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## *Epilepsia* – the journal of the International League Against Epilepsy

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Medical journals seem to contemporary eyes to be a central and permanent feature of academic medicine; but this has not always been the case, nor necessarily will it be so in the future.<sup>1</sup> The story of *Epilepsia* is typical of

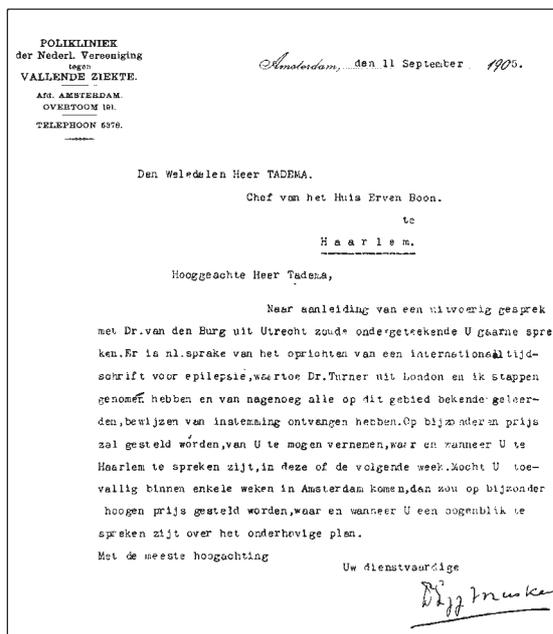
<sup>1</sup> A few words about the historical context: The earliest scientific research journals were the *Philosophical Transactions of the Royal Society* and the *Journal des sçavans*, which both began publication in 1665. Such journals, though, were on the margins of academic life in the 17th and 18th centuries. Indeed, the publication of scientific articles in journals was thought to be rather ridiculous, and one major function was to establish priority for a scientific discovery, often published in anagram form, to reserve priority but to be indecipherable to competitors. Apparently both Isaac Newton and Leibniz used this approach. It was only in the early 19th century, with the inauguration of journals such as the *Lancet* (founded in 1823), that the printed journal began to be respected as a primary method of communicating medical research. This flowering of medical journals was partly fuelled by the industrialisation and falling cost of production, but notwithstanding this books remained at this stage the predominant form of written medical communication (and one hopes and guesses will outlive the fashion for electronics). In the field of epilepsy, for instance, a series of major books were published in the few decades before the birth of *Epilepsia* which included the works of W.R. Gowers, J.R. Reynolds, William Aldren Turner, John Hughlings Jackson, William Spratling, W. Bevan Lewis and David Ferrier. Journals specialising in neurology made their appearance in the middle years of the 19th century. Of the mainline neurology journals which survive today, the *Journal of Nervous and Mental Disease* (founded in 1874), *Brain* (1878), *Encéphale* (1881) and *Revue Neurologique* (1893) existed before 1900 (a further neurological journal continues, albeit having changed its title twice: *Deutsche Zeitschrift für Nervenheilkunde* changed its title to *Zeitschrift für Neurologie* in 1970 and then to the *Journal of Neurology* in 1974). As the pace of medical research increased, with more meetings and symposia requiring publication, more people involved, and in more countries and locations, by 1900 the time of the subspecialist journal had arrived, and journals in many relatively narrow fields were formed. Thus, it was some 30 years after the launch of the first neurology journals that *Epilepsia*, the first specialist epilepsy journal, was to appear. It is still the most important.

that of many medical journals – a tale of a vulnerable academic vessel buffeted by constant flux and changing fortune. Many journals (paper-thin) have failed over the century, but *Epilepsia* has survived, albeit with several periods of hibernation. Indeed, it is one of the most enduring of the International League Against Epilepsy (ILAE) achievements and has been at the centre of the field of clinical epilepsy for many years.

