and stout-hearted stand ‘gainst the foe?”

Going Berserk

“Wolf-coats they are called,
 the warriors unfleeing,
 who bear bloody shields in battle;
 the darts redden
 where they dash into battle
 and shoulder to shoulder stand.
 ‘Tis men tried and true only,
 who can targes [shields] shatter,
 whom the wise war-lord
 wants in battle.”
 (*Hrafnsmál*, 20-21)

The later Icelandic sagas reflect the key roles of the berserks and their prowess on the field, although by this time berserks are stereotyped and demonized to a greater or lesser degree (Price, 2002). “Then the king cried on his berserks [*sic*] for an onslaught, and they were called the Wolf-coats, for on them would no steel bite, and when they set on naught might withstand them” (*Grettis saga*, 2). Angrim’s sons “were all of them berserks... And they were never in a battle they didn’t win. Because of this, they became famous in all the lands, and there wasn’t a king who did not give them what they wanted” (*Hervarar saga ok Heiðreks*, 2). Elsewhere a band of berserks was sent to eliminate enemy soldiers on a long ship:

[Kveldulf] then had a fit of shape-strength [i.e., went berserk, involving shapeshifting], as had also several of his comrades. They slew all that came in their way, the same did Skallagrím where he boarded the ship; nor did father and son stay hands till the ship was cleared. (*Egils saga Skalla-grímsonnar*, 27)

Even taking into account the stereotyping of Christian writers about berserks, the use of ecstatic warriors as elite shock troops has a long heritage (Duchesne, 2009; Speidel, 2002; Reid, 1998), so these late accounts retain elements of truth. The Greeks and Romans by their classical periods were beginning to abandon their own sacred warrior styles for well regulated, massed fighting and to distance themselves from battle trance as “barbarian” tactics, which they viewed as restricted to the “blond nations” by the sixth century CE (Speidel, 2004, p. 194). Northern Europeans practiced it until technological and strategic advances—as well as Christianity—rendered it ineffective. But before then, these holy warriors were greatly revered, and a vestige of this regard even survived into a late religious romance, the 13th century *Barlaams ok Josaphats saga* that calls Jesus God’s “young berserk”

("hinn vgni berserker guðs") and his twelve disciples "his berserks" (197). Berserker-gang, even when rendered as battle-fury or -madness, meant something hallowed: being possessed by Odin (e.g., Kershaw, 2000). Berserks were his consecrated warriors, dedicated to a life of privation and the ultimate self-sacrifice to serve him and their communities and attain everlasting life.

Going Berserk

The act of becoming berserk features the classic dimensions of war magic. Taunting to work up anger prior to an engagement was a part of a refined flyting convention between opposing champions in pagan European culture (e.g., Sayers, 1991). (Flyting is a ritual contest of insulting an opponent in a way that displays verbal virtuosity, such as rap today.) Greek historian Diodorus Siculus (90-30 BCE) said of the Gauls:

It is also their custom, when they are formed for battle, to step out in front of the line and to challenge the most valiant men from among their opponents to single combat, brandishing their weapons in front of them to terrify their adversaries. And when any man accepts the challenge to battle, they then break forth into a song in praise of the valiant deeds of their ancestors and in boast of their own high achievements, reviling all the while and belittling their opponent, and trying, in a word, by such talk to strip him of his bold spirit before the combat. (*The Library of History*, 5.29)

In *Brennu-njal's saga* (118), Skaphedinn insults Skapti Porodsson's intelligence, courage, and appearance. Beowulf (literally Am-a-Wolf, a typical berserker name) engages in a flyting provoked by Unferth, who sneers that Beowulf, who could not best a man named Breca in a swimming match, will never prevail over the monster Grendel (*Beowulf*, ll. 506-528). Beowulf, after saying that he had slain nine sea-monsters during the swimming contest, taunts:

Now, I cannot recall
 Any fight you entered, Unferth,
 That bears comparison. I don't boast when I say
 That neither you nor Breca ever were much
 Celebrated for swordsmanship
 Or for facing danger on the battlefield.
 You killed your own kith and kin,
 So for all your cleverness and quick tongue,

You will suffer damnation in the pits of hell [Christian bowdlerization].

The fact is, Unferth, if you were truly
 As keen or courageous as you claim to be
 Grendel would never have got away with
 Such unchecked atrocity, attacks on your king...
 But he knows he need never be in dread
 Of your blade...
 He knows he can trample down you Danes
 To his heart's content, humiliate and murder
 Without fear of reprisal. But he will
 find me different. (ll. 582-601)

European pagan warriors routinely used noise-making tactics alone or with dancing to bring on battle-trance and frighten opponents. According to Livy (64? BCE-17 CE), Celtic fighters sang and danced to provoke fear: "Their songs as they enter into battle, their war-whoops and dances, and the horrible clash of arms as they shake their shields in the way their fathers did before them—all these things are intended to terrify and appall" (*The History of Rome*, 38.17). Tacitus referred to the songs Germanic warriors sang before battle, especially a chant, by which

they not only kindle their courage, but, merely by listening to the sound, they can forecast the issue of an approaching engagement. For they terrify their foes or themselves become frightened, according to the character of the noise they make upon the battlefield; and they regard it not merely as so many voices chanting together but as a unison of valor. What they particularly aim at is a harsh, intermittent roar; and they hold their shields in front of their mouths, so that the sound is amplified into a deeper crescendo by the reverberation. (*Germania*, 3)

Berserks not only held their shields in front of their mouths, but also bit down on the iron rim of the shield as part of their battle trance. Bears snort and clack their teeth when on the defensive, and berserks made the same sound by biting on their shields' metal rims (Speidel, 2004, p. 45). "And as he came forward on the field to the ground of combat, a fit of Berserk [*sic*] fury seized him; he began to bellow hideously, and bit his shield" (*Egils saga Skalla-grímsonnar*, 67). The rooks of a 12th century chess set from the Hebrides are warriors biting their shield rims.

In particular, berserks were known for howling like animals in battle trance: "Now bearserks'-gang [*sic*]

seized them, and they howled like dogs” (*Grettis saga*, 19). Greek historian Leo the Deacon was an eyewitness of the Byzantine emperor’s Bulgarian campaigns in 970-971 CE against Rus’ warriors fighting in berserk style. The Rus’, whose culture is closely associated with the Norse or Varangian peoples and whose name is retained in Russia and Belarus, unnerved seasoned Byzantine troops by “roaring like beasts and uttering strange and weird howls,” according to Leo (*History*, 8.4), and their leader Sviatoslav I of Kiev is described as “charging the Romans in a frenzied rage” (*History*, 9.8). The earliest Norse record of berserks commemorated Harald Hairfair’s victory at Hafursfjord around 872 CE:

The berserks bellowed
as the battle opened,
The wolf-coated shrieked loud
and shook their weapons.
(*Hrafnsmál*, 8; also cited in *Heimskringla*, The History of Harald Hairfair, 18)

Archeological finds throughout northern Europe have shown war dancing involving the ritual donning of animal skins and masks and leaping with weapons prior to battle as a shapeshifting device (e.g., Davidson, 1990; Price, 2002; Speidel, 2004). Scandinavian, British, and German sites have yielded ornamental plates from helmets, scabbards, and buckles depicting warriors dancing naked along with warriors clad in animal skins brandishing swords and spears. For example, a die dated to about 600 CE from Torslunda shows a naked dancer, probably Odin, wearing only a horned helmet and sword-belt waving a spear in each hand followed by a man completely covered by a wolf skin and mask except for his human feet and hands, one of which clutches a spear while the other draws a sword from its scabbard. The wolf’s raised head with jaws agape seems to be howling. Tacitus (*Germania*, 6) reported youths dancing naked in and out of spears and swords pointed at them, and a legacy of weapon dances persisted well into the 19th century in Germany and the British Isles (Kershaw, 2000).

