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History of the Human Sciences 2008; 21; 1
DOI: 10.1177/0952695107086138

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Talking back to the spirits: the voices and visions of Emanuel Swedenborg

SIMON R. JONES and CHARLES FERNYHOUGH

ABSTRACT

The voices and visions experienced by Emanuel Swedenborg remain a topic of much debate. The present article offers a reconsideration of these experiences in relation to changes in psychiatric practice. First, the phenomenology of Swedenborg's experiences is reviewed through an examination of his writings. The varying conceptualizations of these experiences by Swedenborg and his contemporaries, and by psychiatrists of later generations, are examined. We show how attempts by 19th- and 20th-century psychiatrists to explain Swedenborg's condition as the result of either schizophrenia or epilepsy are unable to account for his experiences. We then demonstrate that the re-emergence of the 19th-century concept of 'hallucinations in the sane' offers an alternative way to understand Swedenborg's experiences outside typical discourses of mental illness. Finally we argue that Swedenborg's experiences should be understood as exemplifying phenomena which we term 'hallucinations without mental disorder', and investigate how conceiving of Swedenborg in this way can inform future research into the experience and clinical significance of hallucinations.

Key words epilepsy, hallucinations, history, schizophrenia, Emanuel Swedenborg

INTRODUCTION

Throughout history, individuals as diverse as Pythagoras, Socrates, Galileo, Joan of Arc, Luther and Pascal have had the experience of hearing voices or seeing visions imperceptible to others (Leudar and Thomas, 2000). There is a long history of attempting to account for such experiences reported by such prominent historical figures using concepts from contemporary psychiatry such as hallucinations (T. James, 1995), today defined as percept-like experiences occurring in the absence of appropriate stimuli with the full force of actual perceptions (Slade and Bentall, 1988).

One danger inherent in such attempts at retrospective analysis is that it assumes it is possible to detach our concept of a hallucination from the contemporary conditions under which it has been formulated, and to apply it to cases that antedate its conceptualization which have not previously been identified in these terms (Leudar and Sharrock, 2003). Many would be skeptical about such an approach (e.g. Hacking, 2003; Young, 1995). One such reason for such skepticism flows from the observation that, while diagnosis usually requires the engagement of, and has performative consequences for, the individual, this is not the case in the analysis of historical figures (Leudar and Sharrock, 2003). Such an approach is also open to the accusation that it treats the concept of the hallucination as having an objective ontological existence, being 'out there, independently of the psychiatric discourses and practices that attempt to define and to treat it' (Borch-Jacobsen, 2001: 20). Borch-Jacobsen has proposed that instead the 'history of psychiatry and/or madness should ideally be the history of those complex interactions that give rise, through feedback, amplification and crystallization, to new psychiatric concepts' (ibid.: 28).

The present article aims to demonstrate how the changing conception of the hallucination has been, and may be, applied to the experiences of Emanuel Swedenborg. We attempt to show the process through which 'a spiritual visionary becomes a madman' (Leudar and Sharrock, 2002: 249), and conversely, how a madman may become a spiritual visionary again. After a review of the phenomenology of Swedenborg's experiences, we examine how these experiences were understood by Swedenborg himself as well as by his close contemporaries. Next, we show how the advent of medical psychiatry in the 19th century, and the concepts it generated, led to a reinterpretation of Swedenborg's experiences as pathological and symptoms of diseases such as schizophrenia and epilepsy. We review these accounts and demonstrate that medico-psychiatric accounts have not yet been able to offer a satisfactory explanation for Swedenborg's experiences. We then discuss how the re-emergence of the discourse of 'hallucinations of the sane', according to which such experiences are not necessarily symptoms of an illness, offers a further shift in the way Swedenborg can be understood. Specifically, we show that

Swedenborg's experiences can be understood as exemplifying phenomena which we term 'hallucinations without mental disorder'. Finally, we draw implications for future research into hallucinations.

WHO WAS EMANUEL SWEDENBORG?

The experiences of the Swedish scientist, inventor, mystic and theologian Emanuel Swedenborg (1688–1772) have been a topic of much debate. Swedenborg's copious and lively writings on his anomalous experiences, coupled with the fact that they emerged relatively abruptly in the middle of his life, mean that his work presents a particularly attractive example for historical analysis.

Swedenborg was born into a nation culturally divided. Exploitation of Sweden's vast mineral wealth had encouraged the development of a hard-headed industrial and scientific quarter. However, in the Swedish countryside, where the 'supernatural brooded over the landscape and in the hearts of men' (Williams-Hogan, 1988: 4), an older and more spiritual outlook remained. Swedenborg's life can be seen to encompass both of these conflicting perspectives. Born to the future Lutheran bishop of Skara, his maternal grandfather was an assessor in the Royal College of Mines. Swedenborg's religious inclinations were present from an early age. As a child Swedenborg claimed his meditations on God 'revealed things at which my father and mother wondered; saying that angels must be speaking through me' (Swedenborg, cited in Swift, 1883: 3). In 1696, at the age of 8, Swedenborg lost both his mother, Sarah, and his older and first-born brother, Albrecht, to an epidemic. His father remarried a year later, and relations between Swedenborg and his new stepmother appear to have been positive (Toksvig, 1948). From adolescence, through to his late 50s, Swedenborg's life was predominantly that of a man of science. His interests and works involved him in physics and chemistry, biology and geology, as well as physiology and mathematics. His work in what is today recognized as neuroscience has been acclaimed as being far ahead of its time (Gross, 1997). Swedenborg eventually settled into a role as an assessor for the Royal College of Mines and in 1747 was recommended for the position of Councillor of Mines, the highest position a non-noble could hold (Toksvig, 1948).

However, by the mid-1740s Swedenborg had already started moving away from his work in the natural sciences, towards a more spiritual focus, occasioned by a number of anomalous experiences. In 1743 he started to become aware of 'angelic voices' (Toksvig, 1948: 153) and by the following year claimed to have produced writings on the commands of angels (*ibid.*). Swedenborg's desire to devote himself entirely to these spiritual investigations led him to decline the offered position of Councillor of Mines and

resign his current position (Stanley, 1988). Swedenborg's subsequent spiritual investigations were not based on a purely philosophical approach, but on the experiences that he interpreted as sent from God. These took the form of a range of predominantly visual and auditory experiences, involving conversations with 'angels' and 'spirits'. As Swedenborg put it 'I have seen, I have heard' (1872[1749–56]: *Arcana Coelestia* (n6191)). Following the onset of these experiences in the mid-1740s Swedenborg remained functioning at a sufficiently high level not only to be able to learn Hebrew, but also to publish a voluminous theological and philosophical biblical literature over a period of decades. Furthermore, not only was Swedenborg able to continue to make presentations to the Swedish Diet (the highest authority in the land below the monarch) on the problems and dangers posed by issues such as inflation, poor foreign exchange rates, and alcohol, he was also able to do so in a clear and simple manner (Toksvig, 1948).

WHAT DID SWEDENBORG EXPERIENCE?

Form and content of Swedenborg's experiences

Swedenborg's experiences were, in the words of William James (1960[1902]: 460), 'the palmary one[s] of audita et visa, serving as a basis of religious revelation'. What Swedenborg experienced, how he experienced it, and his explanations of it, may be found in the copious volumes of spiritual writings he published following the onset of his anomalous experiences in the mid-1740s. These works include his *Spiritual Diary* (hereafter cited as *SpD*; 1746–65), *Arcana Coelestia* (hereafter cited as *AC*; 1749–56), *Life on Other Planets* (hereafter cited as *LP*; 1758), *Heaven and Hell* (hereafter cited as *HH*; 1758), and *True Christian Religion* (hereafter cited as *TCR*; 1771). Throughout these works Swedenborg reiterated how it had been granted him 'for some years almost continually to hold discourse with spirits and angels, and to be in their company as one of themselves' (*AC*, n1634). Such experiences continued to his death in 1772.

As well as spirits and angels, Swedenborg claimed to have been able to 'speak with those who are in hell' (*HH*, n312) as well as almost all of those 'with whom I was acquainted during their life' (*AC*, n1636). Other voices and visions he experienced were those of historical figures; one was 'given me to believe that he was Aristotle' (*AC*, n4658). Yet further voices and visions Swedenborg experienced were understood by him to be from inhabitants of other planets in the solar system: 'Some spirits approached me, and I was told from heaven that they were from the world nearest to the sun, the planet named in our world Mercury' (*LP*, n11). The beings Swedenborg encountered were able to go into great depth about the specifics of life in a spiritual realm.

What Swedenborg experienced is substantially easier to determine than how he experienced it. Swedenborg's writings show him to have had anomalous experiences in visual, auditory, olfactory and tactile modalities. A chronological examination of his experiences gives an indication of the changing nature of his experiences. The seeds of Swedenborg's anomalous spiritual experiences began in 1736 when he was 48 years old (Benz, 2002), occasioning him to start recording them in his *Dream Diary* (henceforth cited as *DD*), which was published posthumously in incomplete form. Up until 1744, his experiences included dreams, 'visions when my eyes were closed', 'fiery lights' and hearing 'speech in morning time' (*SpD*, n2951). The nature of these experiences changed radically post-1744. On two separate occasions in April 1744 and April 1745 Swedenborg experienced seeing Jesus and God respectively, who spoke to him during night-time visions, when it is not clear whether he was awake, asleep, or somewhere in between. The vision of God was to be a turning point in Swedenborg's life, as it was at this moment that he experienced what he later described as the opening of his 'interior sight' (*AC*, n1619), allowing him to see and hear 'things of another life, which cannot possibly be made visible to the bodily sight' (*ibid.*).