Until very recently, the origins of *Epilepsia* were obscure. But a series of letters from L.J.J. Muskens<sup>2</sup> to J[an] C[ornelis] Tadema, director of the publishing house Erven Bohn, held in the library of University of Leiden, has thrown light on the very first stages of the epilepsy journal. A letter from Muskens, dated 11 September 1905, to Tadema is probably the first documented reference to *Epilepsia* that survives and predates the actual date of first publication by three-and-a-half years. Muskens wrote: ‘There is talk of setting up an international journal of epilepsy. In relation to which, Dr Turner from London and I have taken steps and have received support and approval from almost all the well-known scholars in this subject.’<sup>3</sup> A meeting was probably held in the next few weeks between Turner, Muskens and Tadema. Like Muskens, William

<sup>2</sup> Muskens was instrumental in establishing both *Epilepsia* and the ILAE (see Chapter 1). He was someone who found it difficult to get on with his colleagues but whose dedication to the cause of epilepsy was outstanding as, it seems, were his powers of persuasion. There is no doubt that without his tireless pressure *Epilepsia* would not have been published.

<sup>3</sup> The translation of this and subsequent letters has been kindly provided by Dr Ankie Moesker.



Letter from L.J.J. Muskens to his publisher at Erven Bohn, Haarlem (1905), proposing a journal about epilepsy. (Courtesy University of Leiden)

Aldren Turner<sup>4</sup> was a dedicated epileptologist and a prolific author, but a more urbane person, and Muskens seems to have become disillusioned with him, as he did with others; see p. 7, n. 14). As Muskens wrote to Tadema on

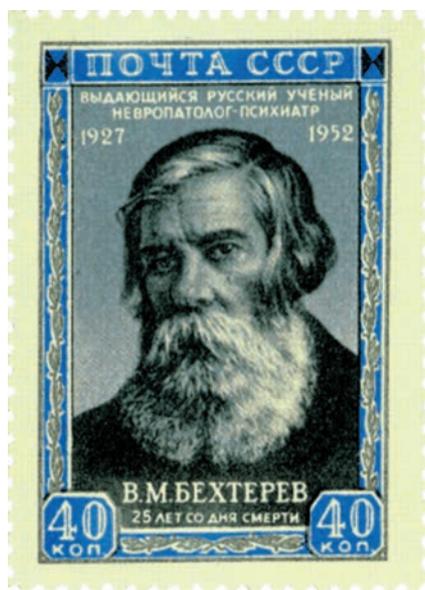
<sup>4</sup> William Aldren Turner (1864–1945) was the elder son of Sir William Turner FRS, principal and vice-chancellor as well as professor of anatomy at the University of Edinburgh. He trained in Edinburgh and Berlin, and then worked as assistant to David Ferris at King's College Hospital, where he received a staff post in 1899. He also practiced at the West London Hospital, and was appointed as an assistant physician to the National Hospital, Queen Square, in 1892 and then a full physician in 1900. He was also nominated as visiting physician to Chalfont Colony in 1902; indeed, he had a lifelong interest in epilepsy and was a firm believer in the value of colonies for the treatment of epilepsy at all its stages. He published a series of very important papers on epilepsy, culminating in 1907 with the publication of the book *Epilepsy: A Study of the Idiopathic Disease*, and in 1910 of three Morison Lectures given to the Royal College of Physicians of Edinburgh. The book became a classic and was re-issued in a facsimile edition with an introduction by J. Kiffin Penry in 1973. Turner was the leading epilepsy specialist in London of his generation but had varied professional interests. He served in the army in France as a doctor in the First World War. He delivered the Bradshaw Lectures at the Royal College of Physicians in London on the psychoses and neuroses of war, and became an advisor to the War Office on shell shock, where his firm but sympathetic understanding of war neurosis was greatly admired.

