The nightmare experience, sleep paralysis and witchcraft accusations[1]

The historical record shows that personal experience of bewitchment was multifarious, concerning livestock, goods, chattels, and agricultural processes. However, over the last five centuries the majority of those experiences that were deemed serious enough to lead to the formal accusation, prosecution, or physical assault of supposed witches, concerned people suffering from ill health, or some other form of physical or mental discomfort. Trying to identify exactly what sort of ailments and bodily experiences people attributed to witchcraft is obviously a rather speculative task, bearing in mind the sketchy description of symptoms in the records, and the limited diagnostic categories of illness available to people in the past. Yet, from the descriptions provided by those suffering from supposed witchcraft in early modern and later trial records, it is possible to recognise a number of modern categories of disease and physical ailments, such as tuberculosis, jaundice, malaria, and rheumatism. Other medical conditions of a psychological or neurophysiological nature, such as depression, schizophrenia and epilepsy are also recognizable. This article will focus on one such identifiable condition, known as sleep paralysis. It has only been properly medically categorised in the last fifty years, and has recently been attracting considerable attention from psychologists and neuroscientists, yet the experience, as described below, has been a matter of medical discussion for many centuries. In the English language, one specific manifestation of the sleep paralysis experience was known as the nightmare, and in many European cultures its cause was attributed to witchcraft. This 'nightmare' experience can also be identified in other accounts where people claimed to have been nocturnally oppressed by such related supernatural beings as the Devil, animalistic fairies, and the spirits of the dead. By combining historical analysis with contemporary medical knowledge of sleep paralysis, and by comparing contemporary manifestations of the experience with those found in the historical record, further light is shed on human encounters with the supernatural in both past and present societies.

Sleep paralysis is not a rare phenomenon. Recent surveys amongst a variety of populations around the world suggest that 20-45% of people experience at least one sleep paralysis episode in their lifetimes (Kotorii et al. 2001; Cheyne et al. 1999; Blackmore 1998; Spanos et al. 1995; Wing et al. 1999; Wing et al. 1994; Ohaeri et al. 1992; Fukada et al. 1987). The condition is associated with the disturbance of rapid eye movement (REM) sleep episodes, and usually occurs immediately before sleep onset or upon wakening, most often in

the early hours of the morning. Those affected by sleep paralysis can see and hear, because under REM sleep there is intense central nervous system activity, but they are unable to make any significant bodily movements, because during the same phase muscle activity is suppressed. Speech is likewise impeded, and only inarticulate sounds can be made. Most episodes last less than ten minutes, but as long as thirty minutes has been reported (Thorpy 2001, 6). Sufferers may, however, feel their paralysis has gone on for considerably longer. The experience that will be defined as nightmare in this discussion has a number of other accompanying diagnostic features that occur less frequently, perhaps amongst 5-20% of the population. As Cheyne et al. (1999b, 316) point out, reports suggesting over a third of the population experience sleep paralysis may give the "false impression" that a large proportion of the population are experiencing what I shall now describe.[2]

With the nightmare, sleep paralysis is accompanied by the feeling of a heavy pressure on the chest, choking sensations, and hypnagogic (accompanying falling asleep) and hypnopompic (accompanying waking from sleep) hallucinations. Although the content of these hallucinations usually contains the same fundamental elements, they are, as we shall see, significantly shaped by cultural beliefs about the origins of the "attack". They usually concern a sense of a physical presence in the room, which manifests itself either visually, aurally, or both. Those who have had such an experience often describe the strong sense of fear or even terror such presences provoke. One of the respondents to the sleep paralysis forum of the Massachusetts General Hospital Department of Neurology website gives an inkling of how frightening the nightmare can be. The man had fought for thirteen consecutive months in frontline combat in Korea, but said of his one nightmare attack in 1964: "Never, before or since, have I ever experienced the fear of that night."[3]

Sleep paralysis and nightmares have excited the interest of numerous psychologists, psychiatrists and neurologists, and their studies and surveys can shed further light on the experience of witchcraft in past European societies. The nightmare encapsulates a unique aspect of human experience; a moment when reality, hallucination, and belief fuse to form powerful fantasies of supernatural violation. The paralytic nocturnal assault may play a statistically minor role in witchcraft accusations, but its influence on the development of the conception of the witch and associated beliefs may be far greater, though ultimately indemonstrable. The nightmare was not just a symptom, like other bodily conditions associated with witchcraft, but through its hallucinatory content was also a potent confirmation of a witch's power and a vivid proof of guilt in some cases. With the nightmare,

we find experience shaping witchcraft fantasies, and fantasies being shaped by witchcraft experience.

Sleep paralysis has been a topic of discussion amongst European and Chinese writers for more than two thousand years. The influential Greek physician Galen examined the causation of the nightmare or *ephialtes* during the second century AD, and a description of the experience appears in a Chinese book on dreams dated to as early as 400 BC. Descriptions of the "nightmare", however, only appear in English in the later medieval period. One fourteenth-century manuscript describes, for example, how the "night-mare" lay on top of people at night (Kuhn and Reidy, 1975), and the word was included in the earliest printed English-Latin dictionary, the *Promptorium parvulorum* of 1499, where it is translated as "Epialtes, vel effialtes, geronoxa, et strix." Cures for those suffering from the night "mare" appear in late Saxon manuscripts, though these make little mention of the actual symptoms (Jolly 1996, 146, 149; Kittredge 1929, 21). One of the most detailed early medieval accounts of the nightmare *experience*, concerning a twelfth-century English knight, Stephen of Hoyland, makes no reference to the "nightmare" because it is in Latin, and so the term "ephialtem" is used to describe Stephen's "intolerabili phantasia vexari" and "in somnis oppressus", which was attributed to a demon (Robertson 1876, 44).

The main medical explanations for the experience up until the twentieth century were based upon Galen's view that it was the result of gastric disturbances. These led either to noxious undigested vapours rising to the head and irritating the nervous system, or alternatively caused a distension of the stomach, which impeded circulation and led to stagnation of the blood. With the rise of Freudian psychoanalysis during the earlier twentieth century, new explanations for the nightmare were sought in not bodily malfunction but mental conflict. It was one of Freud's pupils, Ernest Jones, who put forward the most detailed psychoanalytical interpretation of the experience in his erudite study *On the Nightmare* (1931). For Jones, the nightmare was symptomatic of pathological *Angst* neurosis resulting from repressed sexuality. His scholarly and highly imaginative approach to the subject certainly broadened our understanding of the nightmare experience, even if his interpretation was unconvincing. But it was only from the 1950s onwards, with the more sophisticated development of electroencephalography, that a series of scientific studies and surveys began to uncover the phases and nature of sleep episodes. Only then could we really begin to make sense of the physiology, phenomenology, and neurology of sleep paralysis. Finally, from the 1970s onwards, the contemporary, comparative cultural aspects of sleep paralysis began to receive serious academic attention. In particular, the work of Robert Ness and David Hufford,

linking the "Old Hag" phenomenon in Newfoundland with sleep paralysis and other similar cultural interpretations from around the world, brought the social significance of the experience to wider attention. Meanwhile some fun was had spotting literary appearances of the nightmare, sightings being confirmed in the work of several nineteenth-century and early twentieth-century novelists, such as Guy de Maupassant's "Le Horla", Thomas Hardy's "The Withered Arm", Herman Melville's *Moby Dick*, and Scott Fitzgerald's *The Beautiful and Damned* (Schneck 1994; Davies 1997; Herman 1997; Schneck 1971). The aim of this article is, then, to draw upon this diverse and growing body of knowledge to help us better understand the experience of witchcraft and other supernatural assault traditions in past European societies.

