

DAVID SKAE, M.D., F.R.C.S.,
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by

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A. Skae. The Man

It is unfortunate that David Skae is usually associated with a scheme of classification of mental illnesses which is best forgotten. In one standard text on the history of psychiatry³⁶ not only is Skae merely mentioned in connection with his classification, but the whole basis of his classification is misrepresented and the influence of Skae on his own and subsequent generations of English-speaking psychiatrists is not even briefly discussed.

Probably Skae has been overlooked more often than some of his contemporaries because, unlike most of them, he did not write a text-book. The most extensive account of his views is to be found in his article on 'Mental Diseases' in the eighth edition of the *Encyclopaedia Britannica*.²⁴ Unfortunately this was written before he introduced his classification of mental illnesses. However the Morisonian Lectures for 1873,^{31, 32, 33} which were given after his death by his most outstanding pupil, Clouston, provide a reasonably comprehensive summary of his ideas. According to the obituary writer in the *Edinburgh Medical Journal*, Skae was preparing a treatise on mental diseases at the time of his death, but so far no trace of a manuscript of this kind has been discovered. However there is no doubt that the influence of Skae can be clearly seen in Clouston's famous *Clinical Lectures on Mental Disease*, first published in 1883.⁵

Skae was one of two sons of an Edinburgh architect and was born in Edinburgh on 5 July 1814. When he was a boy his father died and the family moved to St. Andrews to live with his maternal uncle, the Rev. William Lothian. As a boy David was a sociable, cheerful lad with an intense interest in his fellow human beings. He made friends with the drifters, boatmen, carters and tramps in St. Andrews. Nevertheless, his school record was very good and at the age of fourteen he began to study in the Arts Faculty of the University of St. Andrews. At sixteen he left to work in an Edinburgh lawyer's office. In later life he claimed that his office training had given him a good business sense and an ability to write legibly. After a year or so he entered the Edinburgh Extra-Mural School of Medicine and in 1835 he became a licentiate of the Royal College of Surgeons of Edinburgh; in 1836 he was elected a member and later became a fellow. He then became a partner of Dr. Davidson, a general practitioner in Edinburgh.

In 1836 he became lecturer in medical jurisprudence in the Extra-Academical Medical School. His lectures rapidly became very popular and he attracted far more students than any other lecturer on this subject in the School had done before. About the same time he became surgeon to the Lock Hospital and held this appointment for about ten years. During this time he wrote several articles on syphilis. Unfortunately no records of the Edinburgh Lock Hospital are

extant. This hospital was finally taken over by the Royal Infirmary, Edinburgh, in late 1846, which was about the time that Skae was appointed as superintendent of the Royal Edinburgh Asylum. It would appear that up to this time Skae was somewhat unsettled, because he applied for the post of assistant surgeon to the Royal Infirmary in May 1840, but was unsuccessful. In addition to all his other activities he was appointed an examiner in medicine at St. Andrews University, which led to the honorary degree of M.D. being conferred on him in 1842. In 1842 he succeeded Robert Knox as one of the lecturers on anatomy in the Extra-Mural School.

Skae was a close friend of Sir James Simpson, the famous obstetrician and the discoverer of the anaesthetic properties of chloroform. As is well known, Simpson and a group of his medical friends met together in his rooms and tried the effect of chloroform on themselves. Skae was one of this group and it has been claimed that he was, in fact, the first to inhale the chloroform vapour.³⁴

In 1846 Dr. McKinnon, the first physician superintendent of the Royal Edinburgh Asylum, was compelled to retire on grounds of ill health. Skae applied for the post, and was appointed superintendent of the asylum at the end of 1846. According to Clouston,³ Sir James Simpson and Sir Robert Christison, the well-known pharmacologist and Professor of Medical Jurisprudence, supported Skae's application. However, Christison in his autobiography² admits that he supported Skae's opponent and tells an interesting story which throws some light on Skae's personality and the difficulties that faced him when he began to work at the asylum. Christison writes:

The late Dr. Skae, who acquired deserved reputation as physician and administrator in the office of superintendent of our great lunatic asylum, was elected in opposition to the full weight of the then dominant party in the management. The treasurer, one of that party and who had long been virtual head of the managers—an able official, but 'a dour fellow'—could not brook this disappointment, and seemed to take every opportunity of finding Skae in the wrong. I, on the contrary—notwithstanding that I too had voted for Skae's antagonist—determined to support him after his appointment, and was confirmed in this resolution when I saw how he was set upon, and that he had to contend against heavy odds. At last the treasurer thought he had got Skae upon the hip. An advertisement appeared in a Dublin journal, bearing that the daughter of the chaplain to the Asylum had died there at a certain date. The newspaper was sent to several officers of the Asylum and to the chaplain himself. The poor man being a bachelor was in great dismay, and appealed to the treasurer for redress. The treasurer wrote to the editor of the newspaper for the MS., and having got it, recognised as he thought the handwriting of Dr. Skae. He then put the necessary documents before a banker, and an engraver, and a skilled Writer to the Signet,* all of whom agreed with him as to the identity between the MS. and Skae's undoubted handwriting. The treasurer then put the matter before the House Committee, seven in number, of whom I was one. The documents were handed round, and each member in succession, including two Writers to the Signet, shook his head and lamented that there appeared no doubt of the identity. I came last in order, and was shocked for a moment by the very great general resemblance; but after a minute's scrutiny, said I was obliged to differ from them all; that I had been taught by eminent counsel to distrust the *comparatio literarum*; that Dr. Skae's handwriting was of a common sort, and that I had seen many similar to it; that the general resemblance did not hold in particulars, because in the advertisement, two capitals, D and R, were written quite differently from those in Dr. Skae's letters and there were lesser differences in some of the small letters also; that the identity must be complete to make out an effective *comparatio*; that I had such trust in Skae's character, as to