9 October 1905: 'In continuation of our conversation the other day, I now inform you that not only is it certain that England and America are collaborating but they exhibit somewhat too much a tendency, in my opinion, to take the lead. They are namely proposing an editor for America, one in England and one in Europe.' It is likely that Turner and Muskens met in late 1905, and on 11 January 1906, Muskens wrote again to Tadema that he did not consider Turner's proposal for editorship 'international enough'. After this Turner seems to have been effectively written out of the negotiations, and his name does not appear in any more of Muskens' letters.<sup>5</sup>

Further correspondence reveals a frustrating delay introduced by the difficulty of getting relevant people together, but the occasion of the International Neurology and Psychiatry meeting in Amsterdam on 2–7 September 1907 provided the ideal opportunity to make progress.<sup>6</sup> On 11 July 1906 Muskens told Tadema that an international committee would be appointed during the conference where the matter of the journal would be discussed; and on 12 July 1907, 'There is some progress with the journal. Dr Spratling from New York and Prof Donáth with three

<sup>5</sup> It was clear that Muskens wished to dissociate himself from Turner, possibly because Muskens perceived Turner as 'wanting to take over', but in truth this probably largely reflected more the nature of Muskens' personality than Turner's motives. By July 1907, he seems to have chosen Sir F.W. Mott as the preferred English editor. Mott was a very distinguished physiologist and a fellow of the Royal Society, but not as far as I know a specialist in epilepsy. In the event, however, Turner did become a founding editor and Mott did not, although again the reasons for this volte face are not clear.

<sup>6</sup> This was the first Congress of Psychiatry, Neurology, Psychology and Nursing of the Insane, held in Amsterdam in 1907. A further congress was to have taken place in Berne in early September 1914, but the war intervened. The conference series was restarted in 1931 and the meetings were known as the International Neurological Congresses, which carried the logo 'INC', the first of these was in Berne in 1931, then London in 1935, Copenhagen in 1939, Paris in 1949 and Lisbon in 1953. In 1957, in Brussels, the 6th INC was held under the auspices of the First International Congress of the Neurological Sciences (a short-lived initiative to bring together the different neurological disciplines), at which the World Federation of Neurology (WFN) was founded. Prior to these series, there were no specialist international neurological conferences, but neurology was discussed at the world congresses of medicine. The last congress of this lineage (17th International Medical Congress) was held in London (at which neurology was a main topic – a glittering occasion at which lectures were given, for instance, by Gordon Holmes, Babinski, Dejerine and Oppenheim). The ILAE was founded during the 1909 International Medical Congress, and held its own meetings in conjunction initially with that series of congresses, then with the International Neurological Congresses.



Vladimir Bekhterev, one of the ILAE's initial 'Comité de Patronage.'

well-known medical men from Paris, London and Berlin will probably start taking more definitive steps.' After the conference, on 3 October 1907, Muskens wrote Tadema, 'The matter is now well advanced', and 'five principle persons in our specialty ... have agreed to be patrons: Hughlings Jackson, Binswanger, Raymond, Monakow and Bekhterev [this was indeed a very impressive lineup]. Also, we have accepted as editors: Nonne (Hamburg), Mott (London), Donáth (Budapest), Spratling (America) and Claude (Paris). In addition we have several Assistant Editors and a number of contributors.' These were exceptional people, and their recruitment to the nascent *Epilepsia* was a real coup. Muskens goes on to say that it is possible that 20–30 persons would be willing, in the event of insufficient subscriptions, to stand guarantee for the journal for a limited number of issues 'so much are people convinced of success'. Tadema could not fail to have been impressed, but the financial viability of the journal (a topic which appears in several letters) was clearly a concern.

In the end, Tadema did not agree to publish *Epilepsia*. When the journal first appeared, its publisher was Scheltema and Holkema, a rival firm.<sup>7</sup> What dissuaded Tadema (who had also already published a small book of Muskens) from taking on the journal, after extensive correspondence and meetings, is not clear. There was perhaps (too) long a gestation; possibly Tadema found Muskens too difficult to deal with easily (the correspondence that remains contains

only Musken's letters, not the replies); or perhaps he was simply worried about money.

No further correspondence has come to light, but clearly at some point between October 1907 and January 1909, *Epilepsia*'s publication by Scheltema and Holkema was agreed. Thereafter, the editors must have been very busy commissioning articles and advertising the presence of the new journal.