Following this experience, Swedenborg started to write his first series of biblical commentaries on the books of the Old Testament, *The Word of the Old Testament Explained* (henceforth cited as *WE*). Much of this, Swedenborg claimed, was done in the presence of spirits. For example, he explains that 'These words are written in the presence of many Jews who are around me; nor do I doubt that Abraham is also present' (*WE*, n5292). His anomalous experiences at this time appear to have been predominantly auditory, with visual experiences being the exception rather than the rule (e.g. *WE*, n1511). Much of what Swedenborg wrote in this work was copied down as the voices dictated to him 'viva voce' (*WE*, n1150, n1511). Swedenborg vigorously denied that these voices were not real. '[I]t is not in the least degree phantasy', he wrote, 'but a continuous speech, as one of man with another . . . and this now for fifteen months' (*WE*, n5292). As well as being dictated to, he also noted that 'I have written entire pages, and the spirits did not dictate the words but absolutely guided my hand, so that it was they who were doing the writing' (*WE*, n1150). In these passages in which Swedenborg claims his hand is being guided, his handwriting differs from his normal hand, having an angular, slashing style (Toksvig, 1948). At this period of life some of his other movements also appear to have been experienced as controlled by spirits, 'They so ruled my actions that I went whithersoever they desired . . . they ruled my steps' (*WE*, n1149).

Swedenborg's frequency of visual experiences increased gradually over time. As Toksvig (1948: 217) puts it, 'He could "see" more and more as well as "hear"'. Swedenborg's next set of biblical commentaries, published as *Arcana Coelestia*, were not written in the form of automatic writing but were

reflections on what he had seen and heard. By 1758 Swedenborg had discerned at least four distinct ways in which he experienced his voices and visions, although he also claims 'there are a great many other kinds of vision which can never be described' (*WE*, n7387). The first clearly identified state when visions and voices would occur corresponds to states of consciousness associated with the transition from wakefulness to sleep, and vice versa, today referred to as hypnagogic and hypnopompic states respectively (Vaitl *et al.*, 2005). Swedenborg referred to this state as being 'withdrawn from the body, and not knowing whether one is in the body or out of it' (*HH*, n440), but noted that he had been in this state 'only three or four times' (*ibid.*). The second class of experiences occurred when Swedenborg was walking through the streets, yet subjectively perceived himself to be walking through groves, rivers and palaces, conversing with spirits. Again, Swedenborg reports that he only found himself in this state two or three times. Both these first two states were 'extraordinary' (*HH*, n442) and, Swedenborg believed, were shown to him 'only that I might know what they are' (*ibid.*). The third category occurred in 'full wakefulness, with the eyes closed' in which 'things are seen as though in clear day' (*WE*, n7387). The final class of experiences, 'to speak with spirits, and to be with them as one of them' was experienced by Swedenborg 'in full wakefulness of body' and was experienced over a period of many years. This appears to have been the most frequent form of Swedenborg's experiences, occurring on a day-to-day basis. He referred to this as being 'in the spirit' (e.g. *TCR*, n76).

When the spirits spoke to Swedenborg he typically heard them 'as sonorously as the speech of man' (*AC*, n4652), although in other circumstances the voices were less distinct and would 'mutter' (*AC*, n4657). The muttering voices appeared to be associated with a negative content, typically being 'of such a nature, that they observe the faults and failings of others . . . they see and interpret all things unfavourably, and prefer themselves to others' (*ibid.*). Yet other voices spoke 'by a gurgling of words as if from the belly' (*AC*, n1763). Although Swedenborg typically appears to have heard only one voice speaking at a time, he does also report sometimes experiencing 'a simultaneous speech of many spirits together' (*AC*, n1763).

Swedenborg did not only experience his voices and visions when he was alone; he noted that he had

. . . discoursed with them whilst I was also in company with men [and] I also observed, that as I heard the sound of a man's voice in discourse, so I heard also that of spirits, each alike sonorous. (*AC*, n1635)

Swedenborg also, intriguingly, notes that his voices themselves also thought other people could hear them:

. . . [a]t times, when spirits have spoken with me in the midst of the company of men, some of them have supposed, because their speech

was heard so sonorously, that they would be heard also by those that were there present. (*AC*, n4652)

As well as speaking in complete formal language, Swedenborg also notes that the spirits were able to speak in the language of thought. For example, he states that 'speech consisting of ideas of thought is the speech proper to spirits' (*AC*, n1639). Swedenborg claims to have often spoken with spirits 'in their proper tongue, that is, by ideas of thought' (*ibid.*).

From the 1760s through to his death in 1772, Swedenborg's visions typically took one of two forms (Benz, 2002). In the first he experienced a vision 'in a state of complete absorption with closed eyes' (*ibid.*: 280). In the second he was still aware of his surroundings but 'his spirit was directed towards persons and phenomena of the spiritual world, which became partially visible in the context of earthly reality and seemed to intrude into his sensory world of experience' (*ibid.*: 279). Benz (2002) identifies the following typical example of this second type of vision: Swedenborg is meditating on a problem, an 'angel' appears in a specific relation to him (e.g. above and to the left, or to his right). Swedenborg then heads into the spirit world, has a long and didactic conversation, then returns home. For example, Swedenborg reported the experience of being 'engaged in meditation upon the creation of the universe' when an angel 'above me on the right' noticed this, 'descended, and invited me up to them' (*TCR*, n76). Swedenborg claims he was then conducted to the palace of a prince where there ensued a long discussion with its occupants, after which 'the angel, who had introduced me, accompanied me to the house where he found me, and from thence re-ascended to his own society' (*TCR*, n76). In contrast to his earlier experiences in the 1740s when he wrote down what the spirits said to him as they spoke, or recorded their message via automatic writing, in the 1770s Swedenborg generally returned from his spiritual state into his physical state and only then wrote down the things he had heard and seen (Benz, 2002).

In these later visions there still remains some phenomenological heterogeneity. Some visions involve the spiritual figure appearing in the real world, although these are rare (Benz, 2002). For example, Swedenborg reports an experience where

A single satan was once permitted to ascend out of hell, together with a woman, and come to the house where I was. As soon as I perceived them I shut the window, but entered into conversation with them through it. (*TCR*, n80)

Finally, it is worth noting a specific physical state that Swedenborg observed to be associated with his anomalous experiences. Swedenborg noted that ever since his childhood he had been able to breathe in a 'scarcely perceptible' way (Benz, 2002: 158). This breathing technique appears to have consisted of suppression of his breathing in order to focus thought (*ibid.*). After his

anomalous experiences had been occurring for some years Swedenborg made the direct link between his controlled breathing and his spiritual experiences: claiming that 'my respiration was so formed by the Lord that I could respire inwardly for a considerable time, without the aid of external air . . . in order that I may be with spirits and speak with them' (*SpD*, n3317). He states that 'when heaven was opened to me, and I was enabled to converse with spirits, I sometimes scarcely breathed' (*SpD*, n3464). Benz (2002: 159) concludes that 'one cannot dismiss the possibility that Swedenborg's varied visionary experiences . . . are related to this phenomenon'.

Veracity of Swedenborg's reports

Before examining in depth how Swedenborg's experiences have been understood it must be established that Swedenborg did actually experience what he claimed (Talbot, 1998). In this respect we are concerned to establish, not that Swedenborg heard and saw spiritual beings with independent ontological statuses, but that he had experiences of hearing and seeing things that others could not. It is not our intention to address theological issues surrounding Swedenborg's experiences. Swedenborg himself was acutely aware of the skepticism that would meet his claims, writing that he was 'well aware that many will say that no one can possibly speak with spirits and angels . . . and many will say that it is all fancy, others that I relate such things in order to gain credence, and others will make other objections. But by all this I am not deterred, for I have seen, I have heard, I have felt' (*AC*, n68).

In support of Swedenborg's accounts there is first the testimony of his peers. Talbot (1998) cites a Mr Shearsmith who shared a house with Swedenborg. Shearsmith states that:

. . . what he [Swedenborg] saw was in a wakeful state, as he generally stood between the bed and front room when conversing in the day with spirits or those who were invisible to others; which conversations would often also be held in the night, or towards 2 and 3 o'clock in the morning, and would last for an hour or more, he often appearing to be in a kind of conflict, and saying, Nay! nay! nay! often, and sometimes loud; but when it met his approbation, Yea! yea! was pronounced, and more often.

Swift (1883) also put forward a number of reasons why it is unlikely that Swedenborg was simply fabricating his experiences. First, Swift noted that it is implausible that an eminent mathematician and philosopher known for his truth and integrity should 'voluntarily submit for nearly thirty years to a life of self denial and obscurity, merely for the purpose of deluding mankind' (*ibid.*: 69). Second, Swift noted that Swedenborg's claims were 'never associated with anything of self-ostentation or self-commendation'

(*ibid.*). Indeed, as noted above, Swedenborg had rejected a prestigious employment offer in order to pursue his spiritual investigations.

Finally, as Benz (2002) notes, only rarely did Swedenborg experience a traditional Christian vision where he saw events before his spiritual eye, and then received an explanation of them. In this way Swedenborg distinguishes himself from all earlier Christian visionaries in the 'preponderance of didacticism over imagery' (*ibid.*: 315) in his visions. If Swedenborg had fabricated such experiences it would have been more convincing to his peers if they had conformed to the traditional form of Christian visions. If, as seems probable, Swedenborg was reporting *bona fide* experiences, this still leaves the question of whether he embellished his reports. A review of his writings shows his voices and visions increasing in complexity, richness and colour over the course of his life. However, the content and relation of Swedenborg to the spirits remained broadly consistent. It hence appears likely that the visions and voices experienced did genuinely evolve over Swedenborg's lifetime. Another potential issue is that later in life Swedenborg generally wrote down his experiences after they had occurred, leaving open the possibility of memory errors and distortions. Where Swedenborg appears unreliable is not so much in what he reports seeing or hearing, as in his explanations of his experiences. For example, Swedenborg variously claims that pains he experiences in his head (*AC*, n5180) or stomach (*AC*, n5723) were caused by evil spirits. Such explanations could be understood as delusional elaborations (though the pains themselves were probably very real). Ultimately, the veracity and accuracy of Swedenborg's reports can never be conclusively determined. However, we conclude that it is fair to assume that his experiences were not fabricated or overly embellished.