Etymologies of the nightmare experience

The "mare" element of the English "nightmare" derives from the same root as the Germanic *mahr* and Old Norse *mara*, a supernatural being, usually female, who lay on people's chests at night, thereby suffocating them. Even if knowledge of the "mare" has been largely forgotten, she has left her mark in many European languages. In Norway to have the nightmare is to be *mareritt*, and we find the *nachtmahr* in German, *nachtmerrie* in Dutch, and *cauchemar* in French. The mare concept also forms the basis of Slavic, and other central and eastern European terms for nightmare – the *zmora* in Polish, *morica* in Croatian, *mòre* in Serbian, *muera* in Czech, and *kikimora* in Russian. The presence of the mare in so many languages has understandably led etymologists to assume that it is of Indo-European origin, though there seems no agreement as to its Indo-European meaning. *Móros* (death), *mer* (drive out), and *mar* (to pound, bruise, crush), have all been suggested (Pócs 1999, 32, 36; Skeat 1888).

The sense of pressure or weight is integral to the nightmare as both a concept and as an experience, and so it not surprising that it is also prominent in the linguistics. The first element of the French *cauchemar* derives from *caucher* "to tread on". The second element of the Icelandic *martröd* comes from *troda* meaning "to squeeze, press, ride." The idea of pressure is also present in other terms for the nightmare experience which do not share the *mare* element. In German we find *alpdrücken* (elf-pressing) and *hexendrücken* (witch-pressing). The term for the nightmare in medieval French, *appesart*, Italian *pesuarole*, Spanish *pesadilla*, and Portuguese *pesadela* all derive from the verb *peser*, meaning to press down upon. The Latin *incubus* derives from *incubare* (to lie down upon). The Hungarian *boszorkany-nyomas* means "witches pressure." The Estonian word for nightmare, *luupainaja*, means "the one who presses your bones," and the Finnish *painajainen* similarly describes

"something weighing upon you." In the Irish language, *tromluí* or *tromlaige* likewise derive from the act of weighing or being pressed upon. The same sensation was also expressed in terms of being straddled across the chest and ridden like a horse, as in the Norwegian *mareritt*, and the English terms "witch-ridden" and "hag-ridden", with dialect variants in England and Newfoundland such as "hag-rod" and "hag-rided".

The nightmare and early modern witchcraft accusations

Although the majority of the above terms have no direct etymological link with witchcraft, the experience they described had long been blamed on witches throughout much of Europe. People who experienced the nightmare sought explanations for such a terrifying event. By the early modern period, the archaic *mara* was no longer a current concept in a number of countries such as France and England, and the principal figure of supernatural evil in most people's lives was the witch. Even in regions where a belief in the *mara* figure continued, it was closely linked with the living, human witch. In Dalmatian folk belief, for example, a girl born in a red caul became a *morica* when she grew up, and when she married she became a witch (Vukanović 1989, 11). In Poland, the term *zmora* usually designated "people who are alive and able to disturb their neighbour's sleep, by making them feel an enormous weight resting upon their body" (Schiffmann 1987, 149). In Norwegian folk belief, too, women could become a *mara*, either by being one of seven daughters, daughters of women who relieved labour pains by supernatural means, or who wore a wolf-skin girdle (Bringsværd 1979, 78; see also Kvideland and Sehmsdorf 1991, 56-8). The late nineteenth- and twentieth-century folklore records of many European countries contain numerous accounts of witches causing nightmares, but the only way to push back the chronology of belief in this relationship is to examine the trial records of early modern Europe and the North American colonies.

During the prosecution of Olive Barthram for witchcraft at the Suffolk Assizes, England, in 1599, one of her alleged victims, Joan Jorden, testified that a shape-changing spirit sent by Barthram tormented her at night. This nocturnal intruder entered down the chimney and Jorden described it as being "a thick dark substance about a foot high, like to a sugar loaf, white on top". On the following occasion, however, the spirit appeared in the well-defined shape of a cat:

> … at 11 o'clock at night, first scraping on the walls, then knocking, after that shuffling in the rushes: and then (as his usual manner was) he clapped the maid on the cheeks about a half score times as to awake her … kissed her three or four times, and slavered

> on her, and lying on her breast he pressed her so sore that she could not speak, at other times he held her hands that she could not stir, and restrained her voice that she could not answer (Ewen 1933, 188).

Several similar testimonies were made during the Salem witch trials of 1692. Robert Downer's experience occurred after the accused witch, Susan Martin, had said "some She-Devil would shortly fetch him away." That night, "as he lay in his bed, there came in at the window, the likeness of a cat, which flew upon him, took fast hold of his throat, lay on him a considerable while, and almost killed him." Bernard Peach also testified that one night, "he heard a scrabbling at the window, whereat he then saw Susanna Martin come in, and jump down upon the floor. She took hold of this deponent's feet, and drawing his body up into an heap, she lay upon him near two hours; in all which time he could neither speak nor stir." When the paralysis finally began to wear off he bit Martin's fingers and she "went from the chamber, down the stairs, out at the door." Bridget Bishop was similarly accused. Richard Coman stated that eight years before, while he was in bed, she had "oppressed him so, that he could neither stir himself, nor wake any one else, and that he was the night after, molested again in the like manner." John Louder also testified that one night, after having argued with Bishop, "he did awake in the night by moonlight, and did see clearly the likeness of this woman grievously oppressing him; in which miserable condition she held him, unable to help himself, till near day" (Mather 1991, 116, 115, 109, 110).