Dancing, singing, howling, and donning animal skins in Norse war magic conferred the animal’s strength and speed on the shamans. Transformation into beasts by wearing animal pelts and masks has been well established in Indo-European culture (Cebrián, 2010; Kershaw, 2000; Price, 2002; Speidel, 2002, 2004). It was inherent in the terms *berserk* and *úlfhedinn*, and in the personal names of warriors, which included the element for *bear*

Going Berserk

and *wolf*, such as Gunbjorn, Thorbjorn, Wulfgang, and Hildulf, respectively (e.g., Kershaw, 2000). Berserks were specifically called shapeshifters, *eigi einhamr* (not of one shape) or *hamrammr* (shape-strong; Blaney, 1972, p. 39).

The degree to which their transformation was regarded as psychic or physical is unknown. Ecstatic dancing and fighting in animal skins seem to have conferred certain supernatural and feral qualities on berserks, but they seem to have remained essentially human. Two marked exceptions exist in the earlier, more legendary literature in which no dancing was involved and people actually did become animals. The celebrated hero Sigmund and his son Sinfjotli appear to have become werewolves to avenge their dead kinsmen in the *Poetic Edda* (Helgakviða Hundingsbana I, 36-37). They found magic wolf skins, and when they put them on, they could not get them off, during which time they communicated in the voice and language of wolves and hunted like them (*Volsunga Saga*, 8). Each could kill up to seven men alone, and Sigmund forbade his son to attempt more, but Sinfjotli once successfully killed eleven. After a certain number of days, the skins came off. They burned them and thereafter remained in human guise but with increased lethal powers. The most famous bear warrior, known from multiple sources, is Boðvar Bjarki, who, like Odin, bi-located in a shapeshifting trance. His human body was observed apparently sleeping in the hall while a giant bear fought in King Hrolf Kraki’s bodyguard on the battlefield, perceived not only by Boðvar’s comrades but also by the enemy:

Then Hjorvard and his men [the enemy] see a huge bear going before the King Hrolf’s men, always nearest to where the king was. He kills more men with his paw than any five of the king’s other champions. Blows and missiles glance off him. But he bursts under him both men and horses of King Hjorvard’s army; and everything that comes in his way, he crushes in his teeth, so that panic sweeps King Hjorvard’s army. (*Hrólfs saga kraka*, 50).

When Boðvar was awakened from the trance, the bear disappeared. As a man, Boðvar fought in berserker-gang, but less effectively than as the bear when he was in the trance.

Consistently in the earlier literature, berserker-gang was cultivated through certain techniques prior to conflict or evoked by highly emotional events. However, the later, more Christianized sources began to suggest otherwise.

For instance, both Kveldulf, who was “very shape-strong” and whose name meant Evening Wolf, and his son became stronger and more belligerent as daylight waned, so people avoided them then (*Egils saga Skalla-grímsonnar*, 1). In another saga, a man named Thorir who felt compromised “because a berserk fury always comes over me when I would least wish it to” (*Vatnsdæla saga*, 37) would do anything to get rid of it. Prayers to the Christian god and keeping a vow succeeded so that “a berserk fit never again came over Thorir” (*Vatnsdæla saga*, 37). It is hard to know how to take these sources because of their bias and distance from the original events.

The Berserk State

In combat the berserk state was characterized by supernatural strength, fearlessness, and invulnerability. Even in a literature describing a time when fighters routinely hacked one another with halberds, spears, swords, and axes, it is possible to gauge extraordinary feats of strength. They are reported with sufficient detail and in so many records from different sources that they undoubtedly reflect eyewitness accounts of real events, even if not those ascribed to a particular actor. For example, Kveldulf “brandished high his battle-axe, and smote Hallvard right through helm and head, so that the axe sank in even to the shaft; then he snatched it back towards him so forcibly that he whirled Hallvard aloft, and slung him overboard” (*Egils saga Skalla-grímsonnar*, 27). The Rus’ prince Sviatoslav I of Kiev managed to escape capture by Byzantine troops in 971 CE even though he had “lost a lot of blood and been stricken by many arrows,” according to hostile eyewitness Leo the Deacon (*History*, 9.10). In 1066, the Anglo-Saxons surprised the invading Norwegians at the River Derwent and began cutting them to pieces as they fled over Stamford Bridge to their camp. The Vikings sent a single berserk to hold the bridge and buy time. The bridge was wide enough for four men abreast, yet the champion held it alone with his battle-axe for hours, slaughtering all comers. William of Malmesbury (1847) echoed the awe this hero inspired among the enemy:

Yet, however reluctantly posterity may believe it, one single Norwegian for a long time delayed the triumph of so many, and such great men. For standing on the entrance of the bridge...after having killed several of our party, he prevented the whole from passing over. Being invited to surrender, with the assurance that a man of such courage should experience the

amplest clemency from the English, he derided those who entreated him; and immediately, with stern countenance, reproached the set of cowards who were unable to resist an individual. (p. 256)

As bodies choked the bridge, one of the Anglo-Saxons realized it was useless to meet this juggernaut head-on, so he launched a boat underneath the bridge, and jammed his spear up between the boards of the bridge, killing the hero. The lone Viking “stayed the advance of the whole English army till the ninth hour,” killing forty and wounding countless others, and even his enemies believed that his “name ought to have been preserved” (Henry of Huntingdon, 1853, p. 209)—alas it was not.

Stripping before or during battle signaled fearlessness (Kershaw, 2000; Speidel, 2002, 2004). Fighters would throw off their armor and even their clothes in front of the enemy to demonstrate courage, disdain for the opponent, and love of glory. In addition, it signaled that the warrior had invoked powerful invulnerability magic.

According to Polybius (200-118 BCE), the Celts “calculated to inspire terror” among the legions by tossing their clothing away and moving into the front lines naked except for their weapons (*Histories*, 2.28). Diodorus Siculus observed of the Gauls: “Certain of them despise death to such a degree that they enter the perils of battle without protective armour and with no more than a girdle about their loins” (*The Library of History*, 5.29). Germanic berserks, barefooted and bare-chested except for animal skin cloaks, are honored for fighting in the Roman emperor’s bodyguard on Trajan’s column (Speidel, 2002, 2004). Norway’s king Hacon the Good was Christian, but when surprised and badly outnumbered by an enemy army in 961 CE, he took the berserk approach:

Flung off his war clothes,
Slipped off his byrnie,
Before he began.
The gladdest of fighters...(*Heimskringla*,
The History of Hacon the Good, 32)

Laughing at danger, like discarding armor, especially when defeat and death seemed inevitable, was a bid for Valhalla and fame. When Byrhtnoth, the Anglo-Saxon leader of the battle of Maldon, was impaled by a Viking spear, he pushed his shield hard enough against it to break off the shaft, killed his attacker with a spear-thrust through the neck, and then slew another by driving his spear through his mail coat and into his heart:

The earl was the blither:
the brave man laughed then, said thanks to Metod
[Christian God]
for the day-work God gave him.
(*The Battle of Maldon*, ll. 146-148)

Similar to fighting bare-chested was discarding one's shield in battle or wearing it on the back instead of in front (Speidel, 2002, 2004). In the Viking version of the battle of Brunanburh in 937 CE,

Then Thorolf became so furious [berserk] that he cast his shield on his back, and, grasping his halberd with both hands, bounded forward dealing cut and thrust on either side. Men sprang away from him both ways, but he slew many.... He slew the man who bore the earl's standard, and cut down the standard-pole. After that he lunged with his halberd at the earl's breast, driving it right through mail-coat and body, so that it came out at the shoulders; and he lifted him up on the halberd over his head, and planted the butt-end in the ground. There on the weapon the earl breathed out his life in sight of all, both friends and foes. Then Thorolf drew his sword and dealt blows on either side, his men also charging. (*Egils saga Skalla-grímsonnar*, 53)

Two-handed sword or spear work in the text indicates that the warrior has discarded his shield (Speidel, 2004). For example, Asmund went berserk and sang, "Now without shield let us ply our warfare bare-breasted, with flashing blades...." When he had said this, he gripped his hilt with both hands, and, fearless of peril, swung his shield upon his back and slew many" (Saxo Grammaticus, *The Danish History*, 1). At Stamford Bridge, Harald Hardrade "grew so heated [berserk] that he rushed forth right out of the line and struck with both hands; then neither helm nor byrnie could stand against him" (*Heimskringla*, The History of Harald Hardrade, 92).