HOW HAVE SWEDENBORG'S EXPERIENCES BEEN UNDERSTOOD?

In western Europe, between around AD 500 and AD 1500, individuals who reported hearing voices or seeing visions were not typically considered mad, but regarded by their peers as having actual perceptual experiences (Kroll and Bachrach, 1982). Such experiences could be understood as communications from spiritual beings (God, the Devil, etc.), as being merely imaginations, or as resulting from illness (Watkins, 1998). As late as the 17th century, the explanation of hallucinations as religious madness was still common (Porter, 2002). However, by the time of Swedenborg's experiences in the mid- to late 18th century, opinion was shifting towards a conception of hallucinations as illness. Works such as William Battie's *Treatise on Madness* (1758) were formative in identifying lunacy with false perceptions such as reported conversations with angels (Schmidt, 2002). As Schmidt (2002: 191) puts it,

‘Enlightenment epistemologies . . . demanded the disciplining of religious enthusiasm, a confinement of those “unguarded fancies of a man’s own brain” within a secure domain from which reason and the state might avoid contamination’.

Swedenborg’s own understanding

Swedenborg himself made sense of his experiences through the still accessible religious framework. He understood the ‘opening of his inner sight’ as directly equivalent to the experiences of the Old Testament prophets (AC, n1532). Before his vision of Christ in 1744, Swedenborg’s scientific background led him to struggle with the question as to whether figures in the Bible like Moses did actually experience God directly communicating with them. He ironically notes that his doubting ‘is the reason that the angels and God showed themselves to the shepherds and not to philosophers who let their understanding enter into these matters’ (Swedenborg cited in Benz, 2002: 166). Swedenborg initially struggled with himself to assess whether his experiences were mere fantasy (i.e. hallucinatory) or genuine experiences. For example, he writes: ‘What can this be? Is it Christ, God’s son, that I have seen?’ (DD, n55). However, he came to believe his experiences were genuine and to ‘obtain faith without reasoning’ (DD, n149). Swedenborg was then clear to differentiate his experiences from phantasy, where images created in the imagination appear to come from the external world (Benz, 2002). In Swedenborg’s words, his visions were not the ‘vision of phantasy which is of the interior sight; for then, that meets the eye as though from without which yet is within the natural mind’ (WE, n7386).

In addition to trying to understand the source of his experiences, Swedenborg also attempted to address the reasons behind them. Swedenborg supposed they occurred ‘in order that the man of the Church may not continue any longer in his erroneous faith as to a resurrection at the day of judgment, and the state of the soul in the meantime, and also as to angels and the devil’ (HH, n312). This ‘erroneous faith’, Swedenborg claimed, did not allow individuals to have satisfactory answers to fundamental questions such as ‘How can bodies eaten up by worms, consumed by corruption and scattered to all the winds, be gathered together again to their soul?’ (ibid.). These gaps in humanity’s understanding, he thought, would lead to doubts and denials about the existence of the soul, heaven and hell, and faith itself.

However, perhaps reflecting his scientific background, Swedenborg had another discourse available through which to explain the experience. He writes:

That the speech of an angel or spirit flows down from within even into the ear, was proved to me from this, that it also flows into the tongue causing a slight vibration; but not with any motion, such as takes place

when the sound of speech is thereby articulated into words by the man himself. (*HH*, n248)

In this account Swedenborg was able to attempt to knit together potential religious and natural science accounts of his experiences. Strikingly, Swedenborg concurred with modern researchers in seeing the origin of his voices in the realm of thought and speech (e.g. Jones and Fernyhough, 2007). Indeed, his understanding here seems to be as far ahead of its time as his work in neuroscience has been claimed to be (Gross, 1997). His belief that, what today are termed auditory verbal hallucinations, may be accompanied by 'slight vibrations' in the speech musculature was, two hundred years later, shown to be the case (e.g. Gould, 1948; Inouye and Shimizu, 1970). Thus, overall, Swedenborg cannot be adjudged guilty of Francis Bacon's claim that we love better to believe than examine.

Although Swedenborg was able to understand his experiences through a dual religious-natural science framework, he still had to justify this stance against alternative discourses, particularly that of insanity. Swedenborg himself defined insanity as involving 'one who acts contrary to accepted propriety and the customs of society, or, still more, who obstinately defends his own opinion against acknowledged truths and the judgement of sound mind, and . . . who, deranged and empty of mind, exposes himself to public sport' (Swedenborg, cited in Toksvig, 1948: 133). Swedenborg did not believe himself to meet these criteria (*ibid.*). However, he did appear to have worried that, on occasions such as when he responded to a spiritual command to wash his feet, he may have been perceived as insane (*ibid.*). One source of proof to himself that he was not insane came from a voice that told him 'one can become insane as to the body and yet not as to the mind or thinking' (*SpD*, n2421). The association of madness with irrationality that had developed out of the work of the 17th-century philosophers such as Locke and Hobbes also appears to have helped convince Swedenborg that he was not insane. Swedenborg's emphasis that he could 'enjoy my rational mind, just as if they [the spirits] were not present' (*SpD*, n2659) appears to have been a major factor in convincing him of his sanity. Others, however, did not concur.

The understanding of Swedenborg's contemporaries

It appears that Swedenborg himself, as well as a large number of those who met him, had a more charitable view of his experiences than those of the contemporary medical and philosophical establishment. However, as noted, Swedenborg was acutely aware that he may have been thought of as mad, writing of individuals who 'persuaded others that I was insane' (*SpD*, n2772). Perceptions of Swedenborg by his contemporaries may be categorized according to the extent to which the observer was personally familiar with him. As noted in the introduction, terms such as hallucination and madness

have a performative aspect. Thus, we should not be surprised that those who encountered Swedenborg face-to-face should have responded differently to those who did not.

Swift (1883) reports the testimony of an innkeeper, Mr Bergstrom, who encountered Swedenborg in the midst of an anomalous experience while staying at his inn. He found Swedenborg talking to invisible entities with his hands raised in an agitated state, and could not understand what he was saying. As Toksvig (1948) notes, this may be explained by the fact that Swedenborg was speaking in Latin, a language Bergstrom did not know. Even given these experiences, Bergstrom noted that Swedenborg was 'very reasonable' (Swift, 1883: 174), 'dressed neatly in velvet, and made a good appearance' (ibid.), and that he was a 'reasonable, sensible, and good man' (ibid.). Others who met Swedenborg in person, such as the Swedish statesman, Count Hopken, also appear to have agreed that he was of sound judgment (Toksvig, 1948).

Many of those who leveled charges of insanity against Swedenborg before meeting him seemed subsequently to have had second thoughts (ibid.). In addition to his demonstrated rationality in everyday life, Swedenborg's high social standing, combined with his failure overtly to cross the line from religious into political prophecy (Ingram, 1998), may also have played a role in his generally sympathetic treatment. Others who did cross into political prophecy, such as the English preacher Richard Brothers who in 1795 prophesied the fall of the monarchy, were rapidly institutionalized (ibid.).

Those who encountered Swedenborg solely through his writings appear to have made less charitable judgments. For example, Swedenborg's contemporary, the Swedish poet Johan Henrik Kellgren, wrote in a 1787 poem entitled 'You Are Not a Genius even if You Are Mad' that 'Swedenborg will never be anything else than an idiot' (our translation). Furthermore, in 1770 the early Methodist John Wesley wrote that Swedenborg 'is one of the most ingenious, lively, entertaining madmen that ever set pen to paper' (Wesley, 1986[1770]: 216).

Perhaps the most influential commentator, in terms of cementing a particular view of Swedenborg, was his contemporary Immanuel Kant. In his 1766 book, *Dreams of a Spirit-Seer*, Kant (2002[1766]) addressed the experiences of Swedenborg at the insistence of 'inquisitive and idle friends' (ibid.: 56). Kant distinguished between the raw experiences Swedenborg had, which Kant termed 'deludedness of the senses' (ibid.: 50), and the rationalizations, elaborations and interpretations Swedenborg made from these, which he termed 'deludedness of the reason' (ibid.). Kant did not believe that Swedenborg had simply invented his experiences, and found the 'coherent delusion of the senses' to be a 'remarkable phenomenon' (ibid.). Despite this measured tone, certain passages of Kant's work are more critical of Swedenborg. For example, Kant states he would not blame the reader if he dismissed characters such as

Swedenborg as 'candidates for the hospital' (ibid.: 35), and at one point also states that Swedenborg's works are 'nonsense' (ibid.: 49). The recent comment by Ward (2003: 515) that Swedenborg was 'a character whom everybody knew had been rubbished in his lifetime by critics as various as Kant and John Wesley' appears to bear out this conclusion. The weight which subsequent scholars have attached to certain of Kant's words may have contributed to succeeding generations being handed down an influential view of Swedenborg as mentally ill.

19th-century understandings of Swedenborg: hallucinations in the sane?

In 1817 a number of the experiences undergone by Swedenborg (hearing voices, seeing visions, etc.) were subsumed into the first medical definition of 'hallucination' by Esquirol. It was during this period of history that, for the first time, medicine claimed as part of its domain experiences that had traditionally fallen under the authority of the Church (T. James, 1995). Indeed, Schmidt (2002) has argued that medical psychiatry was created precisely in order politically to contain delusions of religious fervour. At this time the method of '*médecine rétrospective*' (Littre, 1860: 103) emerged. This involved attempts to reinterpret, in the light of present-day medical knowledge, the experiences of influential religious and philosophical figures such as Socrates, Moses, Luther, St Teresa of Avila, and occasionally Swedenborg, whose experiences had previously been predominantly situated in a religious discourse (T. James, 1995).