Robin Briggs's work on witch-trials in the Duchy of Lorraine has uncovered several classic nightmare experiences. In 1601, for example, Jacotte Simon testified that she had remained in bed one morning, her husband having risen before dawn to go to work, when she felt something press down on her. Although she could not move, she managed to make the sign of the cross with her tongue. Finally managing to raise her head a little, she saw Penthecoste Miete at the foot of her bed. When her husband then entered the bedroom she saw two "marvellously big and ugly" cats run off noisily. Several years later, one Didier Grand Claudon got into an argument with Jean Grand Didier, and that night Claudon felt a heavy weight on him and saw five people around his bed. The only one he recognised was Didier, who was trying to strangle him. The same terrifying experience was repeated over several nights. In another instance, Mongin André of Hymont reported that "an animal the length of a man had come into their bed and lain on him, being so heavy that he was unable to make the sign of the cross with his hand, but had to do it with the tip of his tongue." André believed his animal tormentor was none other than an acquaintance named Jacquot Petit Jacquot, as he had

seen him enter his bedroom through the keyhole of the door (Briggs 1996, 74, 115, 110). A similar experience was described during the trial of Elise Guyon of Montbéliard in 1659/60. Guyon was accused of entering the bedroom of the daughter of Jean Bruillard one night. The daughter saw Guyon first sit on the end of her bed, then she gripped the girl's knees and began to stifle her. The girl eventually managed to cry out "she's strangling me", and Guyon left. Her parents testified that they found two handmarks on their daughter's knees (Oates 1993, 159).

Several of the Augsburg witch-trial records investigated by Lyndal Roper reveal accounts of nightmare concerning either pregnant women or those who had recently given birth. In 1666, Anna Cramer complained that a witch was tormenting her at night by lying down on her pregnant body. In 1685, Georg Schmetzer testified that his wife complained of a nocturnal presence that lay down upon her body and pressed her. She suspected her lying-in maid was responsible, and accused her of being a witch. During the same trial another woman also testified that, one night, a witch tried to bite her neck, and she heard a strange voice crying "be pressed down Madelin, be pressed down" (Roper 1994, 209). Numerous Hungarian trial records also contain descriptions of what could be sleep paralysis (Szendrey 1955; Klaniczay 1993, 250; Pócs 1999, 45-6, 62-3). In a witch trial of 1747, for instance, a woman reported finding her husband in bed, "lying there stiff, barely drawing breath," and when he finally awoke he cried out, "My Lord Jesus help me! Oh! Fiery witches took me to Máramaros and they put six hundredweight of salt on me" (Pócs 1999, 73).

In numerous other instances where there is little description of the symptoms, we can still posit that the nightmare was at work from the terminology used by witnesses to describe nocturnal assaults. To give several English examples, in 1595 Dorothy Jackson was presented at a York ecclesiastical court for saying that several of her neighbours were witches. She complained that she was "ridden with a witch three times of one night, being thereby greatly astonished and upon her astonishment awaked her husband." At the trial of Ann Wagg of Ilkeston in 1650, Ann Ancoke testified that she knew her sick daughter was "witch-ridden" because she could not speak. Thirty years later, Nicolas Raynes, testifying against Elizabeth Fenwick of Longwitton, Northumberland, stated that his wife "after being threatened, has been continually tormented by Elizabeth, a reputed witch, who rides on her, and attempts to pull her on to the floor" (Tyler 1970, 98; Ewen 1933, 320, 406).

As all the above examples indicate, those who suffered from the nightmare saw their attacks not only as powerful confirmation of their bewitchment, but also, through their hallucinatory experiences as conclusive proof of the identity of the witch. Judges and wider

intellectual society, however, often treated such spectral evidence with more caution than other types of testimony, even those demonologists and witch-hunters who accepted much of what witches were alleged to be able do through Satan's powers. Even John Stearne, partner of the infamous Matthew Hopkins, expressed caution, "because apparitions may proceed from the phantasie of such as the party use to fear, or at least suspect, I forbear, because I would not that any should be accused, but where there are just grounds of suspicion" (Stearne 1648, 38). Nevertheless, despite such prudent words, as the Salem trials amply demonstrate, the widespread acceptance of natural causation did not prevent spectral evidence of bewitchment being taken very seriously by courts right up until the eighteenth century, and beyond in some regions of Europe.

To further illustrate the fluidity of opinion regarding spectral evidence, and the role of the nightmare in creating such evidence, we can cite a rare example of agreement between the one-time enthusiastic witch-hunter James I and the Elizabethan sceptic Reginald Scot. The opinions of both men were undoubtedly influenced by the prevailing Galenic medical opinion on the causation of the nightmare, as expressed, for example, in the numerous editions of Thomas Cogan's *The Haven of Health*, first published in 1584. It was in the same year that Reginald Scot opined:

> [That] in truth, this Incubus is a bodilie disease … although it extend unto the trouble of the mind: which of some is called the mare, oppressing manie in their sleepe so sore, as they are not able to call for helpe, or stir themselves under the burthen of that heavie humor, which is ingendred of a thicke vapor proceeding from the cruditie and rawnesse in the stomach: which ascending up into the head oppreseth the braine, in so much as manie are much infeebled thereby, as being nightlie haunted therewith. They are most troubled with this disease, that being subject thereunto, lie right upward: so as, to turne and lie on the one side, is present remedie (Scot 1972, 49).

Likewise, in the dialogue via which James I put across his views in his *Demonology*, one character asks in relation to witches and diabolic spirits:

> Is not the thing which we call the mare, which takes folks sleeping in their beds, a kind of these spirits whereof ye are speaking? No, that is but a natural sickness which the mediciners hath given that name of incubus unto ab incubando. Because it, being a thick phlegm falling into our breast upon the heart while we are sleeping, intercludes so our

> vital spirits, and takes all power from us, as makes us think that there were some unnatural burden or spirit lying upon us and holding us down (Normand and Roberts 2000, 414).

Ludwig Lavater, a Swiss minister who published a large discourse on ghosts and night-walking spirits in the late sixteenth century, similarly declared of the "Ephialtae" or "Maares" that "physicians do affirme, that these are nothing else but a disease." Those "taken with this disease, imagine that a man of monstrous stature sitteth on them, which with his hands violently stoppeth their mouth, that they can by no meanes cry out, and they strive with their armes and hands to drive him away, but all in vain" (Lavater 1596, 6, 12-13). There was, however, another contemporary strand of thought, which rejected the possibility that witches were responsible for such nocturnal torments, and accepted the theories of natural causation, but also asserted that other supernatural beings were sometimes responsible. Thus, in a brief discussing of the nightmare experience, the author of *Paracelsus of the Supreme Mysteries* stated that witches, being mortals, could not possibly "enter into the chambers, where the doores and windows are shut" and so oppress people, but that "Sylphes and Nymphes easily can" (*Paracelsus* 1656, 59).

It is quite evident that people of all social levels and education subscribed to both natural and supernatural explanations of the nightmare. The choice of diagnosis depended on their particular personal circumstances at the time of the attack - whether they had been experiencing a series of misfortunes for example, or in relation to the content of associated hallucinations. In other words, the acceptance of a rational medical explanation did not preclude the possibility of supernatural causation. This is perfectly demonstrated by the response to a question posed in a short-lived London coffee-house journal, the *Athenean Mercury*, published during the late seventeenth century:

> Q. Whether there's any such thing as a hag, which the common people fancy to be witch-riding, when they are in their beds in the night time, and, as some say, when they are perfectly awake, and with such a vehemency that they are not able to stir either hand or foot, or move the least member of their bodies, nor can utter one word distinctly, but make a kind of grumbling noise? If in the affirmative, what instance meet you with it in history? If in the negative, what is it that is the cause of it?