In battle trance, berserks were invulnerable to fire and blades. Imperviousness to fire is attested in two forms: the ability to swallow live coals and to walk through fire. Sivald's seven berserk sons "were such clever sorcerers that often, inspired with the force of sudden frenzy [berserk], they would roar savagely, bite their shields, swallow hot coals, and go through any fire that could be piled up...." (Saxo Grammaticus, *The Danish History*, 7).

Invulnerability to bladed weapons was sometimes attributed to animal skins worn into battle. According to one account of the battle of Stiklestad (1030 CE), Tore the

Hound (Thorir hund) and his band of berserks wore magic reindeer coats made by the Sami, who were considered master wizards, "and the king's sword would not bite where it struck the reindeer skin coat" (*Heimskringla*, The History of King Olav, 228). But in an earlier version, the Sami-crafted coats were made of wolf skins, "And men say that Bjorn the Stout hewed with his sword at Thorir that day. Yet wherever he attacked his sword refused to bite as though its edge had been turned" (*Heligasaga Ólafssonar Haraldssonar*, 91, cited in Blaney, 1972, p. 86).

Usually it is impossible to tell what berserks are wearing, but they cannot be cut. "When the roll of Harold's army was called, many were they that had fallen, and many were sore wounded...nor was there a man unwounded in the king's ship before the mast, except those whom iron bit not, to wit the Berserks" (*Egils saga Skalla-grímsonnar*, 9). In one epic battle two berserks Egil and Atli "went at it with a will, blow upon blow," and hacked their shields to pieces.

And when Atli's shield was of no use, then he cast it from him, and, grasping his sword with both hands, dealt blows as quickly as possible. Egil fetched him a blow on the shoulder, but the sword bit not. He dealt another, and a third. It was now easy to find parts in Atli that he could strike, since he had no cover; and Egil brandished and brought down his sword with all his might, yet it bit not, strike where he might. (*Egils saga Skalla-grímsonnar*, 68).

So effective was this invulnerability magic that berserks were said to blunt their enemy's blades with sorcery (e.g., Saxo Grammaticus, *The Danish History*, 7) like Odin (*Poetic Edda*, Hávamál, 148). Nevertheless its limitations were exploited by contemporaries, usually with blunt-force weapons, at least according to Christian sources. For instance, Halfdan, knowing that Hakon could dull swords with spells, made a huge mace to club him to death (Saxo Grammaticus, *The Danish History*, 7). Bludgeoning, Christian magic, and the limitations of fire invulnerability were combined in a story from several sources. An Icelander named Thorkell wanted to kill two berserks who "walked barefoot on burning coals" (*Vatnsdala saga*, 46), and agreed to convert to Christianity if Bishop Fredrek would help him do it. The bishop had Thorkell build three fires on the floor of the hall, which he hallowed in the name of the Christian god. He told Thorkell to surround the fires with benches full of brave fighters armed with clubs, "For no iron bites them, and

thus you shall beat them to death” (*Vatnsdæla saga*, 46). The berserks walked through the first fire unscathed, but the second one began to burn them, and when they tried to step out onto the floor the warriors on the benches bludgeoned them to death.

When berserks fought each other in single combat, they tried to bypass their opponent’s invulnerability. Leading his berserk band on horseback and wearing an unfastened helmet, Snaekoll challenged an old farmer to give them his daughter. Grettir, a berserk, who was accompanying the farmer, refused, found a way to wound Snaekoll severely early in the trance state and then kill him.

[Snaekoll] began to howl and to bite the rim of his shield. He held the shield up to his mouth and scowled over its upper edge like a madman. Grettir stepped quickly across the ground, and when he got even with the berserk’s horse he kicked the shield with his foot from below with such force that it struck his mouth, breaking the upper jaw, and the lower jaw fell down on to his chest. With the same movement he seized the viking’s helmet with his left hand and dragged him from his horse, while with his right hand he raised his axe and cut off the berserk’s head. (*Grettis saga*, 40)

Beowulf’s duel with Grendel was hand to hand. “Not blade on earth, no blacksmith’s art / Could ever damage” Grendel who “had conjured the harm from the cutting edge / Of every weapon” (*Beowulf*, ll. 801-804), so Beowulf, after a terrible struggle, dealt Grendel a fatal wound by tearing off his arm, including part of the shoulder (ll. 816-821). In the duel above, when Egil’s sword would not bite Atli, he threw down his arms, “and bounding on Atli, gripped him with his hands. Then the difference of strength was seen, and Atli fell right back, but Egil went down prone upon him and bit through his throat. There Atli died” (*Egils saga Skalla-grímsonnar*, 68).

In the battle trance, berserks could not always distinguish between friends and foes. In one account (*Egils saga Skalla-grímsonnar*, 40), Grim, subject to wolfishness toward evening, was playing ball late in the day, and in the heat of competition, killed one of his opponents and started to come after his own son in such a frightening way that a servant-woman intervened. He killed her.

Except in the heat of battle, it took time to work up to the battle trance, which did not last forever; when the state wore off, warriors were unusually vulnerable.

It is said of shape-strong men, or men with a fit of Berserk fury on them, that while the fit lasted they were so strong that naught could withstand them; but when it passed off, then they were weaker than their wont. Even so it was with Kveldulf. When the shape-strong fit went from him, then he felt exhaustion from the onset he had made, and became so utterly weak that he lay in bed. (*Egils saga Skalla-grímsonnar*, 27)

Not surprisingly, people waited for post-combat exhaustion to overcome berserks before trying to kill them (e.g., *Hervarar saga ok Heiðreks*, 4; *Eyrbyggja saga*, 28)

Explanations of Berserkerang.

Berserkerang is so well attested in the historical and legendary accounts that it has attracted a fair amount of scholarly attention, virtually none of it transpersonally oriented, to account for its unusual effects. Most explanations involve the ingestion of psychotropic drugs, with present-day touchstones being the superhuman strength demonstrated by people resisting restraint, commonly called excited delirium syndrome (EDS). EDS is a controversial diagnosis because it is usually given post-mortem. Neither the American Medical Association nor the American Psychological Association recognize it as a medical or mental health condition, but the National Association of Medical Examiners has recognized it for more than twenty years, especially in accounting for the sudden death of violent individuals whose restraint did not involve mechanical cause of death (such as asphyxiation from a chokehold). The American College of Emergency Physicians has also recognized EDS since 2009 (Flosi, 2011). EDS is characterized by bizarre, violent, and agitated behavior; combativeness; altered mental states and delirium; shouting; hyperactivity; extreme endurance and unusual strength; and autonomic dysregulation, including hyperthermia (raised body temperature) and sweating (Gill, 2014; Ross & Chan, 2006) usually followed by sudden death. Its precursor was Bell’s mania, first described in 1849 (Benzer, Najad, & Flood, 2013) among the institutionalized insane. Most modern documentation comes from the autopsies of detainees who died suddenly in police custody, and the post-mortems typically show long-term use of drugs not available in the ancient world, especially cocaine and amphetamine in various forms (Flosi, 2011; Gill, 2014) often in combination with alcohol, other recreational drugs, or excessive pharmaceutical drugs.