Two contrasting approaches to Swedenborg in the 19th century are particularly worthy of examination, those of Brierre de Boismont and Henry Maudsley. De Boismont's work on the relations between hallucinations and sanity occurred as part of the debate among French proto-psychiatrists (forerunners of contemporary medical psychiatry), as to the relation between hallucinations and madness. This debate, which stretched over three decades from approximately the 1830s onwards, culminated in the 1855 debate at the Société Médico-Psychologique. During these debates a range of views were proposed. At one extreme existed views such as Leuret's which argued that hallucinations were inherently pathological, and an indisputable sign of madness (T. James, 1995). De Boismont, a Roman Catholic doctor, was placed in an awkward position by his colleagues' arguments that all hallucinations were signs of madness, and hence that the Christian prophets, and more recent religious figures such as Luther and Joan of Arc, who had experienced hearing voices and seeing visions, were insane. The need for a category of hallucinations coexisting with sanity was for de Boismont crucial, as otherwise, he notes, 'we are compelled to admit that eminent men . . . must be placed in the Pandemonium of the insane, if the diseased hallucination is the only form that can be recognised' (de Boismont, 1860: 369). He hence argued

that the opinion that turns celebrated men 'into hallucinated lunatics, must be rejected, and reason be permitted to claim these great men as their own' (ibid.: 370).

In order to achieve this aim de Boismont noted that it was true that the 'majority of the insane are subject to hallucinations; but it is equally certain, that they may occur by themselves' (ibid.: 261). From this flowed his argument that hallucinations were not necessarily a 'sign of insanity' (ibid.: xiv), and that they may coexist with sanity. One influential case in supporting this thesis was the oft-cited case of a German bookseller, Nicolai, who in 1799 experienced a number of visual hallucinations both of a known deceased acquaintance and of other unknown figures. Nicolai was able to deal effectively with the continuance of these hallucinations, to the point where he came only to experience mild anxiety when they spoke to him. Upon seeking medical assistance, he came to receive a diagnosis not of insanity, but 'hallucinations compatible with reason' (Berrios, 1996: 36).

De Boismont further subdivided his category of 'hallucinations coexisting with sanity' (1860: 34) into hallucinations that were corrected by the judgement, and those that were not. This distinction arose from de Boismont's division of hallucinations into 'two distinct elements, the sensible idea and the mental conception' (ibid.: 259). The sensible idea referred to the raw experience (i.e. the hearing of the voice), whereas the mental conception referred to how the experience was understood. In hallucinations corrected by the judgement, individuals 'correctly regarded their hallucinations as the offspring of the imagination, or as arising from the unhealthy state of the body' (ibid.: 74). In hallucinations not corrected by judgment, individuals' explanations were 'led by their belief in the supernatural' yet they 'gave no evidence of a disordered intellect' (ibid.). De Boismont claimed that the prominent religious figures of the past fell into this latter category. He also noted the importance of context, arguing that figures such as Luther's interpretations of their experiences belonged to 'society and not the individual' (ibid.: 363).

Although de Boismont considered a number of historical figures, he only mentioned Swedenborg in passing, as part of a discussion on 'hallucinations in ecstasy' (ibid.: 188). However, as is clear from the above, he does not appear to have regarded figures such as Swedenborg as insane. A similar view was taken by his contemporary Lélut. Lélut noted that there existed the view that 'the insanity . . . of Swedenborg, is now generally admitted by all who have added the study of mental disease to that of history and philosophy' (Lélut cited in De Boismont, 1860: 340). However Lélut admitted the possibility that there could be

. . . more or less continual, chronic hallucinations, considered by the hallucinators as real sensations, which are nevertheless compatible with an apparently whole set of reason, and which allow the individual who

suffers them, not only to manage to continue to live with his fellow men, but even to bring to his conduct and the management of his interests all the soundness of judgement which is desirable. (Lélut, cited in T. James, 1995: 91)

Lélut concluded that figures such as Swedenborg 'were not mad, but they were hallucinators, hallucinators such as no longer exist, nor can exist, hallucinators whose visions were the visions of reason' (ibid.: 92). Lélut recognized that such historical figures had 'hallucinations in a religious and reforming mode which was fostered by the spirit of the age' (ibid.: 91) and that this spirit of the age, 'incapable of understanding such a form of madness, obliged the hallucinator and his witnesses to believe in the reality of his false perceptions' (ibid.).

Shortly after the French proto-psychiatrist debate, the agnostic and materialist English psychiatrist Henry Maudsley published a less favourable judgement on Swedenborg's sanity. Maudsley had the explicit aim to promote science over religion (Leudar and Sharrock, 2003) and it was within this context that he gave attention to the case of Swedenborg (Maudsley, 1869a, 1869b). Reflecting the influence of writers such as Kant, Maudsley began his review by noting that 'there are very few who have thought it worth their while to study him [Swedenborg] at all seriously; he is commonly accounted a madman' (ibid.: 169). Maudsley then moved on to discredit Swedenborg's earlier scientific work, claiming it would be 'unprofitable to attempt to give here a summary of Swedenborg's physiological views . . . among them wild conjectures, fanciful theories, strange conceits and empty phrases' (ibid.: 183).

Maudsley's review of Swedenborg's life relied on biographies and not on Swedenborg's original writings. As a consequence he placed weight on a story of Swedenborg rolling around naked in mud, claiming to be the Messiah, which today is considered apocryphal (Talbot, 1998). Maudsley concluded that 'though he [Swedenborg] was insane, he was capable of taking care of himself sufficiently well, and of managing his affairs with prudence' (Maudsley, 1869b: 434). This view appears to be in line with the French proto-psychiatrists' concept of Swedenborg's hallucinations coexisting with sanity, except that Maudsley saw Swedenborg's hallucinations as being intrinsically constitutive of insanity. This seemingly paradoxical conclusion becomes clearer when we note that, although Maudsley was aware of the existence of hallucinations coexisting with sanity, he proposed that this concept applied only to hypnagogic and hypnopompic hallucinations (Leudar and Thomas, 2000). Hallucinations, such as Swedenborg's, occurring in clear consciousness were understood by Maudsley as being pathological and indicative of mental illness.

After Maudsley's (1869b: 434) conclusion that Swedenborg was 'capable of taking care of himself sufficiently well, and of managing his affairs with

prudence', it is somewhat troubling when he adds that 'had he [Swedenborg] lived at the present day in England it is very doubtful whether he would have been left in undisturbed possession of his freedom and his property' (ibid.). Maudsley's hypothetical scenario was later played out in court three decades later when the hallucinations experienced by Daniel Paul Schreber, 'the most frequently quoted patient in psychiatry' (Leudar and Thomas, 2000: 52), resulted in a similar court case. In Schreber's case the court ruled that although Schreber was 'insane' this was not all-encompassing, being restricted to his religious 'fixed ideas', and was hence not a reason to deprive him of his legal rights (ibid.).

20th-century understanding of Swedenborg: consolidation of psychiatry

A number of events around the end of the 19th century provided further impetus for considering Swedenborg's experiences as non-pathological. First, large-scale empirical investigations of hallucinatory experiences in the normal population began. In a survey of 17,000 normal participants, the Report on the Census of Hallucinations (Sidgwick *et al.*, 1894: 33) asked the question 'Have you ever, when believing yourself to be completely awake, had a vivid impression of seeing or being touched by a living being or inanimate object, or of hearing a voice: which impression, so far as you could discover, was not due to any external physical cause?' Ten per cent of respondents replied in the affirmative, though approximately half reported these experiences occurring as they were either falling asleep or waking up. In terms of the modality of the experiences, 56 per cent were solely visual, 23 per cent solely auditory, and 6 per cent involved combined visual and auditory hallucinations.

Secondly, William James's publication of *The Varieties of Religious Experience* in 1902 argued for alternative ways to understand religious experiences. James (1960: 35) noted that what he termed medical materialism 'finishes up Saint Paul by calling his vision on the road to Damascus a discharging lesion of the occipital cortex, he being an epileptic', 'snuffs out Saint Teresa as an hysteric, [and] Saint Francis of Assisi as an hereditary degenerate'. James claimed that such an approach was simple-minded, and argued that experiences such as hallucinations should be dealt with not by 'superficial medical talk' but by an inquiry into 'their fruits for life' (ibid.: 398).

Despite the existence of these conceptual tools, at the dawn of the 20th century it was commonplace for hallucinations still to be seen as pathological and indicative of mental illness (Leudar and Thomas, 2000). The psychiatric framework remained the dominant method of understanding hallucinations, and, inspired by Maudsley, psychiatry limited the phenomena conceptualized as hallucinations of the sane to hypnagogic and hypnopompic hallucinations. Hallucinations in clear consciousness were seen as implying mental disorder (Leudar and Thomas, 2000), as they still often are today (American Psychiatric Association, 2000).

With the further rise of medical psychiatry in the 20th century there were a number of attempts to apply the French proto-psychiatrists' approach of retrospective medicine to Swedenborg and, partly due to Maudsley's view on hallucinations in clear consciousness, correspondingly fewer attempts to understand his experiences as hallucinations coexisting with sanity. Swedenborg's experiences accordingly continued to be predominantly understood as a symptom of an illness, the most common proposals being schizophrenia and epilepsy.