> A. 'Tis effected both ways, by vapours from crude and undigested concoctions, heat of blood, as after hard drinking, and several other natural ways; but sometimes 'tis really effected by witches, which first gave the name to the common oppression in sleep called the night-mare: History is full of such instances.

The author of this response was most likely Samuel Wesley, father of John Wesley, who was one of three people on the journal's editorial board. He went on to give an example from personal knowledge of a witch-inspired nightmare that he heard from a "person that was an eye and ear witness to all the matter of fact." It concerned a boy that was "worn out even to consumption, by the common load and oppression of a witch." A poor, old local woman confessed she spirited herself through the boy's bedroom window, and lay on him and tormented him. She did so, she said, because he was a peevish boy, who hindered her from getting the charitable relief his parents used to give her (*Athenian Oracle* 1728, 292-3).

The duality of nightmare interpretation - the natural and the magical - is not really surprising, as it conforms to the wider understanding and aetiology of bodily ill health and misfortune in cultures that accept supernatural causation. Even something as obvious as a broken leg could, in certain circumstances, be attributed to the machinations of a witch who orchestrated the fall that caused the break. Yet in most such instances the break would be seen as a natural misfortune, and we can assume that, likewise, in many instances, the nightmare experience was put down to natural causes, whether stagnation of the blood or indigestion. Even hallucinations of a presence of some sort, whether humanoid or animal, were probably popularly interpreted as a figment of the imagination on many occasions. It was when the nightmare experience tied in with other misfortunes, or occurred repeatedly, that witchcraft came to be suspected or confirmed.

Victims and frequency

Modern sleep disorder studies indicate that lifestyle and work patterns can significantly affect the incidence of nightmare attacks. A recent large-scale Japanese survey of 8162 people, for example, found that the occurrence of sleep paralysis was significantly greater amongst those engaged in shift work and nursing. This was interpreted as being due to both the physical and mental stress associated with such work, and the irregular sleeping patterns involved (Kotorii et al. 2001). Unusually strenuous physical activity also seems to increase the chances of "attack." We can seek a little tentative confirmation of this in the historical record. In an account of the panic caused in the Silesian town of Breslau 1591-2 by the nocturnal visitations

of the *revenant* of a shoemaker who had committed suicide, it was observed that the revenant came to some people at night, lay on them, and smothered and "squeezed" them hard. Those "most bothered were those who wanted to rest after heavy work" (Barber 1988, 12). In the late nineteenth century, an elderly Scottish woman explained that, "When the females of a house had all the work, and were 'stinted' to do a given amount of work at the spinning wheel before they got any supper, and so much before they went to bed, they were very liable to take the 'Mare' owing to anxiety connected with their stints" (Earl of Ducie 1888, 135). Considering that prior to the twentieth century, with its welfare systems, labour laws, and health and safety restrictions, work patterns and long hours were the norm for the majority of people in much of Europe, we may postulate a greater incidence of the nightmare in previous centuries. The intense anxiety created by fear of bewitchment in past societies may have further increased the incidence of the nightmare. Recent biomedical research has confirmed that anxiety raises the chance of sleep paralysis (Terrillon and Marques-Bonham 2001, 105). The hypothesis that fear of witchcraft and associated anxiety created a vicious circle of attacks has already been made elsewhere (Davies 1996-7, 44-5), but there is little space to detail it further here.

Some studies have indicated that males are significantly more prone to sleep paralysis (e.g. Goode 1962, 231; Ness 1978, 29), others that women are more susceptible (e.g. Kotorii et al. 2001, 266; Fukada et al. 1987, 280). Yet others suggest no significant gender difference (e.g. Wing et al. 1999). It would be unwise, therefore, to draw any conclusions about the relationship between gender and the frequency of nightmare attacks in the present, let alone the past. However, there is one gender specific aspect that does require a little more attention. It has long been suggested that pregnant women were more prone to nightmare attacks. According to one seventeenth-century occult text, *Paracelsus of the Supreme Mysteries*, "some people, especially women in child-bed, have been so oppressed in the night in their sleepe, that they have thought themselves to be as it were strangled, neither could they possibly cry out, or call any helpe, but in the morning have reported that they were ridden by a hag" (*Paracelsus* 1656, 58-9). A cluster of such instances in seventeenth-century Augsburg has already been mentioned. Is there any real evidence that women in childbed were more prone to the nightmare, though? Very little clinical research has been done on this aspect to date, though a recent Finnish medical survey suggests that, while most parasomnias (a term grouping a heterogeneous range of sleep behaviour disorders including sleep-walking, sleep talking, and night terrors) decrease during pregnancy, sleep paralysis actually increases significantly during the second and third trimesters (Hedman et al. 2002, 212-213). This could

be due to the increased sleep awakenings during pregnancy and/or the more frequent resort to a supine sleeping position. Recent German research confirms that both sleep paralysis and related hallucinations predominantly occur in a supine sleeping position (Dahmen and Kasten, 2001). John Bond, who wrote the first English medical study on the nightmare in 1753, was a frequent sufferer of the experience, and confessed, "I have been so much afraid of its intolerable insults, that I have slept in a chair all night, rather than give it an opportunity of attacking me in a horizontal position" (Bond 1753, 71).

Most people who have had sleep paralysis rarely report experiencing repeated attacks over either short or long periods. Wing's Hong Kong survey found, for example, that just under 9% of "victims" reported having attacks more than once a month (Wing et al. 1994, 610). It is possible that a few of those in the historical record who reported frequent nightmare attacks day after day may have been narcoleptics, who suffer from excessive daytime sleepiness. Modern research suggests that around 60% of narcoleptics experience sleep paralysis, some reporting daily episodes, and they are more prone to hypnagogic and hypnopompic hallucinations (Aldrich 1990; Thorpy 2001). Yet the prevalence of narcolepsy is very small – in the US only 0.02-0.05% of the population. That some people may have a genetic predisposition to frequent sleep paralysis has also been posited (Terrillon and Marques-Bonham 2001, 105). Yet, while recognizing the possible involvement of such medical explanations, the combined cultural factors of work patterns and bewitchment-anxiety provide an equally valid explanation for the intense nightmare attacks reported in the historical record.