A related but non-delusional state, hypomania, is one of a range of poorly understood manic states in which people exhibit extraordinary powers, whether euphoric or aggressive, yet do not require hospitalization or result in catatonia or death (Lee, Huang, Hsu, & Chiu, 2012). Hypomania is characterized by inflated self-esteem or grandiosity, decreased need for sleep, talkativeness, distractability, increased involvement in goal-directed activities, and either elevated or irritable mood in the absence of hallucinations or delusions (APA, 1994). Hypomania, while far more congruent with aspects of berserkerang, like EDS, is considered an involuntary state, rather than one deliberately induced.

The dominant theory is that berserkerang was produced by consuming the hallucinogenic mushroom *Amanita muscaria* (fly agaric), an idea introduced in 1784 by Samuel Lorenzo Ödman without much evidence (Wasson, 1968). The hardihood of this falsity is attributable to a canard presented at an American Psychiatric Association conference and later published by physician Howard D. Fabing (1956). While the possibility of drugs cannot be dismissed in the limited situations when such preparation was possible (prior to battle), it is difficult to comprehend why Fabing's argument continues to be influential, despite glaring flaws: 1) Fabing cited no primary Viking Age sources and referred to a character named Berserk, who does not exist in the literature; 2) he drew spurious comparisons, noting that Siberian tribes used *Amanita muscaria* "orgiastically" (not in combat) and reported "prodigious feats of physical strength" (1956, p. 232), as though their behavior inexplicably bears on Norse warriors; 3) Fabing cited research that *Amanita muscaria* produces dilated eyes, convulsive gestures, visual and auditory hallucinations, singing and dancing (Jochelsen, cited in Fabing, 1956, p. 232) and "explosive diarrhea, profuse sweating, excessive salivation and vertigo" as well as complete disorientation, irrationality, and violence (Drew, cited in Fabing 233)—all of which would render a warrior unfit for combat; 4) he stated that bufotenine, the active ingredient of some poisonous toads, trees and seeds (none native to Europe or Iceland, nor related to *Amanita muscaria*), also brought on berserkerang because when he injected bufotenine into subjects—a technology not available to berserks—their faces darkened and they became "relaxed and languid" with severely impaired spatial perception (p. 236), symptoms contrary to those of fly agaric intoxication,

to berserkerang, and to combat. Fabing aside, all fly agaric mushrooms are known for the unpredictability of their effects, depending on the variety, habitat, amount ingested, and individual metabolism (persons with the same body weight taking similar doses have very different reactions; Benjamin, 1992; Buck, 1963; Hoegberg, Larsen, Sonne, Bang, & Skanning, 2008; Satora, Pach, Butryn, Hydzik, & Balicka-Slusarczyk, 2005). Symptoms include nausea, twitching, drowsiness, drop in blood pressure, sweating, salivation, auditory and visual distortions, mood changes, euphoria, relaxation, ataxia, and loss of equilibrium. Large doses can produce agitation, confusion, irritability, hallucinations, and seizures. Even if ingestion selectively sharpened perceptions and reflexes or heightened aggression—the opposite of what is suggested—the extreme variability and unpredictability in response would mitigate against it for combat.

Other intoxicant arguments are similarly flawed. Wernick (1979) suggested that berserks were drunk on alcohol, which may have included bog myrtle (*Myrica gale* or *Gale palustris*), a plant used in Scandinavia to flavor alcoholic beverages. Drunkenness does not conduce to effective fighting, and bog myrtle, an abortifacient that causes gastric upset and severe headaches in large doses, would further reduce battle fitness. Drug arguments are frequently used to rationalize outstanding warrior feats by the losing side, with similarly little grasp of combat demands, toxicology, and extraordinary human capability. The British, for example, alleged that spear-toting Zulu warriors defeated them at Isandlwana because the Zulus ate *dagga* (marijuana), which rendered them fearless and trancelike in the face of the imperial forces' technologically superior breech-loading rifles, rockets, and small cannons (Booth, 2003). Marijuana is not a stimulant, but even today confusion is propagated by "forensic battle experts," such as Ian Knight (2011) who specializes in South African historical battles and alleges that tetrahydrocannabinol (THC), the most psychoactive ingredient in cannabis, produces frenzy. THC may increase anxiety and reduce physical discomfort, which would be useful in battle, but it also impairs coordination, reaction time, and concentration (e.g., Heishman, Huestis, Henningfield, & Cone, 1990). The most intelligent arguments have ascribed the combat ingestion of psychotropic substances to a desire to obscure full realization of the horrors of battle (Roscoe, 2007) rather than to improve fighting capabilities.

Other explanations for berserkerang have included self-induced hysteria poorly distinguished from self-induced ecstatic states but described as a pathology), epilepsy, mental illness, or genetic flaws (Byock, 1995; Carlson, 2006; Foote & Wilson, 1970), but none accounts for more than a fraction of the Norse data, much less for historical accounts of similar pagan ecstatic warriors from different cultures. Geraty (2015) advanced a theory that “berserk behavior is due to heightened exposure to extreme violence, otherwise known as post-traumatic stress disorder” (p. 11), based on comparisons with psychiatrist Jonathan Shay’s (1994) book *Achilles in Vietnam*, regarding his work with American veterans of the Vietnam War. As brilliant as Geraty’s analysis is in some areas, many comparisons just do not hold up beyond universal behaviors seen in combat. Her most cogent argument was that some of the later-documented berserks and traumatized veterans exhibited persistent hypervigilance and potential for explosive violence when no longer in combat. Such a judgment is somewhat difficult to assess owing to the bias of Norse sources and a cross-cultural gap spanning a millennium: given the unpredictable, ubiquitous violence of medieval societies, aggressive hypervigilance was, in fact, appropriate and highly adaptive, including for noncombatants.

The APA has confused and pathologized berserkerang with comparisons to other poorly understood states from different cultures. The last three *Diagnostic and Statistical Manuals* (DSM; APA, 1980, 1994, 2013) have listed a category called intermittent explosive disorder (IED) likened to berserkerang and other “culture-bound syndromes,” such as the Malaysian *amok*, with which berserkerang is clinically compared (APA, 1994, p. 845; i.e., “going berserk” and “running amok”). Culturally-bound syndromes were dropped from the DSM-5 as a category. IED, poorly defined (e.g., Ahmed, Green, McCloskey, & Berman, 2010; Parzen, 2003), is considered a disruptive impulse control and conduct disorder characterized by unpremeditated explosive outbursts of rage disproportionate to the situation, which may happen more or less chronically and frequently, or with relatively infrequent, high-intensity outbursts resulting in injury or destruction of property (APA, 1980, 1994, 2013). An illustration given of the way the APA understands *amok*, similar to the way it regards “going berserk,” was that of a Filipino man who, upon learning that his wife was having an affair, killed her parents, injured her and their son, and then set fire to the house of his wife’s lover’s brother, which killed two children living there (Parzen, 2003, p.

142). IED and the related culturally-bound conditions as defined by the APA match little in the primary berserk sources.

Anthropologists of war magic provide much more valid insights for berserkerang, especially the spiritual foundations of war magic in general. Southeast Asian cultures, for example, have an ecstatic champion tradition very similar to the Indo-European heritage. “*Amok*, far from being an individual, disorganized and insane activity”—as it, and going berserk, are now understood popularly and by the APA—was a “coordinated, group form of violence... unleashed through invulnerability rituals” (Farrer, cited in Reid, 1988, p. 125). The Javanese, noted for ferocity in combat, used a vanguard of *amok* warriors as shock troops to intimidate, scatter, and kill the enemy in the opening moves of a battle (Reid, 1988). *Amoks*, after cultivating a trancelike state of invulnerability through elaborate spiritual and martial arts rituals, furiously charged the enemy, slashing with swords and krises. Even the Balinese, whose strategies relied more on systematic formations, used *amoks*, who wore white to symbolize their self-sacrifice, in leading the attack. If these initial *amok* attacks succeeded in killing the enemy leader, it was often enough to decide the battle before the regular troops were engaged.