Claims for a diagnosis of schizophrenia

Jaspers (1923) argued that Swedenborg was suffering from schizophrenia on the grounds of the hallucinations that he claimed Swedenborg experienced, as well as the delusional messianic beliefs he understood him to espouse. Jaspers considered the diagnosis of schizophrenia 'a certainty' (ibid.: 125) even while conceding that 'the available data do not suffice to render the diagnosis absolutely foolproof' (ibid.). Jaspers' broad conception of schizophrenia, encompassing 'all irreversible processes which are not known as organic cerebral processes or epilepsy' (ibid.: 191), differed considerably from contemporary definitions. However, some modern psychiatrists still suggest that schizophrenia may be an appropriate diagnosis for Swedenborg (e.g. J. Johnson, 1994). It is easy to see how some of Swedenborg's experiences could lead to such a conclusion. In addition to his apparent hallucinations and delusions, statements such as 'my hand was so manifestly directed to the writing that the words hardly appeared to have been written by my hand; my hand was being ruled' (*WE*, n5741) could be interpreted as exemplifying delusions of control associated with schizophrenia (Frith, 1992). A further point of comparison concerns the intellectual quality of the voices and visions Swedenborg experienced. Van Dusen (1990) claims to have been able to delineate 'higher'- and 'lower'-order voices of patients with schizophrenia. The lower-order voices he found to have a level of knowledge 'far less than the patient's' (ibid.: 154). Contrastingly, he found the higher-order voices to be 'more gifted' than the patient (ibid.: 150). As Van Dusen notes, Swedenborg experienced both 'higher' and 'lower' voices according to this definition.

Claims for a diagnosis of epilepsy

In addition to views of Swedenborg as suffering from schizophrenia, there is a long history of viewing his experiences through the lens of epilepsy, a neurological disorder characterized by seizures resulting from abnormal or excessive neuronal activity in the brain. There is a prima facie case to be made for a diagnosis of epilepsy from the observations that at the onset of Swedenborg's anomalous experiences he lost interest in sex (*DD*, n14), turned his focus exclusively to religious matters, and started to produce voluminous

writings on this topic. These coincide with the three primary features of the epileptic syndrome described by Geschwind (hyposexuality, hypergraphia, and hyperreligiosity) which now bears his name (van Elst *et al.*, 2003), although the characterization of this as a personality disorder associated with epilepsy remains controversial (Devinsky and Najjar, 1999).

Foote-Smith and Smith (1996) have also proposed that Swedenborg suffered from epilepsy. They interpret Swedenborg's report that, just prior to experiencing a vision of Jesus, 'there came over me a strong shuddering from head to foot with a thunderous noise, as if many winds beat together; which shook me; it was indescribable and prostrated me on my face' (*ibid.*: 214) as being a generalized tonic-clonic epileptic seizure. They also claim that Swedenborg demonstrated 8 out of the 18 possible behavioral correlates of epilepsy described by Bear and Fedio (1977), as well as noting examples of an ecstatic aura, typically associated with epilepsy, being reported by Swedenborg.

Going beyond the evidence presented by Foote-Smith and Smith (1996), a number of other facets of Swedenborg's experiences could be seen as being consistent with epilepsy. First, the presence of psychotic experiences such as hallucinations and delusions, commonly associated with the positive symptoms of schizophrenia, is a significant complication of epilepsy (Toone *et al.*, 1982). This is particularly the case in the most common form of epilepsy, temporal lobe epilepsy (TLE), in which seizures originate in the temporal lobe (*ibid.*). Psychotic experiences are found in many case reports of individuals diagnosed with epilepsy. For example, Oner *et al.* (2005) found almost daily auditory verbal hallucinations, as well as brief visual hallucinations, in an individual diagnosed with complex partial epilepsy. Furthermore, Hansen and Brodtkorb (2003) report an instance of an epileptic patient who reported the sensation of being in two different worlds. In one attack this patient imagined encountering a wise woman who, in a non-verbal manner, attempted to present to her the ultimate mission of her life. The patient was unable to interpret the details of the message, save that it was related to saving children, and was extremely important. The experience of being in another world, as well as receiving an extremely important message, both characterize some of the experiences of Swedenborg. Another patient reported by Hansen and Brodtkorb (2003) related that during seizures his surroundings felt strange and unfamiliar as if they were in another world.

The link between epilepsy and hyper-religiosity can be seen to provide further support for a diagnosis of epilepsy. TLE has been found to be associated with an enhanced emotional response to specifically religious stimuli, rather than neutral or sexual stimuli (Ramachandran and Blakeslee, 1998). Furthermore, when the religious experiences of individuals with TLE with prominent religious inclinations have been compared to healthy churchgoers, it has been found that hyper-religious epileptic individuals adopted

significantly more non-mainstream (for the United Kingdom) religions than healthy churchgoers (Trimble and Freeman, 2006). Hyper-religious epileptic individuals are also significantly more likely to report the awareness of an evil presence, the feeling of being punished by God, and sensory experience of spiritual figures, as well as believing such experiences to be a source of valid knowledge, which, although non-rational and insightful, are felt to be not merely subjective (*ibid.*).

Swedenborg also reported a number of experiences that we may interpret as simple partial epileptic seizures (seizures in which consciousness is not impaired). First, he reported instances where he experienced unintended facial muscular movements. For example, he writes that 'there are spirits who do not speak but [who] expressed their meaning by changes induced on my face . . . This was affected by variations around the region of the lips extending thence into the face, and also around the eyes' (*AC*, n1762, see also *AC*, n5720). Elsewhere he states how a 'region of my face was moved out of shape' (*SpD*, n626). As Hopkins and Appleton (2003: 14) note, in partial seizures cells in the motor cortex 'which supply the corner of the mouth . . . are most likely to be those in which a seizure discharge begins'. In a related vein Swedenborg elsewhere notes that spirits 'brought about an urge' for him to thrust his tongue between his teeth and so cut it off (*SpD*, n1361, see also *SpD*, n1465). Second, Swedenborg notes that one evening spirits caused him to smell 'the odour of human excrement from the dry foods, and a foul ruinous odour from the liquids' (*SpD*, n618). Similarly he notes that 'on two occasions . . . sugar tasted almost like salt', an experience which he attributed to spirits from Jupiter (*SpD*, n645, see also *WE*, n4793). Both experiences could be attributed to a seizure discharge in the anterior part of the temporal lobe (Hopkins and Appleton, 2003). Third, Swedenborg reports an occasion when 'he [a spirit] induced a contraction or painful straitness in the lower region of the belly' (*AC*, n5388). Such epigastric sensations are also associated with epileptic seizures. Fourth, Swedenborg notes a number of experiences in which he saw lights. Among these were small stars (*SpD*, n613, n913), flashes of lightning (*SpD*, n914), and bright lights (*AC*, n1116, n6922). Such experiences could be interpreted as elementary visual seizures (Ebner, 2001). Finally, Swedenborg also described out-of-body experiences, which in addition are reported by some epileptic patients (Devine and Duncan, 2007).

Any interpretation of Swedenborg's experiences as symptoms of epilepsy would still leave open the question of what triggered his seizures. Benz (2002: 293) notes that 'a great number of Swedenborg's visions actually occurred while he was sitting in his room and reflecting on a particular passage in the Bible'. It could be speculated that Swedenborg experienced language-induced epilepsy in which seizures can be precipitated by speaking, reading, or writing (Valenti *et al.*, 2006).

Reconsidering diagnoses of schizophrenia and epilepsy

We may first reconsider the claim that Swedenborg was suffering from schizophrenia. As noted above, Jasper's (1923) claim that Swedenborg suffered from schizophrenia was partly based on stories that Swedenborg claimed to be the Messiah. As noted above, such claims appear apocryphal (Talbot, 1998). Furthermore, Swedenborg's 'delusions of control' – feeling his hand was moved by another power – occurred only for a short period. Foote-Smith and Smith (1996: 216) have argued that the inappropriateness of a diagnosis of schizophrenia is self-evident from the fact of Swedenborg's 'lifelong involvement in public affairs as a nobleman', 'his scientific achievements', and his membership of the Royal Academy of Sciences. Social and occupational dysfunction is indeed one of the current diagnostic criteria for schizophrenia (American Psychiatric Association, 2000), and, as the evidence presented earlier has shown, Swedenborg was clearly able to function at a high level after the onset of his anomalous experiences. It would hence appear that this psychiatric diagnosis is not appropriate.

However, this does not necessarily validate the alternative conception that Foote-Smith and Smith (1996) have put forward, namely that Swedenborg suffered from epilepsy. A reexamination of Foote-Smith and Smith's evidence for Swedenborg's epilepsy shows much that is anecdotal, selective and vague. For example, examination of their suggestion that Swedenborg possessed many of the eighteen possible behavioral correlates of epilepsy (Bear and Fedio, 1977) shows that their claim of his alleged 'sadness' comes from a diary entry where Swedenborg relates that he wept because he had not loved God. The citing of a single episode of a transient emotional state in Swedenborg does not amount to proof that he possessed sadness as a personality trait. Evidence of the latter in Swedenborg is lacking, and as Pendleton (1998) notes, Foote-Smith and Smith (1996: 215) themselves, elsewhere in their article, cite a contemporary of Swedenborg describing him as 'always contented, never fretful or morose'.

There are also a number of aspects of Swedenborg's account that suggest that an explanation of his experiences as due to epilepsy is not appropriate. First, Swedenborg never seemed to be overwhelmed by his experiences in public. As Benz (2002: 307) notes, 'not one of his friends or visitors report sudden raptures, which might have overpowered him against his will at an unsuitable moment, in company or before witnesses'. Second, Pendleton (1998) has queried Foote-Smith and Smith's (1996) interpretation of some of Swedenborg's experiences as generalized tonic-clonic seizures (GTCS).

Other aspects of Swedenborg's experiences that question the appropriateness of a diagnosis of epilepsy are their frequency, duration and length. First, it is not common for patients with epilepsy to experience the multiplicity of sensations that Swedenborg did (Landtblom, 2004). Although the contemporary experiences of individuals with epilepsy reviewed above show some

similarities to Swedenborg's experiences, none of these individuals presented with the variety of experiences Swedenborg underwent. Second, as a recent review concludes, the hallucinations of epilepsy are 'usually brief, stereotyped and fragmentary' (Mamford and Andermann, 1998: 1826). Swedenborg's experiences were not like this. Furthermore, the hallucinations of epilepsy usually follow a similar pattern as they most frequently are derived from the same epileptic focus (Landtblom, 2004). The variety of Swedenborg's experiences is not consistent with this.