### The first series of *Epilepsia* (1909/10–1914/15)

#### Editorship of Gyula Donáth

There are a number of lacunae in the history of *Epilepsia*, but none perhaps more curious than the fact that the exact date of the first issue is not known. Unbound copies (i.e. with the cover intact) are extremely rare, although we did eventually find a series of original covers of the journal in several repositories. These have narrowed the date somewhat. It turns out that the very first issue is undated (marked only '1e Année' and 'Fascicule 1'), but the next three clearly bear the date 1909 and cover the months April–June, July–October and October–December. The reason for the overlap in October is not clear, but it seems very likely, therefore, that the first edition was dated January–March 1909 and was published in March 1909.

A second interesting question relates to the nature of the relationship between the journal *Epilepsia* and the organisation, the ILAE. The above findings make it clear that the journal preceded the foundation of the League – the journal in March 1909 and the ILAE in August 1909. Furthermore, the early letters of Muskens show that the activity to establish a journal preceded any preliminary activity in the establishment of the ILAE, and initially at least the plans for the journal seem to have been totally unconnected to any plans for an international organisation. I suspect that once the idea of the League was broached, the journal, which was in a more advanced stage of development, was seen as a natural partner. A recent archival find turned up an advertisement in an unrelated magazine edited by Gyula (Julius) Donáth – *Epilepsia*'s first editor-in-chief and also a founding member of the

<sup>7</sup> There was one interesting connection between the publishing house of Erven Bohn (with Tadema as director) and Scheltema and Holkema – that the wives of the directors of both were sisters. This family connection may have facilitated the transfer of the *Epilepsia* project from Erven Bohn to Scheltema and Holkema (S.A.A. Claeysens, personal communication).



mit dem Prädikate „von Stomfa“ verliehen.

**Von der Budapester königl. Universität.** Der Universitätsrat unterbreitete dem Unterrichtsminister den Vorschlag, der Lehrstuhl während Prof. Karl von *Thau's* möge in zwei Teile geteilt werden. Für den einen wurde Dozent G. *Bachböck* vorgeschlagen, der auch mit der Leitung des chemischen Institutes betraut werden soll; für den zweiten theoretischen Lehrstuhl wurde der a. o. Prof. L. *Winkler* kandidiert.

Der Kultus- und Unterrichtsminister hat die Habilitation des Budapester Arztes Dr. Ludwig *Hajós* als Privatdozenten aus dem Lehrfache: Kriminal-Psychologie und Psychopathologie für Rechtslehrer an der rechts- und staatswissenschaftlichen Fakultät der Budapester Universität genehmigend zur Kenntnis genommen und den Genannten in dieser Eigenschaft bestätigt.

**Ernennung.** Der Gerichtsarzt Dr. Edmund *Németh* wurde von Justizminister zum Leiter des justizärztlichen Landes-Beobachtungs- und Irreninstitutes ernannt.

**Internationale Zeitschrift „Epilepsia“.** Das Bestreben, ein internationales Zusammenarbeiten auf dem Gebiete der Epilepsie und der verwandten Erkrankungsformen zu erzielen, wie es auch für die Tuberkulose, den Alkoholismus, Krebs, Lepra u. s. w. der Fall ist, hat mit dem Erscheinen der „Epilepsia“ eine konkrete Form erlangt. Diese Vierteljahrschrift, welche der Erforschung der Epilepsie in wissenschaftlicher, juristischer und sozialer Beziehung gewidmet ist, erfreut sich der Mitwirkung der bedeutendsten Forscher aller Herren Länder auf diesem Gebiete und ist auch Ungarn würdig vertreten. Die drei Sprachen, in welchen die verschiedenen Autoren zu Worte kommen, sind Deutsch, Französisch und Englisch. Durch diese Zeitschrift soll auch die Bildung einer internationalen Vereinigung zum Studium der Epilepsie und namentlich die Kolonialbehandlung der Epileptiker angeregt und gefördert werden. Das 1. Heft ist über 120 Seiten stark, enthält Originalarbeiten von Prof. *Raimond* und *Sérix* in Paris, Prof. *Binswanger* in Jena, Prof. *Redlich* in Wien, Dr. L. *Muskens* in Amsterdam, ferner wird durch einen Stab von nationalen Referenten die gesamte Literatur der Epilepsie referiert. Die Begründer der Zeitschrift sind Chefredakteur Prof. Dr. *Julius Donath* und Redaktionssekretär Dr. L. *Muskens*. Sie erscheint im Verlage von Scholtena & Holkema, Amsterdam und L. A. Barth, Leipzig. Preis 10 Kronen pro Jahr.