* A special type of Edinburgh lawyer roughly equivalent to an English solicitor.

believe him incapable of so heartless, paltry, objectless a trick; and that we must find further evidence before we could adopt any practical conclusions from the manuscripts. A re-examination convinced most of the managers, but not the treasurer, that I was right. He asked me rather pettishly what further evidence I could expect. 'Excellent evidence,' I replied, 'that of Dr. Skae himself.' 'What!' said he; 'do you think that I am to go to Dr. Skae and ask him if he wrote that advertisement?' 'No,' I rejoined, 'for if you did, he would probably knock you down. But the advertisement must have been written by someone very familiar with the Asylum, so that Skae probably knows the handwriting. Say so to him and ask him whether he knows it.' 'No,' said the treasurer, 'I will not do so.' 'Oh, very well, give me the advertisement and I shall ask him.' But the other managers interposed, his own friends among the rest, and told the treasurer they could see no reason why he should not put such a question by authority of the House Committee. He then consented. Skae knew the handwriting at once, and pointed out the real offender in a gentleman who had been till lately a frequent visitor to the Asylum, but had been interdicted at Skae's own request.

Skae's domestic life was extremely happy. He married at the age of twenty-one and had five sons, two of whom became psychiatrists. He was a sociable and likeable man, who was admired almost to the point of adulation by the patients and staff of his hospital. Even today after a lapse of a century one cannot read his articles and reports without being impressed by his compassion, humanity, sense of justice and fair play. One of his grandchildren has described him as follows:

Memory brings back a sturdy figure, broad-shouldered and of powerful build, suggestive to the child mind of a typical 'Father Christmas', a large head, strongly marked features, deeply lined, a mouth with mobile humorous lips half hidden by a moustache and beard only slightly touched with grey; curly dark brown hair worn rather long; and very merry, bright eyes which saw everything; understanding eyes, eyes which responded to whatever a little child might make of confidences. Within half an hour of his arrival at our house, our grandfather was in possession of the entire confidence of each of the small folk; the bright merry eyes remaining courteously attentive even when the baby talk was unintelligible to the unaccustomed ear.³⁴

This impression is confirmed by the more mature judgement of Clouston³ who wrote:

A stout figure, a kindly expression, ever ready to break out into a winning smile or a jovial laugh, reassuring brown eyes, a massive head, only second to Simpson's among the Edinburgh doctors, set on a strong neck and shoulders, the impression he made on a stranger was that of one who enjoyed life and wished others to enjoy it too. He was careless to a fault in his dress, was a great smoker, and did not despise the good things of life. He exercised a wonderful charm on those who knew him intimately.

Unfortunately the last few years of Skae's life were overshadowed by illness. He died on 18 April 1873 from cancer of the oesophagus.

B. Skae as a Clinical Psychiatrist

1. *The aetiology of mental illness.* In his lecture on 'The legal relations of insanity' read to the Royal College of Surgeons of Edinburgh in 1861,²⁷ Skae defined insanity as 'a disease of the brain affecting the mind'. This clear somatic approach to mental illness can be considered as the British equivalent of Griesinger's famous words *Geisteskrankheiten sind Gehirnkrankheiten* (Diseases of the mind are diseases of the brain). It was this clear medical approach to insanity which led him to classify mental illnesses according to aetiology. He first put

forward his classification in 1863 in his presidential address to the annual meeting of the Association of Medical Officers of Asylums, the forerunner of the Royal Medico-Psychological Association.²⁸ He pointed out that the standard classification based on mental symptoms was not very helpful in practice. This was of course true, since, for example, the same delusions may have quite different prognostic significance in different cases. He stressed that in practice the expert tried to determine the natural history and the cause of the mental illness in any case. Since the same physical disorder can cause quite different mental symptoms he felt that a symptomatological classification was useless. As he put it 'Whenever we have a very distinct natural history of any form of Insanity, we at present refer always to its natural order, without reference to the character of the mental disorder.' He illustrates this using epileptic insanity, puerperal insanity and general paralysis as examples. Referring to the latter he says: '*General Paralysis* affords another group, and none of us ever thinks of referring a general paralytic to any other group than that of the natural family to which he belongs, whether he is maniacal, a man of exalted wealth and rank, a melancholic or a dement.'

It is unfortunate that Skae was led astray into postulating a large number of unproven causes of mental illness. This can be well seen in his classification which is shown in Table 1. Skae's subsequent modifications of this scheme appeared in the Morison Lectures, which were published after his death. By this time he had added hypochondriacal, rheumatic, podagrous, post-febrile, anaemic and choreic varieties of insanity as well as insanity from brain disease. Clouston, who read his late chief's lectures to the College of Physicians, added malarious and pellagrous insanity and hereditary insanity of adolescence, apparently with Skae's permission.

Although this part of Skae's work is best forgotten, it must be remembered that the idea behind it is valid. In more recent times a leading German psychiatrist¹⁶ has pointed out that until we can establish physical correlates of psychological symptoms we cannot improve on our present-day unsatisfactory classification of psychiatric disorders. It is interesting to speculate about what would naturally have led to Kahlbaum's concept of a psychiatric disease entity based on the clinical picture and the general course of the illness, which was used so successfully by Kraepelin thirty years later.