Although cross-cultural shapeshifting magic lags in systematic research, the invulnerability claims of berserkerang now have considerable backing. In fact, invulnerability demonstrations have figured prominently in almost all religions since ancient times (e.g., Boles, 1997; Kane, 1982; William & Hood, 2015). Fire-walking, common to many religions as a demonstration of attainment, is now a popular activity at Western self-development seminars bolstered by intense group bonding, singing, and dancing. *Silat*, the foundational martial art of southeast Asia, retains its spiritual basis, as do most other Asian martial arts. Invulnerability is considered a sign of spiritual attainment, including fire-walking, eating broken glass, climbing barefoot up a ladder of knives, and dipping one’s hands into cauldrons of scalding water, boiling oil, or molten tin (Crystal & Yamashita, 1987; Farrer 2009; Waterson 1995). Public displays involve withstanding blows from iron spikes, washing in sulfuric acid, slicing one’s tongue with a machete without shedding blood, and regurgitating live bats “without suffering any physical harm” (Wilson, cited in Nilan, Demartoto, & Wibowo, 2014, p. 74). *Silat* folklore describes techniques that allow the fighter to attack from afar using energy alone without physically touching the opponent (Farrer, 2009),

similar to Boðvar Bjarki's bi-location, something modern athletes and martial artists attest (M. Murphy, personal communication, October 8, 2015).

North African Isawiyya Moslem sects are noted for "eating fire and cutting themselves in ecstasy" (Brett, 1988, p. 38). Adherents give public displays of trance-dancing, slashing their torsos or heads as a sign of devotion and personal relationship with saints (Crapanzano, 1973). According to an early account, becoming-animal was also involved:

One of the Tunisian soldiers ... seized a sword and began to lacerate his stomach. The blood flowed freely, and he imitated all the time the cries and movements of the camel. We soon had a wolf, a bear, a hyena, a jackal, a leopard, and a lion.... A large bottle was broken up and eagerly devoured.... Twenty different tortures were going on in twenty different parts of the hall. (Littell & Littell, 1882, p. 424).

According to Hall (2001, 2004, 2011), adepts of the Sufi Tariqa Casnazaniyyah school, who pierce their bodies with spikes, blades, glass, and the like, have demonstrated such complete control over pain, bleeding, and infection that their wounds heal within 4-10 seconds. Followers have been observed demonstrating instantaneous healing of deliberately caused bodily damage, such as jamming spikes and skewers into their bodies, hammering daggers into their skulls and clavicles, and chewing and swallowing glass and sharp razor blades. Hall, trained in the practice himself, has reproduced it reliably in laboratory conditions (2004, 2011; Hall, Don, Hussein, White, & Hostoffer, 2001). He averred that anyone could develop the capacity, as a transferable ability (not the result of years of practice) "based on a spiritual link...to the current Shaikh Master of the Tariqa Casnazaniyyah Sufi School" (2004, p. 93), but that the same phenomena have also been observed among Brazilian trance surgeons. In such procedures, there was "apparently no postoperative infection or pain, bleeding is minimal" (Hall, 2004, p. 93). Based on EEG readings of Sufi participants during the wounding process, Hall claimed that these phenomena were not related to "hypnosis, realization, altered states of consciousness, or trance states such as relaxation or meditative states" (2004, p. 93; 2001, 2011). However, the Sufi demonstrations were a deliberate, planned activity; if adepts were wounded accidentally, they did not experience rapid healing.

Going Berserk

Moreover, the human body can only endure so much, as the overwhelmed berserks' deaths indicate. Zatsiorsky (2006) has calculated the theoretical maximum an individual's muscles, tendons, and bones can lift or withstand, an absolute strength that cannot be exceeded. The maximum an ordinary person can lift, for example, using conscious effort (as in a gym) is about two-thirds of his or her absolute strength, but some professional athletes in intense competitions have reached 92% of their body's absolute strength. Similar limits have been identified with tragic results in extreme martial arts tests of invulnerability. In 2012, students of *pencak silat* (an Indonesian form) died in the course of progressively difficult tests of invulnerability (Fointuna, 2012). A trio of men from one *silat* school ingested rat poison, and when none sickened, they lay down in the street while motorcyclists drove over their bodies several times without causing injury. Then they had a four-wheel vehicle loaded with passengers roll over their bodies, which crushed and killed them. In a separate incident the previous day, two other *pencak silat* practitioners died from severe burns. They had been testing their invulnerability to weapons and fire but were unable to withstand being doused with an unspecified acid. Reports of snake-bite fatalities among Appalachian Christian snake handlers make headlines with some frequency (e.g., Ball, 2015).

These few examples demonstrate the similarity between apparently superhuman abilities to withstand blades and fires demonstrated by berserks and the spiritually-based invulnerability techniques from other cultures that may be an unrecognized, universal human capacity (c.f., Murphy, 1992; Kelley, 2007). The stories of the berserks were not far-fetched, and if anything, point to a significant gap in transpersonal and body-mind studies.

Conclusion

Warrior-shamanism and dark magic are universal phenomena in which becoming-intense and becoming-animal are not only adaptive but also productive of nonordinary states and transpersonal identifications that take people out of their individual concerns, rendering them willing to sacrifice personal safety and even survival for a greater goal. Berserkergang is a particular version of war magic, probably the best documented of an ancient Indo-European ecstatic warrior tradition celebrated in classic texts that remain influential

today, such as the *Rig Veda* and the *Iliad*. Part of the largely unknown European pagan heritage, berserkerang as a form of battle trance illustrates only a fraction of the horizons war magic opens up for exploration, especially transcendence through self-sacrifice, spiritual trial by ordeal, different ways of understanding transpersonal identification and existential meaning, and supraphenomenal mind-body capabilities with an emphasis on embodiment. Though part of a specific Indo-European heritage, berserkerang is related to universal, ubiquitous kinds of war magic, including martial arts spirituality, spiritual invulnerability practices, and identification with gods or seeking divine favor through religiously-inspired violence. Berserkerang can provide insights for effective battlefield preparation and recovery.