We may also reconsider the claim that Swedenborg's hyper-religiosity was a manifestation of TLE, as such an attitude may equally well be explained as arising from the religious culture in which he was raised. The content of hallucinations has been shown to be influenced by the culture in which the individual is situated. For example, whereas much of the hallucinatory content in Saudi Arabia is religious and superstitious, in the United Kingdom hallucinations are more centred around instructional themes and running commentaries (Kent and Wahass, 1996).

In a related hypothesis, Bradford (1999) has proposed that Swedenborg's experiences resulted from non-epileptic partial complex seizures associated with vascular disease. From evidence that Swedenborg occasionally reported experiencing the spirit world in the right portion of his visual field, Bradford concludes that 'Swedenborg experienced a right-superior quadrantanopia which corresponds with damage along the temporooccipital geniculocalcarine pathway' (ibid.: 379). Unfortunately, like Maudsley, Bradford does not appear to have consulted Swedenborg's original writings, instead relying on reproduced quotations in Benz (2002). Swedenborg's works actually show that he also saw spirits in the left visual field (e.g. AC, n5180, n5387, n5390, n7170).

In conclusion, although cases exist where patients with epilepsy have experienced either auditory, visual or olfactory hallucinations that individually bear some resemblance to Swedenborg's, we are not aware of reports of patients experiencing all of these in clear consciousness and with no intellectual impairment.

UNDERSTANDING SWEDENBORG'S EXPERIENCES TODAY

Given the above review, Johnson's (1994: 691) conclusion in the *British Journal of Psychiatry* that 'Swedenborg's messianic psychosis was due to acute schizophrenia or an epileptic psychosis' is likely to be misplaced. The attempts reviewed above to fit Swedenborg's experiences into some form of psychiatric diagnosis can be seen as operating in the context of a specific understanding of the term 'hallucination'. Despite the introduction of the category of hallucinations of the sane by the French proto-psychiatrists, for

much of recent history the concept of hallucinations has been 'pejorative, coterminous with madness, lunacy, and schizophrenia' (Sarbin, 1967: 379). However, as Leon James (2001: 161) notes, there have always been those in the arts who have seen Swedenborg's experiences and writings 'not as a madman's psychosis, but as intellectually valuable, convincing, and unique'. The positive opinions of Swedenborg held by thinkers and writers such as William Blake, Ralph Emerson, Carl Jung, August Strindberg and Henry Thoreau have had little impact on psychiatric thinking about hallucinations which has remained dominated by the 19th-century conceptions discussed above (Berrios, 1991). Those outside of psychiatry have called for a re-consideration of how we perceive Swedenborg's experiences. For example, the Reverend Brian Talbot (1998) notes that Swedenborgians are disappointed that psychiatrists have not 'considered a third option, and that is that Swedenborg was sane and his unusual experiences were genuine'. In the remainder of this article, we consider how contemporary discourses about hallucinations provide just such a 'third way' of understanding voice-hearing and related experiences, through a revival of the concept of hallucinations in the sane.

A third way: hallucinations without mental disorder

The contemporary reconstruction of the 19th-century concept of hallucinations in the sane may be traced back to the interactions of one psychiatrist, Marius Romme, with a particular patient, Patsy Hague. Romme was led to investigate the presence of specifically auditory hallucinations (voice-hearing) in the general population after discussions with Hague who herself heard voices. These meetings directly led to a television appearance by Romme requesting voice-hearers to contact him. Of the 173 respondents who agreed to complete a questionnaire, 76 were not in psychiatric care (Romme *et al.*, 1992). This and later work led to Romme's being confronted by a large number of 'well-balanced, healthy people, who happened to hear voices' (Romme and Escher, 1993: 59). This provided the impetus for a series of studies into psychosis-like experiences in the general population, similar to those at the end of the 19th century. These studies provided further evidence that otherwise healthy individuals may experience hallucinations in the absence of the social dysfunction or distress associated with clinical psychosis, and that such experiences exist on a continuum stretching into the normal population (Johns and van Os, 2001; Posey and Losch, 1983; Tien, 1991). The annual prevalence of such hallucinatory experiences in the general population (in both the visual and auditory modality) has been found to be 4 per cent (Johns, Nazroo *et al.*, 1998).

As a result of such work, a growing worldwide movement exists today based around the view that hallucinating does not necessarily imply mental illness (Romme and Escher, 1993). For example, in the United Kingdom this has led to the creation of a large user-movement, the Hearing Voices Network,

with parallel organizations now existing throughout the world. Although such individuals' experiences are predominantly auditory, members of the Hearing Voices Network also experience hallucinations in a range of other modalities; for example, visual and tactile (Romme and Escher, 1993). This movement has resulted in a large number of such individuals rejecting the label of 'patient', and the reinvention by such individuals, partly in partnership with psychiatrists, of the paradigm of hallucinations in the sane. In order to encompass the range of sensory modalities in which these experiences can occur, we henceforth use the term 'hallucinations without mental disorder' (HwMD) to refer to these experiences.

There is a gathering consensus that whether an individual experiencing voices and/or visions receives a psychiatric diagnosis depends much on the emotional content of the experience, and her or his emotional response to it. For example, voice-hearers' interpretation of their voices, not just the experience of the voice-hearing *per se*, is an important determinant of the amount of resulting distress and social/occupational disability (Krabbendam *et al.*, 2004). In this framework, social representations (Moscovici, 1988) of voices and visions as being coterminous with madness and insanity may act as self-fulfilling prophecies through their impact on how individuals who have these experiences interpret them. Today many individuals who experience voices and visions are able to lead productive lives, and encounter their experiences in a non-psychiatric, non-mental illness discourse. Contemporary examples of this include a prominent professor of Mathematics who reports receiving beneficial mathematical insights from her voices (Malone, 2006) and a leading pianist who hears a voice that illuminates his playing as well as experiencing a number of anomalous visual experiences (*ibid.*). In line with such examples, Leudar (David and Leudar, 2001: 256) has argued that 'hearing voices (and the experiences we may categorize as hallucinations) should be judged as sane or insane in terms of their consequences for life. They are not in themselves signs of madness, any more than, say, thinking and remembering.'

Given the religious background of Swedenborg, and the cultural milieu in which he was situated, it seems appropriate for us today to consider his experiences as those of an individual experiencing HwMD. It should be stressed that such an account is not an explanation of Swedenborg's experiences, but rather offers an established framework within which to understand them that does not invoke concepts of mental illness or insanity.

Swedenborg's experiences in a modern context

It is interesting to compare modern characterizations of the experiences of HwMD with what Swedenborg reported. As most research into such individuals' hallucinations has focused on 'hearing voices', we focus our comparison on Swedenborg's early experiences in the mid-1740s, which, as noted above, were largely auditory. The majority of individuals experiencing HwMD in a

sample interviewed by Leudar *et al.* (1997) reported being the target of the voice, which spoke to them rather than addressing another voice or person. Swedenborg's experiences also included direct conversations with spirits, as well as overhearing their conversations with each other. Secondly, Leudar *et al.* found the majority of those experiencing HwMD reporting hearing voices giving commands – for example, 'Get the milk' or 'Go to the hospital' (Nayani and David, 1996) – which typically focused on mundane, everyday activities. Swedenborg's early voices also gave him explicit directions, in his case to write. Although it might seem odd to describe Swedenborg's profoundly spiritual experiences as being focused on mundane or everyday activities, his voices were nevertheless able to go into great depth about the specifics of life in a spiritual realm. It was this that led William Butler Yeats to remark that he liked Swedenborg because he tells us that the angels don't use butter (Johnson, 1997).

Surveys of the numbers of different voices heard by individuals experiencing HwMD have found an average of 2–3 voices (Leudar *et al.*, 1997). Swedenborg heard many more than this number, indeed by 1748 he had counted 60 different voices (*SpD*, n1499). Swedenborg also experienced voices which themselves claimed to believe that other people could hear them. While it is common for many experiencing HwMD initially to think that their voices can also be heard by others (Romme and Escher, 1993), no phenomenological surveys have reported examples of individuals reporting that the voices themselves think that other people can hear them. This may be seen to reflect Van Dusen's (1990) observation that some voices can be seen to be independent from the individual's conscious self. Another facet aspect of Swedenborg's experience is that he claims to have often spoken with spirits 'by ideas of thought' (*AC*, n1639). While the idea that we think, not in natural language, but in a specific language of thought (today termed 'mentalese') is still a popular philosophical position (e.g. Fodor, 1975), it is not known whether voices reported by those experiencing HwMD often have this quality.

Currently, a lack of relevant evidence prevents us from comparing Swedenborg's later experiences, in which he felt himself to ascend to the spirit world and there converse with spirits, and similarly combined visual and auditory experiences in modern accounts of HwMD. However, we would note that personal accounts from those with HwMD indicate that when visually hallucinating most experience themselves as firmly in this world, with their visual hallucinations also embedded in it (Romme and Escher, 1993).

What can we learn from Swedenborg's experiences?

Conceiving of Swedenborg's experiences as those of an individual experiencing HwMD argues against previous proposals that it is not worthwhile

'to study him at all seriously; [as] he is commonly accounted a madman' (Maudsley, 1869a: 169). When viewed as worthwhile of investigation, Swedenborg's experiences present us with a number of questions. One such question is the relation of the knowledge and intelligence of the voices and visions experienced by an individual to his or her conscious persona. Swedenborg was clearly able to hold dialogues with his voices and visions, while not experiencing the answers or arguments they gave as his own. This raises the question as to whether it is possible for voices and visions to have access to information that the experiencer may not be able to consciously access. If so, what are the cognitive mechanisms that allow voices to offer insightful, novel information to those experiencing HwMD? This issue is highlighted by contemporary cases, such as that of an otherwise healthy woman who heard voices telling her to get a brain scan for a tumour, which was subsequently found and removed, at which point the voices stopped (Azuonye, 1997). We may also ask what the relation is between such experiences and the creative process, where novel ideas enter into consciousness and are experienced as generated by the self. Research showing an association between schizotypy (non-clinical equivalents of the symptoms of schizophrenia) and creativity (e.g. Brod, 1997; Nettle, 2006) suggests that the creative process may be linked to ideas that are experienced as alien to the self (see also Taylor *et al.*, 2004).