Apart from Skae's younger pupils led by Clouston, Skae's classification was rejected by most British psychiatrists. In 1875 J. Crichton Browne, physician superintendent of the West Riding Asylum, wrote a scathing criticism of the classification.¹ This attack by a former pupil and friend of Skae led Clouston⁴ to counter-attack, but with little success. In 1876 an article signed 'N.M.' appeared in the *Journal of Psychological Medicine*,¹³ which summarized the controversy and criticized Skae's classification more drastically. It pointed out that there was a great similarity between Skae's approach and that of Morel in his book, *Traité des Maladies Mentales*.¹² N.M. went on to point out that Morel's work must have been known to Skae when he first put forward his classification but he never once referred to it. This hint of plagiarism is rather unfair since the ideas of Skae and Morel were not really new and were held by many others at

that time. One of Browne's main criticisms of Skae's aetiological classifications was that it led to a neglect of clinical psychiatry, since symptoms were no longer of importance in diagnosis. This was again stressed by N.M., who then went on to claim that Skae was not a good clinician; he says of Skae:

We have a respectful, admiring recollection of him as a man of capacious intellect and genial sentiments, who commanded the affectionate regard of all who approached him, but we cannot bring ourselves to say that he was a great clinician. That he had all the talents that go to the making of a great clinician we cordially allow, but that he put these talents out to usury we cannot admit. His mode of work was essentially unclinical, and Dr. Clouston, in extolling him as a clinician, must have forgotten that many who attended Skae's lectures and demonstrations in the wards of Morningside still survive. Their reminiscences, as far as we can ascertain, bear out the statement that he was never seen to make a genuine clinical examination, or to use an instrument of precision, but that his practice was, most dexterously, to rifle the patient's mind of its madness, and then, with broad humour, to comment upon the madness and the madman.

This hostile critic gives a very good account of a fine undergraduate teacher demonstrating a case. It is not, however, an adequate proof that Skae was a poor clinician. The repeated assertions by N.M. that mental illness could not be explained as a disorder of the brain show that his criticism of Skae was motivated by prejudices just as strong as those of Skae and Clouston.

However, Maudsley's view of Skae's classification was somewhat more charitable. In his book, *Pathology of the Mind*, published in 1879¹¹ he pointed out that in considering the prognosis of a mental illness the constitutional diathesis or the accompanying bodily disturbance was more important than the actual mental symptoms. He went on, 'To the late Dr. Skae belongs the merit of having insisted strongly upon this clinical classification of mental diseases, and of having been the first to sketch, although vaguely, the leading features of numerous groups.'

As we have seen, the basis of Skae's classification was the aetiology and the natural history of the illness. It is very difficult to understand why Zilboorg³⁶ should write, 'The symptoms observed are facts. The assumed causes of these symptoms are not yet facts. Hence mental diseases could be arranged in proper order only in accordance with symptoms—the only aspect of mental diseases which was well understood. This was the premise of David Skae (1814–1873 and his followers.'

2. *The Organic Psychoses.* As we have seen above general paralysis was regarded by Skae as a paradigm for mental illnesses. It is therefore not surprising that he was very interested in this disorder. In 1860 he read a paper, 'Contribution to the Natural History of General Paralysis' to the Edinburgh Medico-Chirurgical Society.²⁶ Unlike some recent historians of psychiatry,^{7, 10} he recognized Haslam as the first psychiatrist to describe this illness. He realized that the paralysis in this condition is not the same as many other forms of paralysis and contradicted Bucknill's claim that reflex action was impaired in this disorder. Skae pointed out that if one tickled the soles of the feet of general paralytics who were sleeping deeply, the usual reflex withdrawal of the legs occurred. It would appear that he came close to discovering the extensor plantar response of Babinski. He gave a careful clinical description of the physical signs and pointed out that

the paralysis might exist for years before the onset of the mental symptoms. He described the so-called *mania paralytica* or *délire ambitieux* of the French authors, but went on to stress that other symptoms such as depression could occur. He wrote:

Sometimes, although not frequently, instead of ideas of grandeur, riches and importance, the patient labours under deep depression of spirits, or fancies that he is persecuted, or has other illusions common to other forms of insanity; sometimes a dementia or imbecility, not distinguishable, as far as the mental state is concerned, from other cases of dementia, accompanies this disease throughout its course.

In the sixth Morisonian lecture, written by Clouston with the aid of Skae's notes, the non-essential nature of grandiose delusions in general paralysis is stressed once again. Clouston went on to say, 'I look upon the delusions of *grandeur* and wealth and the acquisitive propensities as being the former day-dreams and tendencies of the individual . . . uncontrolled by judgement. I have found that it was the vain, boastful, ambitious men who were kings and millionaire general paralytics.' The determination of the content of delusions by the previous personality was obviously well known to Skae and Clouston. In recent years it has been suggested that the clinical features of general paralysis have changed. It is therefore of interest to consider the mental symptoms in Skae's series of 108 general paralytics as shown in Table 2. It is interesting that roughly 30 per cent of Skae's patients showed a dementia without any classical delusions.

Austin had claimed that pin-point pupils occurred in the early stage of the illness and that the right pupil was fixed in the melancholic and the left in the elated variety. Skae examined the pupils in twenty-five cases and found that both pupils were fixed and dilated in thirteen cases and pin-point in two. In the remainder the right pupil was affected in six and the left in four cases. He could find no correlation between the pupillary changes and the mental symptoms.

Skae noted that temporary recovery could occur, and three years later in his annual report he observed that two patients with general paralysis had been discharged from his hospital, and predicted that the recovery would be short-lived. It is strange that some have contested the claim that John Haslam first described general paralysis in 1809, because the case he reported made a temporary recovery.