References

- Adam of Bremen (2002). *History of the Archbishops of Hamburg-Bremen*. (F. J. Tschan, Trans.). New York, NY: Columbia University Press.
- Adolphson, M. S. (2007). *The teeth and claws of the Buddha: Monastic warriors and sohei in Japanese history*. Honolulu, HI: University of Hawaii Press.
- American Psychiatric Association. (1980). *Diagnostic and statistical manual of mental disorders* (3rd ed.). Arlington, VA: American Psychiatric Association.
- American Psychiatric Association. (1994). *Diagnostic and statistical manual of mental disorders* (4th ed.). Arlington, VA: American Psychiatric Association.
- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Arlington, VA: American Psychiatric Association.
- Ahmed, A. O., Green, B. A., McCloskey, M. S., & Berman, M. E. (2010). Latent structure of intermittent explosive disorder in an epidemiological sample. *Journal of Psychiatric Research*, 44(10), 663–672. doi:10.1016/j.jpsychires.2009.12.004 Retrieved from <http://www.sciencedirect.com/science/article/pii/S0022395609002763>
- Ball, M. M. (2015). Targeting religion: Analyzing Appalachian proscriptions on religious snake handling. *Boston University Law Review*, 95(4), 1425–1450. Retrieved from <http://search.proquest.com/docview/1710788133?accountid=25304>
- Barlaam ok Josaphats saga: En religiös romantisk fortælling om Barlaam og Josaphat*. (1851). (K. H. Sverressön, Ed.). Christiania, Norway: Feilberg & Landmarks Forlag. Retrieved from <https://archive.org/details/barlaamsokjosap01ungegoog>
- Benjamin, D. R. (1992). Mushroom poisoning in infants and children: The *Amanita pantherina/muscaria* group. *Journal of Toxicology: Clinical Toxicology*, 30(1), 13–22. doi:10.3109/15563659208994442 Retrieved from <http://search.proquest.com/docview/72831982?accountid=25304>
- Benzer, T. I., Najad, S. H., & Flood, J. G. (2013). Case 40-2013: A 35-year-old man with agitation and paranoia. *New England Journal of Medicine*, 369(26), 2536–2545. Retrieved from <http://search.proquest.com/docview>. doi:10.1056/NEJMcpc1304051
- Blaney, B. (1972). *The berserkr: His origin and development in Old Norse Literature* (Doctoral Dissertation). Retrieved from ProQuest Dissertations and Theses. (Accession Order No. AAT 302695545)
- Boles, J. B. (1997). Taking up serpents: Snake handlers of eastern Kentucky. *The American Historical Review*, 102(1), 195–196. doi:10.2307/2171416 Retrieved from <http://search.proquest.com/docview/199875742?accountid=25304>
- Booth, M. (2003). *Cannibis: A history*. New York, NY: Bantam.
- Brennu-njal's saga (The story of Burnt Njal)*. (1861). (G. W. DaSent, Trans.) Retrieved from http://sagadb.org/brennu-njals_saga.en
- Brett, M. (1988). Islam in North Africa. In P. Clark (Ed.), *The world's religions: Islam* (pp. 23–47). London, UK: Routledge.
- Buck, R. W. (1963). Toxicity of *Amanita muscaria*. *Journal of the American Medical Association*, 185, 663–664. doi:10.1001/jama.1963.03060080059020 Retrieved from <http://search.proquest.com/docview/83305722?accountid=25304>
- Burkert, W. (1992). *The orientализing revolution: Near Eastern influences on Greek culture in the Early Archaic Age* (M. E. Pinder & W. Burkert, Trans.). Cambridge, MA: Harvard University Press.
- Byock, J. L. (1995). Egil's bones. *Scientific American*, 272(1), 82–87. doi:10.1038/scientificamerican0195-82 Retrieved from <http://search.proquest.com/docview/223269346?accountid=25304>
- Carlson, E. R. (2006). *The crisis of violence: Warfare, genetics, and culture in Old English and Old Norse texts* (Doctoral Dissertation). Retrieved from ProQuest Dissertations and Theses. (Accession Order No. AAT 2007651938)

- Cebrián, R. B. (2010). Some Greek evidence for Indo-European youth contingents of shape shifters. *The Journal of Indo-European Studies*, 38(3–4), 343–357. Retrieved from <http://search.proquest.com/docview/1095733308?accountid=25304>
- Crapanzano, V. (1973). *The hamadsha: A study in Moroccan ethnopsychiatry*. Berkeley, CA: University of California Press.
- Crystal, E., & Yamashita, S. (1987). Power of gods: Ma'bugi' ritual of the Sa'dan Toraja. In R. S. Kipp & S. Rogers (Eds.), *Indonesian religions in transition* (pp. 48–70). Tucson, AZ: University of Arizona Press.
- Dalton, J. (2011). *The taming of the demons: Violence and liberation in Tibetan Buddhism*. New Haven, CT: Yale University Press.
- Danielli, M. (1945). Initiation ceremonial from the Norse literature. *Folklore*, 56(2), 229–245. doi: 10.1080/0015587X.1945.9717764
- Davidson, H. R. E. (1988). *Myths and symbols in pagan Europe: Early Scandinavian and Celtic religions*. Syracuse, NY: Syracuse University Press.
- Davidson, H. R. E. (1990). *Gods and myths of northern Europe*. New York, NY: Penguin.
- Deleuze, G., & Guattari, F. (2004). *A thousand plateaus: Capitalism and schizophrenia* (B. Massumi, Trans.). London, UK: Continuum.
- Diodorus Siculus. (1933–1967). *The library of history* (C. H. Oldfather, Trans.). Cambridge, MA: Harvard University Press. Retrieved from http://penelope.uchicago.edu/Thayer/E/Roman/Texts/Diodorus_Siculus/home.html
- Duchesne, R. (2009). The aristocratic warlike ethos of Indo-Europeans and the primordial origins of Western civilization—part two. *Comparative Civilizations Review*, 61, 13–51. Retrieved from <http://search.proquest.com/docview/205825332?accountid=25304>
- Egils saga Skalla-Grímssonar (Egil's Saga)*. (1893). (W. C. Green, Trans.) Retrieved from http://sagadb.org/egils_saga.en#1
- Ehrenreich, B. (1997). *Blood rites: Origins and history of the passions of war*. New York, NY: Metropolitan Books.
- Eliade, M. (1958). *Rites and symbols of initiation: The mysteries of birth and rebirth*. (W. R. Trask, Trans.). New York, NY: Harper Torchbooks.
- Eliade, M. (1976). *Shamanism: Archaic techniques of ecstasy* (W. R. Trask, Trans.). Princeton, NJ: Princeton University Press.
- Erbyggja saga The Saga of the Ere-Dwellers*. (1892). (W. Morris, & E. Magnusson, Trans.) Retrieved from http://sagadb.org/eybyggja_saga.en
- Fabing, H. D. 1956). On going berserk: A neurochemical inquiry. *The Scientific Monthly*, 83, 232–237. Retrieved from <http://search.proquest.com/docview/615324396?accountid=25304doi:10.1176/ajp.113.5.409>
- Farrer, D. S. (2009). *Shadows of the prophet: Martial arts and Sufi mysticism*. New York, NY: Springer Science+ Business Media. doi:10.1007/978-1-4020-9356-2
- Farrer, D. S. (2013). Becoming-animal in the Chinese martial arts. In P. Dransart (Ed.), *Living beings: Perspectives on interspecies engagements*. ASA Monographs No. 50. London, UK: Bloomsbury.
- Farrer, D. S. (2014). Cross-cultural articulations of war magic and warrior religion. *Social Analysis*, 58(1), 1–24. doi:10.3167/sa.2014.580101
- Flosi, E. (2011). Sudden in-custody deaths: Exploring causality & prevention strategies. *The Forensic Examiner*, 31–48.
- Fointuna, Y. (2012, February 22). Four die in extreme martial arts tests. *The Jakarta Post*. Retrieved from <http://www.thejakartapost.com/news/2012/02/22/four-die-extreme-martial-arts-tests.html>
- Foote, P. G., & Wilson, D. M. (1970). *The Viking achievement*. London, UK: Sidgwick & Jackson.
- Fortson, B. W. IV. (2010). *Indo-European language and culture: An introduction* (2nd ed.). Chichester, United Kingdom: John Wiley & Sons.
- Geraty, L. F. L. 2015). Berserk for berserker: Introducing combat trauma to the compendium of theories on the Norse berserker. (Doctoral dissertation). University of Iceland. Háskóli Íslands, Hugvísindasvið. Retrieved from <https://www.google.com/search?q=Geraty%2C+L.+F.+L.+%282015%29.++Berserk+for+berserker&ie=utf-8&oe=utf-8#q=Geraty%2C+Berserk+for+berserker>
- Gibson, P. V. (2011). Warsong: Dynamics of the cadence in military training. Retrieved from ProQuest Dissertations and Theses. (Accession Order No. AAT 2013-99200-327)
- Gill, J. R. (2014). The syndrome of excited delirium. *Forensic Scientific Medical Pathology*, 10, 223–228. Retrieved from <http://search.proquest.com> doi 10.1007/s12024-014-9530-2
- Grettis saga (Grettir's Saga)*. (1900). (W. Morris, & E. Magnusson, Trans.) Retrieved from http://sagadb.org/grettis_saga.en