We may also consider what we can learn from the efforts of Swedenborg and other historical figures to cope with their experiences. Swedenborg's talking back to the spirits may have been actively beneficial to him. One experimental therapy for individuals experiencing HwMDs already acts through treating the voices as separate entities with which the voice-hearer can engage in a dialogue. This was explored in a case study by Davies *et al.* (1999), in which one of the authors (Davies), a voice-hearer diagnosed with schizophrenia, initially experienced two dominant voices. The first voice, which she termed her 'guardian angel', commented on her behavior and often ordered her to do 'wicked' things. Such commands were hard to resist. The second voice she referred to as her 'little devil'. This voice did not direct her but gave her information necessary for performing the actions it suggested. When, as part of a therapeutic intervention, Davies started to write out potential responses to the voices' suggestions, as part of a dialogical engagement with them, a new voice arose, which Davies termed her 'holy angel'. This voice reassured her, supported her, and had the effect of increasing her self-esteem.

CONCLUSION

This article first offered a summary of the experiences of Emanuel Swedenborg, and an account of how he and others have attempted to explain these experiences. It was shown how the birth of psychiatry increased the range of

conceptual frameworks available for making sense of Swedenborg's experiences, including interpretations of his experiences both as a spiritual visionary and a madman. However, as has happened with many other historical figures (Leudar and Sharrock, 2003), Swedenborg's experiences became translated into pathological symptoms. In the 20th century this understanding, through further medicalization of Swedenborg's experiences, continued, with Swedenborg understood as suffering from epilepsy or schizophrenia. We have argued that Swedenborg's experiences are not consistent with such diagnoses, and that instead they may be understood (though not may be explained) within a non-medical framework. Specifically, we have proposed that Swedenborg be understood as an individual experiencing HwMD, a discourse which can exist outside of that of mental illness. David (David and Leudar, 2001: 256) has claimed that 'A [healthy] voice-hearer who is not in any distress, who lives a fruitful and productive life according to commonsense criteria, would never even enter the arena in which the possibility of mental illness was up for discussion'. We suggest the frequent historical attempts to diagnose Swedenborg with a psychiatric disorder have arisen due, not to the failure of Swedenborg's life to be fruitful and productive, but its failure to do so 'according to commonsense criteria'.

We should also consider some possible limitations to our analysis. First, it may be correctly noted that we have not consulted the writings of Swedenborg except in translation, and that the quotations we have used to support our case are selective. In response to this we note that Swedenborg's voluminous output means that such a review must be to some extent selective. Second, it may be noted that, just as Talbot (1998) has argued that some psychiatrists may have an interest in promoting Swedenborg as an example of someone who was insane, our account has been partly motivated by an attempt to demonstrate that Swedenborg can be conceived of as experiencing HwMD. We are happy to let the reader, and particularly those who have studied Swedenborg's writings more closely, judge whether our review of Swedenborg's experiences in the context of the psychiatric literature is fair. Even if others wish to dispute our characterization of Swedenborg as experiencing HwMD, this article has shown how a number of productive lines of enquiry relevant to our contemporary understanding of hallucinations may be developed.

Finally, it appears from our review of Swedenborg's experiences that the formation of an active partnership between the scientific community and those experiencing HwMD would be likely to be highly beneficial to both parties. The active involvement of such individuals in the research process should help to reduce the perception of such individuals as 'patients', and instead promote a conception of them as rational, healthy individuals who are attempting to understand experiences that are present, albeit in lesser degree, in many of us. Such a partnership should also provide researchers with a better acquaintance with the varied phenomenology of such experiences,

forming a bridge between clinical and research aspects of psychology. This approach would appear to be a good step towards what Romme (cited in Bentall, 2003: 511) has termed the 'liberation not cure' of those experiencing HwMD. Ignoring or sidelining the experiences of individuals undergoing voices and visions, such as Swedenborg, may constitute a barrier both to further understanding of the phenomenon and, if necessary, therapeutic progress. Although consulting such individuals may at first raise more questions than answers, it is only by such a process that these most mysterious of experiences can come to be more fully understood.

BIBLIOGRAPHY

- American Psychiatric Association (2000) *Diagnostic and Statistical Manual of Mental Disorders*, 4th edn, revised. Washington, DC: APA.
- Azuonye, I. O. (1997) 'A Difficult Case: Diagnosis Made by Hallucinatory Voices', *British Medical Journal* 315: 1685–6.
- Bear, D. M. and Fedio, P. (1977) 'Quantitative Analysis of Interictal Behaviour in Temporal Lobe Epilepsy', *Archives of Neurology* 34: 454–67.
- Bentall, R. P. (2003) *Madness Explained: Psychosis and Human Nature*. London: Penguin Books.
- Benz, E. (2002) *Emanuel Swedenborg: Visionary Savant in the Age of Reason*, trans. N. Goodrick-Clarke. West Chester, PA: Swedenborg Foundation.
- Berrios, G. E. (1991) 'British Psychopathology since the Early 20th Century', in G. E. Berrios and H. Freeman (eds) *150 Years of British Psychiatry 1841–1991*. London: Gaskell and the Royal College of Psychiatrists.
- Berrios, G. E. (1996) *The History of Mental Symptoms: Descriptive Psychopathology since the Nineteenth Century*. Cambridge: Cambridge University Press.
- Borch-Jacobsen, M. (2001) 'Making Psychiatric History: Madness as *Folie à Plusieurs*', *History of the Human Sciences* 14: 19–38.
- Bradford, D. T. (1999) 'Neuropsychology of Swedenborg's Visions', *Perceptual and Motor Skills* 88: 377–83.
- Brod, J. H. (1997) 'Creativity and Schizotypy', in G. Claridge (ed.) *Schizotypy: Implications for Illness and Health*. Oxford: Oxford University Press.
- David, T. and Leudar, I. (2001) 'Head to Head: Is Hearing Voices a Sign of Mental Illness?', *The Psychologist* 14: 256–9.
- Davies, P., Thomas, P. and Leudar, I. (1999) 'Dialogical Engagement with Voices: a Single Case Study', *British Journal of Medical Psychology* 72: 179–87.
- De Boismont, A. B. (1860) *On Hallucinations*, trans. R. T. Hulme. Columbus, OH: Joseph H. Riley.
- Devine, M. J. and Duncan, J. S. (2007) 'Development of Psychogenic Non-epileptic Seizures in Response to Auditory Hallucinations', *Seizure*, 717–21.
- Devinsky, O. and Najjar, S. (1999) 'Evidence Against the Existence of a Temporal Lobe Epilepsy Personality Syndrome', *Neurology* 53: S13–25.
- Ebner, A. (2001) 'Epileptic Syndromes in Adults', in M. Dunitz (ed.) *Epilepsy: Comprehensive Review and Case Discussions*. London: Martin Dunitz.

- Fodor, J. (1975) *The Language of Thought*. Cambridge, MA: Harvard University Press.
- Foote-Smith, E. and Smith, T. J. (1996) 'Emanuel Swedenborg', *Epilepsia* 37: 211–18.
- Frith, C. D. (1992) *The Cognitive Neuropsychology of Schizophrenia*. Hove, Sx: Lawrence Erlbaum.
- Gould, L. N. (1948) 'Verbal Hallucinations and Activity of Vocal Musculature: an Electromyographic Study', *American Journal of Psychiatry* 105: 367–72.
- Gross, C. G. (1997) 'Emanuel Swedenborg: a Neuroscientist Before his Time', *The Neuroscientist* 3: 142–7.
- Hacking, I. (2003) 'Indeterminacy in the Past: on the Recent Discussion of Chapter 17 of Rewriting the Soul', *History of the Human Sciences* 16: 117–24.
- Hansen, A. B. and Brodtkorb, E. (2003) 'Partial Epilepsy with "Ecstatic" Seizures', *Epilepsy & Behavior* 4: 667–73.
- Hopkins, A. and Appleton, R. (2003) *Epilepsy: The Facts*. Oxford: Oxford University Press.
- Ingram, A. (1998) *Patterns of Madness in the Eighteenth Century: A Reader*. Liverpool: Liverpool University Press.
- Inouye, T. and Shimizu, A. (1970) 'The Electromyographic Study of Verbal Hallucination', *Journal of Nervous and Mental Disease* 151: 415–22.
- James, L. (2001) 'Overcoming Objections to Swedenborg's Writings through the Development of Scientific Dualism', *The New Philosophy*. Retrieved 1 November 2006, from: <http://www.newphilosophyonline.org/journal/article.php?page=1027&issue=104b>
- James, T. (1995) *Dreams, Creativity, and Madness in Nineteenth-Century France*. Oxford: Clarendon Press.
- James, W. (1960[1902]) *The Varieties of Religious Experience*. London: Collins.
- Jaspers, K. (1923[1962]) *General Psychopathology*. Manchester: Manchester University Press.
- Johns, L. C., Nazroo, J. Y., Bebbington, P. and Kuipers, E. (1998) 'Occurrence of Hallucinations in a Community Sample', *Schizophrenia Research* 29: 23.
- Johns, L. C. and van Os, J. (2001) 'The Continuity of Psychotic Experiences in the General Populations', *Clinical Psychology Review* 21: 1125–41.
- Johnson, G. R. (1997) 'Kant on Swedenborg in the Lectures on Metaphysics, Part 1', *Studia Swedenborgiana*. Retrieved 20 November 2006, from: http://www.baysidechurch.org/studia/studia.cfm?VolumeID=37&RID=061207_041506_7048636
- Johnson, J. (1994) 'Henry Maudsley on Swedenborg's Messianic Psychosis', *British Journal of Psychiatry* 165: 690–1.
- Jones, S. R. and Fernyhough, C. (2007) 'Neural Correlates of Inner Speech and Auditory Verbal Hallucinations: a Critical Review and Theoretical Integration', *Clinical Psychology Review* 27: 140–54.
- Kant, I. (2002[1766]) *Kant on Swedenborg: Dreams of a Spirit Seer and Other Writings*, trans. G. R. Johnson and G. A. Magee. West Chester, PA: Swedenborg Foundation.
- Kent, G. and Wahass, S. (1996) 'The Content and Characteristics of Auditory Hallucinations in Saudi Arabia and the UK: a Cross-cultural Comparison', *Acta Psychiatrica Scandinavica* 94: 433–7.
- Krabbendam, L., Myin-Germeys, I., Hanssen, M., Bijl, R. V., de Graaf, R., Vollebergh, W. et al. (2004) 'Hallucinatory Experiences and Onset of Psychotic