Table 3 shows the causes of general paralysis which Skae reported in his paper. These may seem very strange to us today, but we would do well to remember that many of our well-held beliefs about the aetiology of mental illnesses will sound just as peculiar in a hundred years' time. In Skae's fifth Morisonian lecture, written by Clouston, there is a discussion of syphilitic insanity, in which it is admitted that some cases of syphilitic insanity are indistinguishable from general paralysis. After discussing the views of several other workers in this field on the relationship between general paralysis and syphilis, the author goes on to say: 'That more general paralytics are not so affected seems the only surprising thing, for their disease in many cases has undoubtedly been caused by excessive venery.' Again we see how closely Skae and his most prominent pupil came to a fundamental discovery in clinical psychiatry.

As far as the other organic psychiatric states are concerned Skae and his pupils described cases of insanity resulting from head injury, sunstroke, epilepsy and alcohol as well as more fanciful psychoses due to rheumatism, gout and tuberculosis. In the fifth Morisonian lecture there is a description of delirium tremens and of alcoholic insanity which is regarded as a 'slow and chronic form of delirium tremens'. The occurrence of alcoholic dementia is also noted. In the discussion of delirium tremens it is pointed out that 'the symptoms most apt to persist, and if so to affect the favourable prognosis, are hallucinations of hearing'. This is, of course, a reference to alcoholic hallucinosis, a condition disputed by some members of the Edinburgh school.

3. *The Functional Psychoses.* Skae was, of course, convinced of the physical basis of all insanity. Clouston³³ expressed his late chief's attitude when in his discussion of Skae's group of 'Insanity from Brain Disease' he wrote: 'By using this term Dr. Skae, of course, did not imply that any form of insanity can result from anything but brain disease.'

There is little doubt that the insanity of masturbation and pubescence, and the hereditary insanity of adolescence, added by Clouston, included a large number of patients whom we would call schizophrenic. However, from Clouston's later description⁵ of adolescent insanity it is obvious that affective disorders and adolescent crises were included in this group. It is likely that Skae's hysterical insanity also included some schizophrenics. His ovarian insanity consisted of paranoid states in which there were delusions of love or seduction, so that it is probable that many of these patients would today be classified as paranoid schizophrenics. On the whole Skae's teaching on what we now call the functional psychoses was not very illuminating.

4. *The Neuroses.* In his evidence to the Royal Commission²³ in 1857 Skae recognized the need for in-patient treatment for nervous patients who were not insane. He said, 'If we had intermediate establishments, in some way they might meet the difficulty—establishments called retreats for ladies and gentlemen labouring under nervous affections, the words asylum and madhouse being carefully excluded.' It was of course well over fifty years later that such facilities were provided in Edinburgh by the establishment of the psychiatric nursing homes and Jordanburn Nerve Hospital.

In his annual report for 1847 Skae mentions three patients who voluntarily asked for admission to the Royal Edinburgh Asylum. One of these was obviously suffering from an obsessional state which Skae described as follows:

A young man of high promise . . . had been haunted by a *single word*. . . . He had long been able to preserve his self control, and had carried his secret with him in the discharge of his daily duties. But this horrid word was continually before him. It appeared to pursue all his conceptions with the untiring activity and relentless persecution of a demon. It gained upon him every day, until it met him in every line he read, and seemed to lurk under every placard, signboard and doorplate.

This is a very good description of that type of obsessional rumination where the patient is constantly reminded of his obsessional thought by his environment.

5. *Moral Insanity and Alcoholism.* A good deal of confusion has been caused by the term 'moral insanity'. The word moral was used in the early nineteenth

century in the same way as we use the word psychological. Thus the *Phrenological Journal* was subtitled the *Magazine of Moral Science*. Most of the classical Greek and Roman physicians equated madness with delusion, so that the early modern psychiatrists were puzzled by the strange paradox that a man could be very mad and yet have no delusions. This led Prichard¹⁴ to introduce the term moral insanity as that variety of insanity where the emotions and feelings are disordered in the absence of intellectual aberrations. He wrote:

Moral Insanity, or madness consisting in a morbid perversion of the natural feelings, affections, inclinations, temper, habits, moral dispositions, and natural impulses, without any remarkable disorder or defect of the intellect or knowing and reasoning faculties, and particularly without any insane illusion or hallucination.

This group of mental illnesses obviously included such disorders as manic depressive insanity, severe neuroses, hebephrenic schizophrenia and psychopathic personalities. As the century went on, gradually the word 'moral' in this diagnosis came more and more to mean 'moral' in the ethical sense. This change can be seen in the writings of Skae and his pupils. Thus in the first of his lectures²⁰ in 1853 Skae used the term 'moral insanity' for those monomanias affecting the desires, emotions and passions only without delusion. In his lecture 'The Legal Relations of Insanity' in 1861²⁷ he stated his position clearly when he said:

To reduce my definition to a brief compass, I would say that *insanity is an (apyretic) affection of the brain in which emotions, passions, or desires are excited by DISEASE (not by motives), or in which CONCEPTIONS are mistaken for acts of PERCEPTION or MEMORY*. This definition appears to me to comprise everything. The first part of it defines *moral insanity*, in which the propensities, emotions and desires alone are *morbidly* excited; and the second part of it defines *intellectual insanity*, in which there are actual delusions or hallucinations, so long considered the essential feature of madness.