- Grossman, D. (1996). *On killing: The psychological cost of learning to kill in war and society*. Boston, MA: Little, Brown.
- Guðmundsdóttir, A. (2007). The werewolf in medieval Icelandic literature. *The Journal of English and Germanic Philology*, 106(3), 282.
- Gurevich, A. (1995). *The origins of European individualism*. Oxford, UK: Blackwell.
- Hall, H. (2011). Sufism and healing. In H. Walach, S. Schmidt, & W. B. Jonas, (Eds), *Neuroscience, consciousness and spirituality: Studies in neuroscience, consciousness, and spirituality*, Vol. 1 (pp. 164–278). New York, NY: Springer. doi:10.1007/978-94-007-2079-4_16
- Hall, H. R. (2001). The Islamic Sufi tradition and healing. In M. S. Micozzi (Ed.), *Fundamentals of complementary and alternative medicine* (2nd ed.; pp. 381–386). Philadelphia, PA: Churchill Livingstone.
- Hall, H. R. (2004). Bringing Sufi rapid healing methods into the laboratory. *Alternative & Complementary Therapies*, 10(2), 90–94. Retrieved from online.liebertpub.com/doi/pdf/doi:10.1089/107628004773933334
- Hall, H. R., Don, N. S., Hussein, J. N., White, E., & Hostoffer, R. (2001). The scientific study of unusual rapid wound healing: A case report. *Advances in Mind-Body Medicine*, 17(3), 203–209. Retrieved from <http://search.proquest.com/docview/71197569?accountid=25304>
- Harner, M. (1980). *The way of the shaman: A guide to power and healing*. New York, NY: Harper & Row.
- Hasenfratz, H-P. (2011). *Barbarian rites: The spiritual world of the Vikings and Germanic tribes*. (M. Moynihan, Ed. & Trans.). Rochester, VT: Inner Traditions.
- Heaney, S. (Trans.). (2000). *Beowulf: A new verse translation*. New York, NY: W. W. Norton.
- Heishman, S.J., Huestis, M.A., Henningfield, J.E., & Cone, E. J. (1990). Acute and residual effects of marijuana: Profiles of plasma THC levels, physiological, subjective, and performance measures. *Pharmacology Biochemistry, and Behavior*, 37(3), 561–565. Retrieved from <http://search.proquest.com/docview/80324019?accountid=25304> doi:10.1016/0091-3057(90)90028-G
- Henry of Huntingdon. (1853). *The chronicle of Henry of Huntingdon, comprising the history of England, from the invasion of Julius Caesar to the accession of Henry II*. (T. Forester, Ed. and Trans.) London, UK: Henry G. Bohn. Retrieved from <https://archive.org/details/chroniclehenryh00foregoog>
- Hervarar saga ok Heiðreks. (The Saga of Hervor King Heidrek the Wise)*. (2003). (P. Tunstall, Trans.) Retrieved from <http://www.northvegr.org/sagas%20annnd%20epics/legendary%20heroic%20and%20imaginative%20sagas/old%20heithinn%20tales%20from%20the%20north/018.html>
- Hoegberg, L. C., Larsen, L., Sonne, L., Bang, J., & Skanning, P. G. (2008). Three cases of Amanita muscaria ingestion in children: Two severe courses. *Clinical Toxicology*, 46(5), 407–408. doi: 10.1080/15563650802071703
- Hornklofi, Þ. (1936). Hrafnsmál (Haraldskvæði; The lay of Harald). In L. M. Hollander (Ed. & Trans.), *Old Norse poems*. New York, NY: Columbia University Press. Retrieved from <http://www.sacred-texts.com/neu/onp/onp11.htm>
- Hrólfs saga kraka. (The saga of Hrolf Kraki and his champions)*. (2003). (P. Tunstall, Trans.) Retrieved from <http://www.northvegr.org/sagas%20annnd%20epics/legendary%20heroic%20and%20imaginative%20sagas/old%20heithinn%20tales%20from%20the%20north/034.html>
- Jordania, J. (2011). *Why do people sing? Music in human evolution*. Tblisi, Georgia: LOGOS.
- Kane, S. M. (1982). Holiness ritual fire handling: Ethnographic and psychophysiological considerations. *Ethos*, 10(4), 369–384. doi:10.1525/eth.1982.10.4.02a00060 Retrieved from <http://www.jstor.org/stable/3696947>
- Kalweit, H. (1988). *Dreamtime & inner space: The world of the shaman*. Boston, MA: Shambhala.
- Kelley, E. W. (2007). Psychophysiological influence. In E. F. Kelley, E. W. Kelley, A. Crabtree, A. Gauld, M. Grosso, & B. Greyson (Eds.), *Irreducible mind: Toward a psychology for the 21st century* (pp. 117–240). New York, NY: Rowman & Littlefield.
- Kershaw, P. K. (2000). The one-eyed god: Odin and the (Indo-)Germanic Männerbünde. Washington, D.C.: *Journal of Indo-European Studies*, Monograph No. 36. Retrieved from <http://search.proquest.com/docview/742258579?accountid=25304>
- Knight, I. (2011). *Zulu rising: The epic story of Isandliwana and Rorke's drift*. London, UK: Pan McMillan.
- Kogan, N. (1997). Reflections on aesthetics and evolution. *Critical Review*, 11(2), 193–210. doi:10.1080/08913819708443453 Retrieved from <http://search.proquest.com/docview/42912471?accountid=25304>
- Larson, S. (1988). *The shaman's doorway: Opening imagination to power and myth*. Barrytown, NY: Station Hill Press.