Sex

The sexual aspects of the nightmare, both in conceptual and experiential terms, have long been asserted. The Greek medical encyclopaedist Paulus Aegineta, writing in the seventh century AD, asserted that "some imagine often that they even hear the person who is going to press them down, that he offers lustful violence to them." A dissertation written at the University of Tübingen in 1666 likewise described how the victim of nightmare "gets pressed, squeezed, twisted, excited or forced to sexual relation" (Haga 1989, 516). The *incubus*, which became an important topic of debate amongst early modern demonologists, was interpreted as an explicitly demonic sexual assault. However, if we look at the details of nocturnal sexual molestations whether by the Devil, demons, or *incubi*, as described in trial confessions, we find little mention of paralysis, inarticulacy, suffocation, or chest pressure. Then again judges, magistrates, and inquisitors were preoccupied with the nature of the sexual act rather than

other bodily sensations the "victim" might have experienced, and so nightmare symptoms may have gone unreported. There is certainly a sexual component in the testimony of Olive Barthram, and it can also be detected in the testimonies of a couple of nuns during the Louviers sex and possession scandal of the 1640s. One nun experienced a series of erotic nocturnal episodes after being touched by Father Picard. On one occasion she asserted, "a tremendous weight rested on my shoulders so that I thought I was going to choke". On dragging herself out of bed she "felt this weight fall to the ground with a loud noise." Another nun complained how on two occasions she "found than damned incubus of a cat on my bed in the most indecent postures it is possible to imagine, exhibiting a huge penis just like a man's" (Robbins 1959, 321, 357).

The two strongest sensations associated with nocturnal demonic sexual assault were fear and the coldness of the attackers, particularly their penises and their semen. The monk Francesco Maria Guazzo observed that "witches confess that the semen injected by the devil is cold, and that the act brings them no pleasure, but rather horror" (Guazzo, 1988, 31). The same observations were widely repeated and discussed by fellow demonologists such as Henry Boguet and Nicolas Rémy. The sensation of coldness is rarely reported in recent sleep paralysis studies, though one of Hufford's female respondents described a "very cold, dead weight" (Hufford 1982, 91). However, the unpleasantness of the satanic sexual experience tallies well with the findings of recent sleep paralysis surveys.

One explanation for such nocturnal molestation, mooted back in the sixteenth century, was that such confessions of diabolic sexual attack were merely excuses to cover up the evidence of masturbation or elicit affairs. Reginald Scot, for instance, was sceptical about such sexually active spirits and witches: "Thus are lecheries covered with the cloke of *Incubus* and witchcraft … speciallie to excuse and mainteine the knaveries and lecheries of idle priests and bawdie monkes" (Scot 1972, 48). The fervent French witch-persecutor Henry Boguet was also content to consider this possibility, but only when it came to the "heathens" of the New World, reporting that "we find in the west Indies that their gods, which they call Cocoto, lay with women and had sexual intercourse with them; unless it was really certain lickerish men who abused them" (Boguet 1971, 34). It is important to remember, of course, that many confessions of diabolic intercourse were the product of torture and leading questioning, and probably had no basis in actual sleep disturbances. But there are similar confessions, like those already cited, that were not the product of torture, and the nightmare experience can perhaps provide some enlightenment as to their content. We need to look,

therefore, at what twentieth-century psychological, neurophysiological, and ethnographic research has to say on the sexual aspects of the nightmare.

The most forceful affirmation of the sexual connotations of the nightmare is to be found in the work of the early Freudian psychoanalyst Ernest Jones. Hufford, however, found a few overtly sexual reports in the course of his research, but they lacked the sleep paralysis and fear associated with the nightmare. He suggested that the examples cited by Jones were erotic REM dreams and not true nightmares (Hufford 1982, 131). More recent research, however, has suggested several possible sexual aspects of the experience, in terms of both content and aetiology. Some sex linkage could be drawn, for example, from the fact that initial onset of sleep paralysis usually occurs during adolescence (e.g. Kotorii 2001). It has been suggested that, in this respect, biological development, particularly hormonal, may affect the occurrence of the phenomenon, but there is also a modern environmental factor to consider. In societies, such as those of Japan, Hong Kong, Canada, and the USA, where most recent surveys have been conducted, teenagers are put under considerable pressure and stress to achieve high grades at school. The stress and disturbed sleep patterns from late-night studying may trigger initial sleep paralysis (Fukada et al. 1987, 285). It is possible, therefore, that the age of initial onset of sleep paralysis may have been significantly different in past European societies, where schooling and exam pressure were unknown.

A more controversial association is that between the experience of sexual assault and sleep paralysis. A 1992 report on the hallucinatory sleep experiences of narcoleptics, for example, uncovered a number of false but sincere accusations of sexual abuse (Hays 1992). In the light of recent research confirming the prevalence of child sex abuse, some psychiatric studies have suggested that some nightmare experiences (as well as night terrors), both in the past and in the present, should be interpreted as symptomatic of actual sexual trauma, particularly in childhood. The Norwegian psychiatrist Eivind Haga has argued, for example, "an attack of the Nightmare is an expression of a mental conflict over an incestuous experience" (Haga 1989, 519). Thirteen of the female respondents in a Canadian survey explicitly described their sleep paralysis experience as feeling very like being sexually assaulted or raped. This may have been born of personal experience, which would fit with the psychiatric interpretation, but the surveyors understandably did not ask for confirmation of this. It is possible that in describing their sleep paralysis episodes in this way, these women drew, not upon experience, but upon the narratives of sexual assault widely available in modern society (Cheyne 1999a, 330). A smaller British survey of contemporary nightmare accounts also found more references to sexual activity amongst women. Female respondents

indicated that the imagined sexual advances accompanying the feeling of pressure were unwanted, and that they felt powerless to halt what was an entirely unpleasant sensation (Parker and Blackmore 2002, 51, 57). These recent surveys seem to corroborate the impression gained from the historical sources that sexual content in nightmare attacks was usually reported by women.

There are few examples in either the historical record or in the recent clinical material of men describing sexual activity during sleep paralysis. Richard Bovet, in his *Pandaemonium* published in 1684, provides one rare instance. A footman in the employ of a West Country nobleman complained of a headache and was permitted to go to bed early and rest. On passing by his door later that night, the footman was seen "lying speechless on the bed, his eyes were staring very wide, and fixed on one side of the room, his hands were clutched, his hair erected, and his whole body in so violent a sweat." On awakening he described how, about half an hour after lying down, there came into the room two "very beautiful young women, whose presence enlightned the place, as if it had been day … they endeavoured to come into the bed to him … he resisted with all the power he could, striking at them several times with his fists, but could feel nothing but empty shadows … he had contested so long with them, that he concluded within himself he should die under their violences, during all that time he had no power to speak, or call for aid" (Bovet 1975, 133). If we take this account at face value, then the footman had the same impression of the sexual advances made towards him as the women in recent surveys; in other words, that the sexual approaches were not only unwanted but terrifying, no matter how attractive the assaulters.