However, as time went on Skae tended to use the term 'moral insanity' for patients whom today we would call psychopathic personalities. In his annual report for 1850 he discusses four patients suffering from moral insanity, who were admitted that year. One of these was a woman with homicidal impulses, one was a well-endowed woman who behaved immorally and two were men who drank heavily and became excited when drunk. In 1853 fifteen patients suffering from moral insanity were admitted to the Royal Edinburgh Asylum and Skae writes 'Of these a large proportion exhibited a marked craving for stimulants and a complete loss of self control in their use.' For Skae most cases of moral insanity were alcohol addicts. Thus in his 1854 report he wrote:

Of the cases of Moral Insanity, by far the greatest number were characterised chiefly by an insatiable craving for stimulants, the loss of self control and a shameless and complete disregard for the truth. Such patients are the most troublesome inmates of an Asylum, and the results in regard to them are almost uniformly unsatisfactory. Some legislative enactment for the control of such persons, and their treatment in houses especially set aside for that purpose, would save many lives, and many families from shame, grief and loss of property, or total ruin.

The special problems of the psychopathic personality were thus underlined by Skae over one hundred years ago and his successors—in particular, of course, Sir David Henderson—have continued to be interested in the care and legal

provisions for this difficult group of patients. The introduction of the category of 'psychopathic disorder' in the new English Mental Health Act can be regarded as the result of the work of David Skae. As far as dipsomaniacs were concerned, Skae suggested to the Scottish Lunacy Commission in 1857 that the law should be amended along the lines of the French legal provisions, so that it would be possible to appoint a guardianship committee consisting of two close relatives, two doctors and the Sheriff of the county.

In 1857 Skae took part in a discussion at the Medico-Chirurgical Society and read a paper on 'Remarks on that Form of Moral Insanity called Dipsomania and the Legality of its Treatment by Isolation.'²² He pointed out the difference between the drunkard and the dipsomaniac or oinomaniac who suffered from loss of self-control. This has a modern ring and it is not long ago that a World Health Organization technical committee stressed that the characteristic feature of alcohol addiction was loss of control over drinking. Skae preferred the term moral insanity rather than dipsomania or oinomania, because these patients had a longing for other drugs apart from alcohol, also because the English Lunacy Commissioners had used this term and finally because 'the craving for stimulants is only *one* of many symptoms of moral perversion which characterise the disease'. He goes on to quote with approval the first report of the English Commissioners in Lunacy, in 1844, which defined moral insanity in a way rather similar to Prichard, but stressed the immoral behaviour, for example, they said, 'They are characterised by a total want of self control, with an inordinate propensity to excesses of various kinds—among others, habitual intoxication.' He also quoted the eighth report of the Inspectors-General for Ireland, 1857, who pointed out that cases of moral madness due to drink and dissipation had been admitted to licensed private madhouses: they emphasized the immoral nature of these patients and in particular their disregard for the truth. It is therefore quite obvious that the term 'moral insanity' was used by Skae for patients whom today we call psychopathic personalities. Perhaps the best idea of Skae's concept of moral insanity can be obtained from an article 'Clinical Cases Illustrative of Moral Imbecility and Insanity', written by one of his pupils, Stanley Hayes.⁹ Hayes wrote 'Under the term "Moral Imbecility" I include all those cases in which there is a congenital deficiency of one or more of the moral powers.' He then presented fifteen case histories from which it would appear that six were psychopathic personalities, five were manic depressives, three were schizophrenics, and one was an epileptic. Hayes went on to discuss the legal implications of this variety of insanity and claimed that patients with this illness must be less responsible for their actions than normals. In his annual report of 1865 Skae referred approvingly to this article by Hayes, but unfortunately gave the wrong reference.

6. *Forensic Psychiatry*. Skae was very interested in the legal responsibility of the mentally ill, and lectured to the Royal College of Surgeons of Edinburgh on 'The Legal Relations of Insanity' on 1 March 1861 and 18 January 1867. In his first lecture²⁷ he insisted that insanity was a disease of the brain affecting the mind and emphasized the important fact that insanity could occur in the absence of delusions. He then went on to regret the need for a Sheriff's warrant

before a patient could be admitted and pointed out how difficult it was to admit an urgent case to a mental hospital. He had stressed this need for special legislation in his annual report for 1859, where he cited an unfortunate patient who was suicidal but refused to allow his friends to certify him in order to obtain his admission to the Royal Edinburgh Asylum. His friends were advised that he must be certified as soon as possible, but they did not take immediate action. The patient cut his throat and died. Skae pointed out that this needless death was due to the lack of an adequate procedure for urgent admission.

In his second lecture Skae³⁰ once more emphasized that insanity was a disease, in order to refute a statement by the Lord Chancellor in 1862 that insanity was a fact and not a disease and this fact was one 'upon which every man of rational understanding was competent to form an opinion'. Skae quoted a case of a man tried for murder at Newcastle who displayed obvious insane delusions, but was found guilty of murder and sentenced to death. Clearly men of rational understanding had failed in this case. The Chancellor had gone on to make much of the frequent disagreements between medical witnesses in cases of insanity, but Skae pointed out that the reason for this was that the Law had out-of-date concepts of insanity which some medical witnesses accepted while others did not. He then went on to point out that according to English Law unsoundness of mind is neither idiocy, imbecility, nor insanity. However the state of Scots Law did not escape Skae's criticism. He drew attention to the legal procedure for securing the care of the person and the property of a patient of unsound mind. This was done by a process called cognition in which the person was tried by a jury and a Sheriff in order to determine if he were an absolute idiot, absolutely fatuous or furious. If he could count to five or recite a verse of the Bible he could not be cognosed, i.e. deemed suffering from idiocy, fatuity or fury.