- Lee, B-S., Huang, L-L., Hsu, W-Y., Chiu, N-Y. (2012). Clinical features of delirious mania: A series of five cases and a brief literature review. *BMC Psychiatry* 12, 65. doi:10.1186/1471-244X-12-65 Retrieved from <http://www.biomedcentral.com/1471-244X/12/65>
- Leo the Deacon. (2005). *The history of Leo the Deacon: Byzantine military expansion in the tenth century* (A-M. Talbot, & D. F. Sullivan, Eds. & Trans.). Washington, D. C.: Dumbarton Oaks Research Library and Collection. Retrieved from erpconnect.umd.edu/~sullivan/LeoTheDeacon.pdf
- Lincoln, B. (1991). *Death, war, and sacrifice: Studies in ideology and practice*. Chicago, IL: University of Chicago Press.
- Littell, E., & Littell, R. S. (1882). Inside Kairwan. *Littell's Living Age*, 152, 412–425. Boston, MA: Littell. Retrieved from https://books.google.com/books?id=T_
- Livius, Titus. (1905). *The history of Rome*. (Roberts, Trans.). London, UK: J. M. Dent & Sons. Retrieved from <http://mcadams.posc.mu.edu/txt/ah/Livy/Livy38.html>
- MacLean, P. D. (1973). *A triune concept of the brain and behavior*. Toronto, Ontario: University of Toronto Press.
- MacLean, P. D. (1990). *The triune brain in evolution: Role in paleocerebral functions*. New York, NY: Plenum.
- Malmesbury, William of. (1847). *William of Malmesbury's chronicle of the kings of England. From the earliest period to the reign of King Stephen* (J. A. Giles, Ed. & Trans.). London, UK: Henry G. Bohn. Retrieved from <https://archive.org/stream/williamofmalmesb1847will#page/n5/mode/2up>
- McNeill, W. H. (1995). *Keeping together in time: Dance and drill in human history*. Cambridge, MA: Harvard University Press.
- Miller, D. A. (1998). On the mythology of Indo-European heroic hair. *Journal of Indo-European Studies*, 26 (1/2), 41–60. Retrieved from <http://search.proquest.com/docview/206857569?accountid=25304>
- Miller, D. A. (2000). *The epic hero*. Baltimore, MD: Johns Hopkins University Press.
- Miller, W. I. (1990). *Bloodtaking and peacemaking: Feud, law, and society in saga Iceland*. Chicago, IL: University of Chicago Press. doi:10.7208/chicago/9780226526829.001.0001
- Murphy, M. (1992). *The future of the body: Explorations into the further evolution of human nature*. New York, NY: Tarcher-Putnam.
- Nettle, B. (1961). Polyphony in North American Indian music. *Musical Quarterly*, 47, 354–362. doi:10.1093/mq/XLVII.3.354 Retrieved from <http://search.proquest.com/docview/740766917?accountid=25304>
- Nilan, P., Demartoto, A., & Wibowo, A. (2010). Youthful warrior masculinities in Indonesia. In J. Gelver (Ed.), *Masculinities in a global era (International and Cultural Psychology, 4)*, 69–84. New York, NY: Springer Science+Business Media. doi:10.1007/978-1-4614-6931-5_4
- Parzen, M. D. (2003). Toward a culture-bound syndrome-based insanity defense? *Culture, Medicine and Psychiatry*, 27, 131–155. doi:10.1023/A:1024217907209
- Pieslak, J. (2009). *Sound targets: American soldiers and the music of the Iraq War*. Bloomington, IN: Indiana University Press.
- Poliakoff, M. B. (1987). *Combat sports in the ancient world: Competition, violence, and culture*. New Haven, CT: Yale University Press.
- Polybius. (1889). *The histories of Polybius* (E. S. Shuckburgh, Trans.). London, UK: Macmillan. Retrieved from <http://www.gutenberg.org/files/44125/44125-h/44125-h.htm>
- Price, N. S. (2002). *The Viking way: Religion and war in late Iron Age Scandinavia*. Uppsala, Sweden: Department of Archaeology and Ancient History, Uppsala University.
- Reid, A. (1988). *Southeast Asia in the age of commerce, 1450–1680*. Volume 1, *The lands below the winds*. New Haven, CT: Yale University Press.
- Roscoe, P. (2007). Intelligence, coalitional killing, and the antecedents of war. *American Anthropologist*, 109(3), 485–495. doi:10.1525/aa.2007.109.3.485 Retrieved from <http://search.proquest.com/docview/616977757?accountid=25304>
- Ross, D., & Chan, T. (2006). *Sudden deaths in custody*. Totowa, NJ: Humana Press. doi:10.1007/978-1-59745-015-7
- Satora, L., Pach, D., Butryn, B., Hydzik, P., & Balicka-Slusarczyk, B. (2005). Fly agaric (*Amanita muscaria*) poisoning, case report and review. *Toxicicon*, 45(7), 941–943. doi:10.1016/j.toxicicon.2005.01.005 Retrieved from <http://search.proquest.com/docview/67847386?accountid=25304>
- Saxo Grammaticus. (1905). *The Danish history* (O. Elton, Trans.) New York, NY: Norroena Society. Retrieved from <http://www.gutenberg.org/files/1150/1150-h/1150-h.htm>

- Sayers, W. (1991). Serial defamation in two medieval tales: The Icelandic Ölkofra Þátrr and the Irish Scéla Mucce Meic Dathó. *Oral Tradition*, 6(1), 35–57. Retrieved from <http://search.proquest.com/docview/55071954?accountid=2530>
- Shay, J. (1994). *Achilles in Vietnam: Combat trauma and the undoing of character*. New York, NY: Simon & Schuster.
- Simek, R. (1993). *Dictionary of northern mythology*. (A. Hall, Trans.). Cambridge, UK: D. S. Brewer.
- Speidel, M. P. (2002). Berserks: A history of Indo-European “mad warriors.” *Journal of World History*, 13(2), 253–290. doi:10.1353/jwh.2002.0054 Retrieved from <http://search.proquest.com/docview/225236145?accountid=25304>
- Speidel, M. P. (2004). *Ancient Germanic warriors: Warrior styles from Trajan’s column to Icelandic sagas*. New York, NY: Routledge.
- Sturluson, S. (1990). *Heimskringla: The lives of the Norse kings* (E. Monson, Ed. & Trans.). New York, NY: Dover.
- Sturluson, S. (1987). *Edda*. (A. Faulkes, Ed. & Trans.). North Calrendon, VT: Everyman.
- Tacitus. (1971). *The agricola and the Germania*. (H. Mattingly, Trans.). Harmondsworth, UK: Penguin.
- The battle of Maldon*. (1982). (J. A. Glenn, Trans.). Retrieved from <http://lightspill.com/poetry/oe/maldon.html>
- The Poetic Edda. (1962). (L. M. Hollander, Trans.). Austin, TX: University of Texas Press.
- Vatnsdæla saga (The Saga of the People of Vatnsdal, A. Wawn, Trans.). (2000). In *The sagas of Icelanders: A selection*, (pp. 185–269). New York, NY: Viking.
- Volsunga saga. (1888). The story of the Volsungs, with excerpts from the Poetic Edda. (W. Morris, & E. Magnusson, Trans.). London, UK: Walter Scott Press. Retrieved from <http://www.sacred-texts.com/neu/vlsng>.
- Walsh, R. N. (2007). The world of shamanism: New views of an ancient tradition. Woodbury, MN: Llewellyn.
- Wasson, R. G. (1968). *Soma: Divine mushroom of immortality*. New York, NY: Harcourt Brace Jovanovich.
- Waterson, R. (1995). Entertaining a dangerous guest: Sacrifice and play in the Ma’pakorong ritual of the Sa’dan Toraja. *Oceania*, 66(2), 81–102. doi:10.1002/j.1834-4461.1995.tb02538.x Retrieved from <http://search.proquest.com/docview/222373729?accountid=25304>
- Wernick, R. (1979). *The Vikings*. Alexandria, VA: Time-Life Books.
- Whitehead, N. L. (2002). *Dark shamans: Kanaimà and the poetics of violent death*. Durham, NC: Duke University Press. doi:10.1215/9780822384304
- Whitehead, N. L., & Wright, R. (Eds.). (2004). *In darkness and secrecy: The anthropology of assault sorcery and witchcraft in Amazonia*. Durham, NC: Duke University Press. doi:10.1215/9780822385837
- Williamson, W. P., & Hood, R. W., Jr. (2015). Poison-drinking in obedience to the faith: A phenomenological study of the experience. *Mental Health, Religion & Culture*, 18(3), 196–206. doi:10.1080/13674676.2015.1033685
- Wilson, L. (2015). *Martial arts and the body politic in Indonesia*. Boston, MA: Brill. doi:10.1163/9789004289352
- Zatsiorsky, V. M., & Kraemer, W. J. (2006). *Science and practice of strength training* (2nd ed.). Champaign, IL: Human Kinetics.

About the Author

Jenny Wade, PhD, is a developmental psychologist specializing in the structuring of consciousness and how variations in awareness can expand human potential. Her research of variations in normal adult consciousness forms the basis of a leadership and organization consulting practice, most recently designing a radically transformative leadership program sponsored by the International Peace Foundation and Prince Alfred of Liechtenstein. Particular interests are prenatal and near-death consciousness, naturally occurring altered states, and an astronomical basis for ancient Indo-European paganism. Author of *Changes of Mind: A Holonomic Theory of the Evolution of Consciousness, Transcendent Sex: When Lovemaking Opens the Veil* and numerous academic articles, she oversees a wide range of doctoral research projects, including developmental psychology, normal and altered states of all kinds, intervention studies, cross-cultural studies, spontaneous openings, dreams, sexuality, men’s and women’s studies, leadership and organization development, spirituality, and spontaneous recovery.