- Disorder: Evidence that the Risk is Mediated by Delusion Formation', *Acta Psychiatrica Scandinavica* 110: 264–72.
- Kroll, J. and Bachrach, B. (1982) 'Visions and Psychopathology in the Middle Ages', *Journal of Nervous and Mental Disease* 170: 41–9.
- Landtblom, A.-M. (2004) 'Did St Birgitta Suffer from Epilepsy? A Neuropathography', *Seizure* 13: 161–7.
- Leudar, I. and Sharrock, W. (2002) 'The Cases of John Bunyan, Part 1. Taine and Royce?', *History of Psychiatry* 13: 247–65.
- Leudar, I. and Sharrock, W. (2003) 'Changing the Past?', *History of the Human Sciences* 16: 105–21.
- Leudar, I. and Thomas, P. (2000) *Voices of Reason, Voices of Insanity: Studies of Verbal Hallucinations*. London: Routledge.
- Leudar, I., Thomas, P., McNally, D. and Glinski, A. (1997) 'What Voices can do with Words: Pragmatics of Verbal Hallucinations', *Psychological Medicine* 27: 885–98.
- Littre, E. (1860) 'Un Fragment de Médecine Rétrospective', *Philosophie Positive* 5: 103–20.
- Malone, D. (producer and director) (2006) *Voices in My Head* [television broadcast, 18 June]. London: Channel 4.
- Mamford, M. and Andermann, F. (1998) 'Complex Visual Hallucinations: Clinical and Neurobiological Insights', *Brain* 121: 1819–40.
- Maudsley, H. (1869a) 'Emanuel Swedenborg', *Journal of Mental Science* 15: 169–96.
- Maudsley, H. (1869b) 'Emanuel Swedenborg', *Journal of Mental Science* 15: 417–36.
- Moscovici, S. (1988) 'Notes Towards a Description of Social Representations', *European Journal of Social Psychology* 18: 211–50.
- Nayani, T. H. and David, A. S. (1996) 'The Auditory Hallucination: a Phenomenological Survey', *Psychological Medicine* 26: 177–89.
- Nettle, D. (2006) 'Schizotypy and Mental Health Amongst Poets, Visual Artists, and Mathematicians', *Journal of Research in Personality* 40: 876–90.
- Oner, O., Unal, O. and Deda, G. (2005) 'A Case of Psychosis with Temporal Lobe Epilepsy: SPECT Changes with Treatment', *Pediatric Neurology* 32: 197–200.
- Pendleton, J. L. (1998) 'Diagnosing Emanuel Swedenborg', *The New Philosophy*, retrieved 15 November 2006, from: <http://www.newphilosophyonline.org/journal/article.php?issue=sanity&page=1000>
- Porter, R. (2002) *Madness: A Brief History*. Oxford: Oxford University Press.
- Posey, T. B. and Losch, M. E. (1983) 'Auditory Hallucinations of Hearing Voices in 375 Normal Subjects', *Imagination, Cognition, and Personality* 3: 99–113.
- Ramachandran, V. S. and Blakeslee, S. (1998) *Phantoms in the Brain: Probing the Mysteries of the Human Mind*. New York: Morrow.
- Romme, M. and Escher, S. (1993) *Accepting Voices*. Shaftesbury: Mind.
- Romme, M., Honig, A., Noorthoorn, E. O. and Escher, S. (1992) 'Coping with Hearing Voices: an Emancipatory Approach', *British Journal of Psychiatry* 161: 99–103.
- Sarbin, T. R. (1967) 'The Concept of Hallucination', *Journal of Personality* 35: 359–80.
- Schmidt, L. E. (2002) *Hearing Things: Religion, Illusion, and the American Enlightenment*. London: Harvard University Press.
- Sidgwick, H., Johnson, A., Myers, F. W. H., Podmore, F. and Sidgwick, E. M. (1894) 'Report on the Census of Hallucinations', *Proceedings of the Society for Psychological Research* 10: 24–422.

- Slade, P. and Bentall, R. (1988) *Sensory Deception: A Scientific Analysis of Hallucination*. London: Croom Helm.
- Stanley, M (1988) *Emanuel Swedenborg: Essential Readings*. London: Aquarian Press.
- Swedenborg, E. (1872[1749–56]) *Arcana Coelestia*, trans. J. Clowes. London: Swedenborg Society.
- Swedenborg, E. (1883[1746–65]) *The Spiritual Diary of Emanuel Swedenborg*, trans. G. Bush and J. H. Smithson. London: James Speirs.
- Swedenborg, E. (1883[1771]) *True Christian Religion*. London: Swedenborg Society.
- Swedenborg, E. (1928[1746–47]) *The Word of the Old Testament Explained*, trans. A. Acton. Bryn Athyn, PA: Academy of the New Church.
- Swedenborg, E. (1931[1758]) *Heaven and Hell*, trans. J. R. Rendell. London: Swedenborg Society.
- Swedenborg, E. (1986[1859]) *Emanuel Swedenborg's Journal of Dreams*, trans. J. G. G. Wilkinson, commentary W. Van Dusen. New York: Swedenborg Foundation.
- Swedenborg, E. (2006[1758]) *Life on Other Planets*, trans. J. Chadwick. London: Swedenborg Society.
- Swift, E. (1883) *Emanuel Swedenborg: The Man and His Critics*. London: James Speirs.
- Talbot, B. M. (1998) 'Swedenborg's Alleged Insanity', *The New Philosophy*. Retrieved 15 November 2006, from: <http://www.newphilosophyonline.org/journal/article.php?issue=sanity&page=1000>
- Taylor, M., Carlson, S. A., Maring, B. L., Gerow, L. and Charley, C. M. (2004) 'The Characteristics and Correlates of Fantasy in School-age Children: Imaginary Companions, Impersonation, and Social Understanding', *Developmental Psychology* 40: 1173–87.
- Tien, A. Y. (1991) 'Distributions of Hallucinations in the Population', *Social Psychiatry and Psychiatric Epidemiology* 26: 287–92.
- Toksvig, S. (1948) *Emanuel Swedenborg: Scientist and Mystic*. London: Faber & Faber.
- Toone, B. K., Garralda, M. E. and Ron, M. A. (1982) 'The Psychoses of Epilepsy and the Functional Psychoses: a Clinical and Phenomenological Comparison', *British Journal of Psychiatry* 141: 256–61.
- Trimble, M. and Freeman, T. (2006) 'An Investigation of Religiosity and the Gastaut-Geschwind Syndrome in Patients with Temporal Lobe Epilepsy', *Epilepsy & Behavior* 9: 407–14.
- Vaitl, D., Birbaumer, N., Gruzelier, J., Jamieson, G. A., Kotchoubey, B., Kubler, A. et al. (2005) 'Psychobiology of Altered States of Consciousness', *Psychological Bulletin* 131: 98–127.
- Valenti, M. P., Rudolf, G., Carre, S., Vrielynck, P., Thibault, A., Szepetowski, P. et al. (2006) 'Language-induced Epilepsy, Acquired Stuttering, and Idiopathic Generalized Epilepsy: Phenotypic Study of One Family', *Epilepsia* 47: 766–72.
- Van Dusen, W. (1990) *The Natural Depth in Man*. New York: Swedenborg Foundation.
- Van Elst, L. T., Krishnamoorthy, E. S., Baumer, D., Selai, C., von Gunten, A., GeneCos, N. et al. (2003) 'Psychopathological Profile in Patients with Severe Bilateral Hippocampal Atrophy and Temporal Lobe Epilepsy: Evidence in Support of the Geschwind Syndrome?', *Epilepsy & Behavior* 4: 291–7.

- Ward, W. R. (2003) 'Emanuel Swedenborg: Visionary Savant in the Age of Reason', *English Historical Review* 118: 515–16.
- Watkins, J. (1998) *Hearing Voices: a Common Human Experience*. Melbourne: Hill of Content Publishing.
- Wesley, J. (1986[1770]) *The Works of John Wesley*, vol. 22, *Journals and Diaries, V, 1765–75*. Nashville, TN: Abingdon Press.
- Williams-Hogan, J. K. (1988) 'Swedenborg: a Biography', in E. J. Brock, E. B. Glenn, C. C. Odhner, J. D. Odhner, C. H. Walker and J. K. Williams-Hogan (eds) *Swedenborg and his Influence*. Bryn Athyn, PA: Academy of the New Church.
- Young, A. (1995) *The Harmony of Illusions: Inventing Post-traumatic Stress Disorder*. Princeton, NJ: Princeton University Press.

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