Skae went on to make a reasoned plea for changing the law on criminal responsibility of the insane. The only test for responsibility laid down by English Law and Scots Law was the knowledge of right and wrong. Skae pointed out that this was not an accurate test of the responsibility of the insane, because although they might have the knowledge of what was right and wrong, they did not necessarily have the power to do right. He felt that many medical witnesses tended to be influenced by the fact that the accused was insane and *ipso facto* not responsible for his actions. He goes on to say that some change in legal opinion was taking place and cites the case of the trial for murder of Alexander Milne before the Lord Justice Clerk, who instructed the jury that 'If you are quite satisfied that the prisoner was under an insane delusion at the time of the act, you need not inquire whether he knew right from wrong. If the delusion be once established, the law will presume from that, that he did not know right from wrong.' He also cites the case of Robert Hancock, tried in England in 1855 for the murder of his wife. The judge, Baron Parke, 'so far from adhering to the metaphysical test laid down by the judges, he charged the jury that if they were satisfied that the criminal act was the result of delusion they must acquit the prisoner'. The words 'the metaphysical test laid down by the judges' are obviously a reference to the McNaghten rules formulated in 1843

by the English Law Lords. It is interesting that Skae does not himself refer to these rules, which considered that as far as delusions were concerned the actions of the accused must be judged as if his delusions were true.

Having dealt with the problem of partial insanity Skae returned to the problem of the loss of the power of doing right which occurs in insanity. He quotes a large number of instances of insanity to show that there are different degrees of self-control and therefore different degrees of responsibility. He put the matter very clearly in the words:

All these cases, and they are of daily occurrence, show that there are degrees of self-control, and *degrees* therefore of *responsibility*, varying with the amount of disease under which the individual labours. Why should not the *law* recognise this fact? Why should it not legislate with a view to it? Why should a verdict of manslaughter or *culpable homicide* not be received in any case of murder where the existence of mental disease, even in a partial degree, was distinctly proved? If such a verdict were accepted, it would, I think, put an end to the difficulties which attend such cases, and the present uncertainty of the law regarding them.

In fact this concept of partial responsibility was accepted by Scottish courts later in the nineteenth century and was clearly stated by Lord Alness in the case of *Rex v. Savage*.

Skae also suggested that the French procedure might be followed and two or three experts be appointed by the court to investigate the psychiatric state of the patient. This he felt would be a great improvement and would convey sound psychological advice and evidence free from the influence of partisanship. He ended his lecture with an appeal to the Royal College of Surgeons to make the study of mental diseases obligatory on their licentiates, as it was much more important than several subjects included in the medical curriculum at that time. He felt that the proper teaching of mental disease to medical students would naturally improve the quality of medical testimony in courts of law when the plea of insanity was raised.

7. *Skae and the Edinburgh School of Psychiatry*. The three main interests of Skae were the organic mental illnesses, the problem of psychopathy and forensic psychiatry. Since Skae's time these topics have been the major interest of most of his successors. Skae, therefore, was the founder of the famous Edinburgh School of Psychiatry whose alumni have contributed so much to their speciality in all parts of the English-speaking world. In fact this school can boast of being the second oldest postgraduate school of psychiatry in the world.

C. *Skae as a Teacher*

In 1823 Sir Alexander Morison began the systematic teaching of psychiatry in Edinburgh and continued to give a yearly course of lectures until 1852.¹⁵ In 1850 the Royal College of Physicians passed a motion suggesting that formal instruction in mental diseases should be carried out at the Royal Edinburgh Lunatic Asylum and instructed the Fellows of the College who were also Directors of the asylum to bring this subject to the notice of the managers. After some negotiations the Board of Management of the asylum, on 25 April 1853, approved a scheme of lectures on mental illness, and on 7 May 1853 David Skae delivered the first lecture²⁰ and continued to lecture every summer term for the

next twenty years. In his first lecture Skae outlined the scheme of teaching. The class was originally restricted to twelve, but later increased in number. There were clinical visits on Mondays and Wednesdays at three p.m. and on Saturday at two. The visits consisted of small groups being taken through the hospital by an assistant medical officer. Immediately after the visit on a Saturday there was a lecture. In his early teaching Skae followed the traditional classification of insanity into mania, monomania, dementia or incoherence, general paralysis with insanity, epilepsy with insanity, and idiocy.

Skae took his teaching responsibilities very seriously. In his presidential address to the Association of Medical Officers of Asylums,²⁸ he apologized for his absence from the annual meetings of the association and explained that this had arisen from the fact that he was always engaged in conducting a course of lectures during the summer session when the association met.

Skae was, of course, a medical teacher long before he became a psychiatrist. In 1836 he became the lecturer on medical jurisprudence at the Extra-Mural School and later succeeded Robert Knox as lecturer in anatomy in that school. In 1839 the lecturers in the Extra-Mural School were advised that the University of London would not recognize individual teachers and therefore they should organize themselves into more formal schools. They agreed to call their new school Queen's College. Unfortunately because of various personal animosities not all the extra-mural lecturers finally joined this college. In 1841 the *Edinburgh Monthly Medical Journal*, forerunner of the *Edinburgh Medical Journal*, commented on the prize-giving at Queen's College and suggested that the college was merely an imposing name, which had only been agreed to by a few teachers. The journal went on to compare the claims of the college to those of a well-known quack. This drew a vigorous attack from Skae, who explained the reasons for the foundation of Queen's College and the disagreements after it had been founded. Skae's letter was couched in fairly blunt language, but was well within the bounds of normal controversy in the early nineteenth century. The editor of the *Monthly Medical Journal* published Skae's letter but introduced it with a feeble excuse and a criticism of the tone of the letter.

Skae continued his connection with the Extra-Mural School and in 1859 he delivered the Introductory Address at the opening of the 1859–60 session.²⁵ In this he pointed out the value of scientific education for medicine and the need for the doctor to know the common ailments. Finally he stressed the necessity of some knowledge of insanity. He went on to say:

I cannot but regard it as a singular anomaly, that the study of mental diseases has not hitherto received a place in the curriculum of medical education in this country, and that none of the licensing boards have ever required any instruction in this department of medicine on the part of their licentiates.