In the extensive archive of nightmare legends and memorates collected in some European countries during the twentieth century, the sexual aspect of the nightmare tradition is much more evident. De Blécourt demonstrates in his article in this volume that there was a strong sexual component in Dutch and Flemish nightmare legends. Catharina Raudvere has also suggested that in Scandinavia there is "an undercurrent of latent sexuality more or less manifest in the *mara* traditions" (Raudvere 1995, 41) and erotic motifs are fairly common in Estonian *luupainaja* legends.[4] Yet neither the content of the early modern European witch trial material, nor the nineteenth-century Somerset reverse witch-trials (Davies 1996-7; Davies 1999, 130-3), suggest either a significant or explicit sexual component. Then again, the samples are very small compared to the legend material. The narratives contained in trial witness statements are hardly detailed enough to detect sexual motifs, and the circumstances

in which they were reported would, perhaps, militate against the expression of overt sexual sensation. Still, Lyndal Roper believed her Augsburg cases, did "not appear to be directly sexual," but rather symbolic of an "ambiguous mixture of love and hatred," linked with "a kind of excess of maternality." The "oppressive sensation of smothering symbolizes her [the mother's] inaction and the diffuse nature of the threat to herself and her child" (Roper 1994, 209-10). In this context, the lying-in maid, through the nightmare, represented an evil mother aspect rather than a sexual predator. It is quite noticeable that, when nightmare hallucinations involved suspected witches, there was no mention of sexual behaviour, even if it involved a female on male assault or vice versa. Sexual behaviour, it seems, was only enacted by spirit beings or demons of some sort. The link between witch assault and sex assault is very tenuous.

In examining the sexual content of the nightmare, a distinction has to be made between the nightmare as motif, the personification of the nightmare in legends, and the nightmare as actual experience. The relationship between all three is complex and far from being fully understood, particularly from a historical perspective. The legend material surely reflects, to a certain extent, cultural perceptions and preoccupations current at the time of their recording. And so it may be that, as social and personal fears concerning witches, spirits, and fairies changed or declined, the sexual motifs associated with the experience of being pressed fluctuated. The sexual component of aural and tactile hallucinations may likewise vary in relation to whatever are the predominant cultural concerns regarding nocturnal assault. Of equal importance in experiential terms, though, was the psychological make-up of individuals as well as communities and cultures. Experience of childhood abuse, sexual frustration, particularly during adolescence or in the social context of religious orders, may have shaped the content of nightmare assaults in the past, but, of course, we simply do not have the personal histories to confirm properly such linkages. When it comes to the historical-cultural context of the nightmare all is open to conjecture.

Other supernatural explanations

In many societies and cultures around the world the nightmare has not been attributed to the magical activities of living beings, motivated by envy and malice, but has instead been seen as having its source in the spirit world. The Thai for nightmare *Phi um* means "ghost covered", and in China the experience has been attributed to oppression by ghosts for at least the last two thousand years (Wing et al. 1994, 609). Amongst the Hmong of Laos, the nightmare is attributed to pressing spirits such as the *dab tsog* and *poj ntxoog* (Adler 1991, 57, 69). In

Japan, some people believe sleep paralysis is caused by evil spirits, and the traditional term for the experience, *kanashibari*, meaning "to tie with an iron rope," derives originally from the belief in the magic powers of a Buddhist god (Fukada et al. 1987, 280). The *kokma* of St Lucia is attributed to the spirit of a dead baby, which jumps on sleepers' chests and chokes them (Ness 1978, 35; Dahlitz and Parkes 1993). In Indonesia the *tindihan* (meaning "to be weighted down") is attributed to spirit assault, and, in Hawaii, sleep paralysis is said to be cause by supernatural "night marchers" (Conesa 2000, 108). Amongst the Syan tribe of Uganda, it was believed that the *emisambwa*, spirits of the dead, were responsible for pressuring and throttling sleepers at night (Huntingford 1928, 77). At least some nightmare experiences in Zanzibar are attributed to and shaped by the *popabawa*, a nocturnal humanoid, bat–winged demon that rapes men as they lie in their beds (Nickell 1995).

In a number of European societies, the nightmare has also, both in phenomenology and in legends, been attributed to the spirits of the dead, rather than to witches or the *mara*. In Poland, the nightmare experience was sometimes attributed to the *strzyga* (from the Latin *striga*), which in Polish came to be associated with dead people's souls (Schiffmann 1987, 149). Further north, in Finland, folklore material collected between 1890 and 1960 shows, that although being pressed by spirits was commonly interpreted as an act of witchcraft, it was also attributed to the spirit of a dead person, particularly that of a child.[5] Estonian legends and memorates collected during the same period also reveal a popular belief that the nightmare was caused by ghosts, though the experience was most commonly attributed to living neighbours motivated by envy, spite, and unrequited love, who were not necessarily witches.[6] In parts of southeastern and central Europe, the experience also has associations with *revenants* and members of the living dead such as the vampire and the Greek *vrykolakas*.

The nightmare tradition has been predominantly associated with supernatural animal figures in some regions. As material in the Irish Folklore Collection indicates, hallucinations associated with the *tromluí* took the form of a big bird, sometimes with many wings or talons. The bird first lay on sleepers' legs then moved up to press down on the whole body.[7] This has obvious parallels with the *striges* and *lamiae* of classical myth and belief. In Cornwall, the nightmare was attributed to the *hilla*, "a great hairy thing which lay on them with a dead weight that almost stopped their breathing." One old man recalled how, during his youth in the early nineteenth century, he had been assaulted by the *hilla* as he slept rough one night after returning from an exhausting hurling competition. "Just as soon as he lay down … the Hilla would be on him and lay with such a dead weight that he could neither move hand nor foot, nor call for help if it were to save his life." When the Hilla left and he awoke, he was

covered in sweat, and "felt as sore as if I'd ben thrashed with a thrashal on a barn-boards." On this occasion the man believed that the *hilla* was none other than "a cussed piskey, in another form; and older and wiser people say the same thing" (Bottrell 1880, 182). Both Ireland and Cornwall were regions where the popular discourse concerning fairies remained vibrant well into the nineteenth century. In Ireland, in particular, misfortune was frequently blamed on fairies as well as witches. In this context both the *tromluí* and the *hilla* can be viewed as malicious animalistic fairies or as shape-changing fairies. Elsewhere in Europe, the nightmare was also attributed to similar spirit beings that took on animal forms. In the mountain region around Neuchâtel during the nineteenth century, people talked of the *tchutch-muton*, a variant of the *chaufaton*, a nightmare-causing fairy that appeared in the guise of a black sheep (Abry and Joisten 1976, 128, 130). In Herzegovina, the *mora* often took the form of a cock (Bjelskositche et al. 1904, 134), though elsewhere in the region it was frequently thought to appear as a hen (Pócs 1991/2, 322). The Hungarian *lidérc*, a pressing entity, was also thought to take the form of a chicken (Pócs 1991/2, 324; Pócs 1999, 48; Dömötör 1982, 87-92). Some of these animalistic nightmare entities were also thought to be the spirit companions or familiars of witches. Olive Barthram was convinced that a local witch sent the shape-shifting spirit that molested her. The Hungarian trial material shows that people believed some witches possessed a *lidérc*, which they used to transmit harmful spells and to torment sleepers, an experience known as *lidércnyomás* (*nyomás* = pressing).