You work at the anatomy and the surgery of hernia and lithotomy, and grind up the mode of detecting the 1000th part of a grain of arsenic in the liver or kidney, and how to discover nicotine in a person poisoned with tobacco—all very proper things to know, but they are operations which may not fall to the lot of one medical man out of ten thousand. Yet this disease, which you cannot pass a few weeks in practice without meeting in some of its phases—a malady so common, that one out of every 400 of the population is affected by it; so dreadful as to involve the overthrow of reason, of all that distinguishes man from the brutes; and with

this overthrow of reason, to destroy all that renders life desirable, and too often to lead to self-destruction or some fearful homicide—this disease you are not taught to distinguish or treat.

There is little doubt that Skae was also an excellent post-graduate teacher. He inspired his assistants and suggested lines of research to them. In his annual reports he often referred to their papers. As Clouston said in an obituary³ of Skae, 'He caught at that time the spirit of doing original work in medicine, which he earnestly inculcated in his assistants to the last.'

The influence of his teaching can only be fully realized when one remembers that during his lifetime no less than fifteen of his assistants became medical superintendents of mental hospitals throughout Britain.

D. Skae as a Physician Superintendent

Skae fully appreciated the fact that the mental hospital was a therapeutic organization, not simply a custodial institution. He believed that admission to hospital was an essential part of treatment in many cases. As for the patient's immediate environment he wrote: 'The patient requires to be surrounded by experienced attendants, allowed the greatest liberty, and treated with the utmost kindness compatible with his own safety.'²⁴

He stressed the need for 'the healthy occupation of the mind'. Or, as he summarized it: 'In fine, everything which can employ and interest the healthy mind, and which is apart in its character or by association from the morbid thoughts of the patient, ought to be brought into exercise for his recovery.'²⁴

He also pointed out the need for careful organization of the mental hospital so that this kind of treatment could be carried out. His definition of a well-run mental hospital was,

Such a house subserves a variety of ends: it is a place for the isolation and safety of the dangerous; it is a retreat and home for the hopeless and incurable; it is a great hygienic hospital for the restoration of the insane to physical and mental health; a house for moral and physical education; it is also a school for elementary, artistic, scientific and religious education; and an industrial establishment where the busy crafts of artisans and gardeners, and all the homely occupations which can employ the hands and heads of men and women, are called into systematic and daily activity.

Skae's ideas were not just paper fantasies. The annual reports of the Edinburgh Asylum show clearly how he put them into action. In the report for 1859 he pointed out that the patients had carried out work to the value of at least £556 7s. 3d., and that the Head Attendant supervised glazing, painting, carpentry and blacksmith work. He went on to mention the assistance he had had from the attendants and office bearers in the introduction of his 'industrial plans'. In 1851 he reported that the work done by the patients for the year 1850 was more than £2,000 in value, and he went on to say:

Of all the agencies that can be brought to bear upon the insane, I believe that in the large majority of cases, occupation, particularly in the open air, is the most beneficial in promoting recovery. For the more perfect development of the resources of the Asylum in this respect among the male inmates, the Head Attendant was, with your approbation, made Master of Works, and under his management a still larger amount of work has been executed during the past than any previous year.

In his reports he frequently noted the amusements and excursions organized for the patients in the Edinburgh Asylum. In his evidence to the commissioners in 1857 he said that there were a great variety of amusements including a weekly ball at which the male and female patients met. He also said that a few patients were allowed out of the asylum on parole and that lodgings at Portobello were taken for individual patients in the summer.

He was continually interested in the improvement of the accommodation for the patients. In 1855 he suggested that the cottage system which Bucknill had developed in Devon might be used and houses in the village of Tipperlin could be used to this purpose. In 1856 he reported that a cottage 'on the western extremity of the grounds adjoining the charming scenery of Craig Hill' had been used to house patients. In 1862 when his new house had been built for him he used his former cottage to house a small group of patients.

One of the essential principles of mental hospital organization is the classification of patients according to their behaviour rather than their formal diagnosis. This principle was well known to Skae, who put the matter very succinctly in his evidence to the commissioners when he said: 'All classification depends in great measure on the habits of the patient, rather than on their exact state of mind.'

Skae never ceased to protest against the inhuman treatment of the insane. Frequently in his annual reports he draws attention to the barbarous methods used by attendants who brought patients from distant parts to the asylum. In 1856 he complained that many patients were brought to the asylum in irons and that female patients were often brought in by male attendants. He mentions with great indignation the case of a woman admitted to the asylum with five or six broken ribs caused by the man in charge of her putting his foot on her chest in order to get the restraining straps as tight as possible. In his evidence to the commissioners he again underlined the scandalous methods used to restrain patients on their way to the asylum.

Skae believed that mechanical restraint was sometimes necessary, but he did not use it often. In his evidence to the commissioners he said that he practised seclusion more frequently than he would otherwise do, but was compelled to use it because of the lack of adequate accommodation.

In his report for 1852 Skae complained of the practice of transferring incurably insane patients to workhouses. He wrote:

Workhouses are test-houses of poverty where, on principle, nothing is offered to conduce to happiness and contentment, but everything to induce the inmates to seek, if possible, other means of support, and greater sources of happiness. To condemn a lunatic, capable of enjoyment, able and willing to work, but rendered incapable of taking care of himself, would be adding man's punishment to God's visitation, and would be repugnant, I think, to the common philanthropy of the age in which we live.

Skae was not only a good clinical psychiatrist, but also a humane and efficient physician superintendent. However, he did not allow himself to be imposed upon. In his report for the year 1854 he describes his treatment of a troublesome patient, who was not only unruly, but also made frequent suicidal attempts.

One day he made an attempt to hang himself and was cut down by the attendant. Skae was called to the patient and told the attendant to hang the patient up again because he was a nuisance. The patient became terrified and beseeched Skae on bended knees not to hang him and promised to reform. Thereafter his behaviour was very good. It seems that Skae recognized that this patient had what we now call a psychopathic personality and was attempting suicide in order to get attention.

E. *Skae as a Toxicologist*

In 1841 Skae published the case of a soldier in Edinburgh Castle who took $2\frac{1}{2}$ ounces of *liquor opii sedatus*, became unconscious within fifteen minutes and died after one hour and twenty minutes. He discussed the smallest fatal dose of laudanum and concluded that it was 4 grains or half an ounce of tincture. He mentioned two of his own cases in which one pennyworth of laudanum was fatal, the dose being probably less than 2 drachms.¹⁷

In 1855 he published the case of a manic patient who ate a large quantity of tobacco prior to his admission to the asylum. As he vomited tobacco and a large amount of tobacco was found in his pockets, his stomach was washed out. Unfortunately he had convulsions and died some hours after admission.²¹

F. *Phrenology*

In 1846 Skae reviewed a book on phrenology for the *British Quarterly Review*, and Combe, a well-known supporter of phrenology, replied to Skae in two articles in the *Lancet*. Skae criticized the lack of accurate measurements in phrenology and suggested that one skull should be taken as a standard and the features of all other skulls measured and compared with the standard. Combe's article⁶ was reprinted in the *Phrenological Journal* in 1847 and another article critical of Skae by James Straton³⁵ of Aberdeen was also published in that journal. Both Combe and Straton were very critical of Skae's attempt to introduce accurate measurement into phrenology. They were particularly scathing about Skae's use of Swift's skull as a standard. Unfortunately Skae had mistakenly used a table of corrected measurements in his article and had referred to them as actual measurements. This oversight was seized on by Straton, who used it to discredit Skae. Later in 1847 Skae published a letter in the *Phrenological Journal* in which he admitted his previous mistake and stressed the need for standardizations of skull measurements. Needless to say, the editor commented unfavourably on Skae's letter and was unable to grasp Skae's method of standardization. This is understandable because Skae had shown by his method that the behaviour of certain persons bore no relation to the relative size of certain parts of the skull, which according to current phrenological theory indicated certain kinds of behaviour. Thus, in comparing a group of skulls belonging to violent criminals and others, he found that one violent murderer had the smallest organ of combativeness.

At the beginning of his letter Skae apologized for his delay in replying to the criticism of his article and said that he was prevented from doing so by a severe and protracted illness.

G. Skae's place in the history of Psychiatry

Skae was obviously a good doctor, a kind and humane asylum superintendent and an enthusiastic teacher. However, he made no great discoveries, and instituted no new reforms in the treatment and care of the insane. At times it seems that he was on the verge of making an advance, for example when he used the natural history of the illness in the classification of mental illnesses, but he never made the decisive step. Sigerist has pointed out that there are two types of 'Great Doctors', those who make a revolutionary discovery and those whose standards of medical practice are a model for their times. There is no doubt that Skae was the second type. His influence on British psychiatry did not end with his death, because his former assistants and pupils became leading psychiatrists in the British Isles. In Edinburgh he has been followed by a succession of great doctors, Clouston, Robertson and Henderson, who have been outstanding clinicians and inspiring teachers and have continued to enhance the reputation of the school which he founded over one hundred years ago.

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Table 1. Skae's Classification of Insanity

Idiocy,	{ Moral and	Senile Mania
Imbecility	{ Intellectual	Phthisical Mania
Insanity, with Epilepsy		Metastatic Mania
Insanity of Masturbation		Traumatic Mania
Insanity of Pubescence		Syphilitic Mania
Satyriasis		Delirium Tremens
Nymphomania		Dipsomania
Hysterical Mania		Mania of Alcoholism
Amenorrhoeal Mania		Post-Febrile Mania
Post-Connubial Mania		Mania of Oxaluria and
Puerperal Mania		Phosphaturia
Mania of Pregnancy		General Paralysis with Insanity
Mania of Lactation		Epidemic Mania
Climacteric Mania		Idiopathic Mania { Sthenic
Ovario-Mania (Uterio-Mania)		

Table 2. The Character of the Mental Disorder in 108 cases of General Paresis (After Skae)

More or less excited	
With delusions of Wealth and Power, etc.	52
With Suspicion	3
No Delusions, Demented	5
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Total in this group	60
<hr/>	
Depressed or Melancholy	
With Delusions of Wealth, Power, etc.	2
With Suspicions	2
Demented	16
<hr/>	
Total in this group	20
<hr/>	
Quiet	
With Exaltation of Ideas	9
With Suspicion	5
Demented	14
<hr/>	
Total in this group	28
<hr/>	
Total	108

Table 3. Skae's List of Causes of General Paresis

Cause	Male	Female
Parturition	0	1
Intemperance	26	0
Venereal Excess	4	0
Disappointment in Business	15	1
Grief	9	0
Over-excitement, Anxiety	8	0
Exposure to wet and fatigue	2	0
<i>Coup de soleil</i>	1	0
Injuries to the head	7	2
by railway accident	1	0
Renal Disease	2	0
Suppression of Periodic Epistaxis	1	0
Hereditary Tendency	14	3
Unknown	35	5
<hr/>		
Total	125	12