It is striking that, despite the strong and quite widespread belief that fairies were sometimes responsible for causing the nightmare, as evident in the German term *alpdrücken* for example, people rarely seemed to visualise fairies in humanoid guise during their hallucinations, despite the fact that in folk legends and tales they often took such a form. This could be because of the lack of clear, visual, stereotypical representations of such beings. One of the roles of the central nervous system is to generate coherence and meaning from endogenous and exogenous sensory inputs (Cheyne et al. 1999, 321). Nightmare hallucinations can be seen as interpretative outcomes of that process, and their content will be formed by familiar associations. The image and feel of animals were imprinted on the subconscious through daily experience whereas those of fairies were not. The brain, in trying to make best sense of the unusual physical sensations experienced by the body during the nightmare, and conditioned by the cultural interpretation of assault by shape-changing fairies, was most likely to resolve the situation by confirming an animal presence. Once the attack was over the fairy/animal link was further corroborated by the victim's conscious reflection on the experience.

As the above examples show, a wide range of animals forms have been associated with nightmare attacks, but the cat is by far the most ubiquitous in the historical sources and legends of Europe. It is certainly the most frequently mentioned animal in early modern nightmare accusations. We find it, for example, in the aforementioned testimonies of Olive Barthram, Robert Downey, and Jacotte Simon. It is also prevalent in later material. In 1876, a 26-year-old Somerset labourer was prosecuted for threatening the life of an elderly neighbour, whom he accused of hag-riding him at night in the form of a cat. He killed both his own cat and that of a neighbour in the misguided hope that it was the tormenting witch (Davies 1999, 132). The cat was also a common form taken by other shape-shifting nightmare entities. In Norwegian folklore, for instance, the *mara* was frequently thought to the take the shape of a black cat known as the *marekatt* (Bringsværd 1979, 79). The strong connection between nocturnal cat visions, witchcraft and the nightmare in the Hungarian witch-trial material and later folk belief led Éva Pócs to label it the "mora trinity" (Pócs 1999, 45).

The potent motif of the nightmare cat could be related to the belief that both witches and cats sucked the breath of children, as described by a hag-witch in Ben Johnson's *Masque of Queens*, performed in 1609 (McFarland 1977, 89):

> Under a cradle I did creepe,
> By day; and, when the Child was a-sleepe,
> At night, I suck'd the breath; and rose,
> And pluck'd the nodding nurse, by the nose.

Edward Fairfax, in his account of the bewitchment of his daughters in 1621, described how one of them, "near break of day in the morn," cried out suddenly, "'Oh, I am poisoned!' Her mother asked, 'What with?' She answered – 'A white cat has long been upon me, and drawn my breath, and hath left in my mouth and throat so filthy a smell, that it doth poison me'" (Fairfax 1971, 38). Of the six women brought to trial for bewitching Fairfax's daughters, two were accused of having cats as familiars, while another woman was accused of appearing as an apparition and had a "spirit in the likeness of a white cat". It would seem, then, that it was believed that the witch frequently caused the nightmare either in cat form or enacted it through cat familiars. It is surely significant, though, that no one complained of being oppressed by a hare, which was an equally common shape-shifting guise used by witches. Both are hairy so why did people not visualise pressing hares? Again, it seems to come back to the central nervous system working out an interpretation based on familiarities.

Pressing by cats has a well-known basis in fact. Cats, which weigh ten to twelve pounds on average, have occasionally been known to cause the death of infants by sleeping upon them in their cribs. On 4 May 1810, the *Lincoln & Hull Chronicle* reported that the fourteen-month-old baby of a labouring couple had been found in its crib with a lacerated face and barely breathing. On turning back the covers, a cat and a kitten were found asleep on the baby's chest. As the newspaper observed, the mother returned just in time, otherwise the cat "would by its weight upon the child's stomach, have speedily deprived it of life." However, a common interpretation of this phenomenon was that it was not the crushing weight of the cat that caused death, but that the cat, with implied malicious intent, had sucked the breath out of the baby and thereby suffocated it. At an inquest held in 1791 upon the death of an eighteen-month-old child of Plymouth, England, a verdict was given that "the child died in consequence of a cat sucking its breath, thereby occasioning strangulation" (*Annual Register*, 25 January 1791). At another English cat-pressing inquest seventy years later, the mother described how on returning home on the fateful day she had "found a strange cat, which had been there about a week, lying in a crouching position over the face and mouth of the child, which was quite dead. Marks were observed around the child's mouth as if it had been licked by the cat" (*Pulman's Weekly News*, 17 January 1860). The verdict was accidental suffocation by smothering, but the mother's testimony suggests that she thought otherwise.

The perception of being pressed by a cat was not always based on visual hallucination and physical testimony, but also on tactile sensation. The experience of a Dutch dairy farmer, recorded in 1911 by his doctor, is indicative:

> He was sleeping and then he woke up and it just felt like something was sitting upon him, and he could hardly breathe so that he ended up bathed in sweat. He distinctly felt it crawling up his legs and up to his throat, and meanwhile he felt more and more oppressed … he decided to try and get hold of the thing, and he clearly felt having a cat between his fingers. But the funny thing was, it melted away more and more.[8]

Accounts like this raise further questions about the origins of such hallucinations and their interpretation. Did the tactile neurological sensation of fur or feathers lead to the subsequent frequent visualisation of animal forms such as cats? Or conversely, did the cultural concepts of cat-pressing and were-animals stimulate the nervous sensation of contact with fur or feathers? This is just another of many questions concerning the cultural-neurological nexus of the nightmare experience highlighted by the historical record.

Finally, as well as witches, spirits, and fairies in their various guises, there was one other important nightmare assaulter: the Devil. In 1728, a Swedish soldier, John Gottfried Ekelau, who was convicted of sodomy, also confessed that he had attempted to break a pact he had made with the Devil four years earlier. He had consequently been persecuted and abused by the Devil in various animal and human forms. "On one occasion," he testified, "the Devil lay on top of him as he was sleeping in bed at night, so that he had difficulties to breath … he thought that the Devil wanted to suffocate him" (Olli, forthcoming). Writing a couple of decades later, James Bond reported on the frequent similar nightmare experiences of a clergyman acquaintance:

> He has assur'd me, that, in these fits, he imagin'd the Devil came to his bedside, seiz'd him by the Throat, and endeavour'd to choak him. Next day he observ'd the black impressions of his fingers on his neck. After being at a wedding or christening, he never escap'd it; and his servant is oblig'd to watch him all the next night, and rescue him from the paws of Satan … The servant told me, he always found his master lying on his back in the fit" (Bond 1752, 55).

Darren Oldridge has suggested that some of the startling accounts of nocturnal satanic visitations recorded by English Puritans in the seventeenth century may have also had their origin in nightmare experiences. The demonic apparition that tormented the Puritan surveyor, Richard Norwood, is a likely instance. So real was the experience, and so great the fear, that he wrote that he had "sometimes taken a naked knife in my hand when I went to sleep, thinking to strike at it" (Oldridge 2000, 44)

Flight

The feeling of weight or pressure was an essential component of the nightmare experience, but it was not intrinsic to sleep paralysis. In other words, hallucinations accompanying sleep paralysis have a broader range than is strictly categorised as nightmare. Spanos et al. (1995) found that sense of pressure on the chest was reported by only 35% of those experiencing sleep paralysis, Fukada et al. (1987) reported 40%, and Wing et al. (1994) reported 50%. More rare than the sensation of pressure is the opposite experience, whereby sufferers feel various inertial forces acting on them, over which they have no control. People describe such sensations as flying, accelerating, rising, lifting, spinning, swirling, being hurled through a tunnel. A smaller proportion of people describe out-of-body experiences, where they float

above their beds and look down upon their bodies. They often feel light-headed or dizzy, but the experience is usually pleasant, even blissful (Cheyne 1999a, 331; Cheyne 1999b, 315; Hufford 1982, 237-44; Terrillon and Marques-Bonham 2001, 109-13). This contrasts strongly with the dread and sense of presence accompanying the sensation of pressure, and yet both experiences are hallucinatory aspects of sleep paralysis. Has the historic experience of this manifestation of sleep paralysis helped shape such belief complexes as that associated with the *benandanti* of Friuli? Across Europe there are numerous trial records of people who claimed to have gone on nocturnal soul or spirit journeys. These were not people who, like shamans, deliberately induced such experiences through trance ritual, but people who claimed that they involuntarily felt their soul or spirit drawn out of them while asleep at night, often by denizens of the "other world." Take, for example, the interrogation of Paolo Patavino, one of the Friuli *benandanti* investigated by the Italian inquisition in 1580 (Ginzburg 1983, 157-9):

> Who led you to enter the company of these benandanti? He replied: The angel of God. When did this angel appear before you? He replied: At night, in my house, perhaps during the fourth hour of the night, at first sleep. How did it appear? He replied: An angel appeared before me, all made of gold, like those on altars, and he called me, and my spirit went out.

Paolo's wife, when questioned concerning her husband's nocturnal activities, answered:

> I never noticed any of the things that you ask about my husband, whether he went out in spirit and was a benandante. However, one night, about the fourth hour before daylight, I had to get up, and because I was afraid I called my husband Paolo so that he would get up too, and even though I called him perhaps ten times and shook him, I could not manage to wake him, and he lay face up.

Here, according to the evidence of Paolo and his wife, we find apparent paralysis, together with Paolo's sleeping in a supine position. The time of the angelic visitation is also significant. Paolo's hallucinations are similar to the out-of-body experiences recounted in recent surveys of sleep paralysis. I am not proposing that the sleep paralysis experience *explains* the origins of the *benandanti* and other similar traditions, but merely suggesting that it may have served to reinforce personal belief and understanding amongst some of those who confessed to soul journeys. It may also have contributed to a shared sense of experience

amongst a small section of a community who found they had had similar nocturnal visions and bodily sensations. Such community-formation through shared sleep experience can be found amongst supposed alien abductees today, some of who have certainly had the same manifestation of sleep paralysis (Spanos et al. 1993; Blackmore 1998). To give just one alien abduction account from the 1960s, comparable with the experience of Paolo nearly four hundred years earlier:

> As I was floating above myself, I saw two shadowy figures that gave off a silvery light … They seem to have entered the room by passing through the window … They drew my prone body on the bed to them as if by magnetic pull … I found myself following them without effort or conscious intent through the window into the open night sky (Goldberg 2000, 314).

Where Paolo drew his imagery from church iconography, alien abductees draw theirs from cinema and the television: same core experience, different cultural influence.

Conclusion

In an essay examining witchcraft experiences and nocturnal visions in early modern England Katherine Hodgkin remarked how such accounts, "in their extraordinariness to our own categories of thought … seem to mark out our difference from the mentalities of the early modern period, and perhaps to offer a way into that difference" (Hodgkin 2001, 217). Understanding sleep paralysis provides the historian not only with a "way into that difference", but also with a unique sense of shared physical experience, a direct and very real link with the supernatural interpretations of past cultures. We can understand their fantasies because many of us today, through the same potent brew of neurophysiological experience and cultural influence, continue to fear the nocturnal appearances of pressing entities or have life-changing encounters with soul-drawing visitors thought to be from other worlds. Some of those who testified to nocturnal witch assaults or soul journeys were clearly not just dreaming, and nor were they liars, mentally ill or on drugs. They were normal people who experienced something extraordinary but natural, and who made sense of it in the best way they could, based on what they believed and what they thought they saw, heard, and felt. In particular, modern biomedical research enables us to understand better the very real terror of nocturnal supernatural assault felt by people in the past. Through sleep paralysis reality and terrible

fantasy became one. It was the innocent who suffered the consequences, both as victims of the nightmare and victims of those who experienced it.

The availability of scientific information concerning sleep paralysis has increased considerably in the last decade. There are now numerous Internet sites providing medical information, newspapers have reported widely on the phenomenon, and it has been the subject of recent television programmes.[9] Yet, despite the increased awareness of the medical origins of the nightmare in modern society, there is no reason why supernatural interpretations of the experience should decrease as a consequence. As history shows, natural and supernatural explanations for the nightmare have long coexisted. Witches and fairies may no longer be figures of fear, but there are others abroad at night ready to terrorise us in our sleep. The nightmare will not go away, for it is an aspect of who we are.

Notes

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[1] Figures for sleep paralysis are not representative of nightmare experiences.

[1] John E. Sullivan 1/26/98; www.mgh.harvard.edu/neurowebforum.

[1] Ülo Valk, pers. comm.

[1] Thanks to Laura Stark-Arola for providing a brief resumé of the Finnish material.

[1] Thanks to Ülo Valk for providing a summary of the Estonian folklore.

[1] See, for example, Irish Folklore Commission main MSS 85, p. 176. Thanks to Crístóir Mac Cárthaigh for an English summary of this report, and for further English reports from the Irish Folklore Collection.

[1] Thanks to Theo Meder for finding and translating this case from the Dutch Folklore Database.

[1] See those mentioned in Terrillon and Marques-Bonham (2001, 120), as well as *The Entity* shown on Channel 4 in 2002.

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