**Gesundheitszustand der Haupt- und Residenzstadt Budapest** in der sechsten Woche 1909 (bis 13. Febr). Infektiöse Erkrankungen: Typhus abdominalis 5, Masern 78, Scharlach 72, Keuchhusten 12, Croup und Diphtherie 19, Puerperalfieber 1, Schafblattern 30, Mumps 10, Trachom 17, Todesfälle bei infektiösen Erkrankungen: Masern 4, Scharlach 8, Croup und Diphtherie 2, Influenza 3.

**Das Politikum der Frauenklinik Nr. II der Budapester königl. Universität** hat im Monat Jänner in 86 Fällen Hilfe geleistet; in 69 Fällen wurde operiert.

**Verein abstinenter Aerzte.** Der Budapester Verein abstinenter Aerzte hielt am 11. d. M. eine Generalversammlung ab. Es wurde beschlossen, daß der Verein monatliche Sitzungen abhalten wird, an welchen die wissenschaftliche Seite der Alkoholfrage besprochen werden soll. Die neugewählten Funktionäre des Vereines sind: Präsident: Prof.

Budapest Dr. WILHELM SCHULHOF (im Winter Budapest, II., Margit-Adorát 3) erstellt gerne auch briefliche Angebote.

### Physikalische Kuranstalt

mit allen modernen Behelfen zur ambulatoischen Behandlung in einer Stadt Ungarns mit ca 40.000 Einwohnern, wegen Uebernahme größerer Heilanstalt zu verkaufen. Nachweisbarer Reingewinn 10000 Kronen pro anno. Anfragen unter „Hydrotherapeut“ an die Administration. 000000

Der Gesamtauflage unserer heutigen Nummer liegen folgende Prospekte bei:

**Aktiengesellschaft für Anilin-Fabrikation** (Pharm. Abteilung) Berlin SO. 36, Borovertin-Prospekt.

**Farbwerke vormals Meister Lucius & Brüning, Hoechst a.M., Trignin-Prospekt.**

Wir empfehlen diese Beträge der Aufmerksamkeit unserer geschätzten Leser.

## Scotts Emulsion

ist eine Lebertran-Emulsion, die

**nicht nur schmackhaft und selbst für den schwächsten Magen leicht verdaulich ist,**

sondern die sich Dank des Scottschen Emulgierungsverfahrens unveränderlich hält und nicht ranzig wird.

Scotts Emulsion ist derartig fein emulgiert, daß — wie in Kliniken angestellte Versuche bewiesen haben — das Gesamtgewicht des in dieser Emulsion enthaltenen Lebertrans in das organische Fett des Körpers übergeht.

**Scotts Emulsion führt nicht die geringsten Verdauungsstörungen**

herbei und die bekannte Wirkung des Lebertrans (wenn assimiliert) wird bei der Ordination von Scotts Emulsion dadurch wesentlich erhöht, daß in diesem Präparat Kalk- und Natriumhypophosphite mit dem Lebertran geboten werden.

**Für Versuche wird den Herren Aerzten auf Wunsch gerne eine grosse Flasche Scotts Emulsion mit Angabe der Bestandteile gratis und franko zugesandt.**

**SCOTT & BOWNE B. T.**  
BUDAPEST, VII., Garay-utca 30.



Announcement of *Epilepsia* in a newspaper edited by Gyula Donáth. This notice gives a description of the upcoming journal and provides an insight into the planning and intentions of its progenitors. In passing, note the advertisement for Scotts Emulsion, an emulsion of cod liver oil and a natural source of vitamin A and D, calcium, phosphorus and omega 3. It is still manufactured, now by GlaxoSmithKline, and has a large market in many parts of the world — a rather more enduring medicament than most antiepileptics. (Courtesy Semmelweis Museum)

ILAE — to the effect that one purpose of the new journal was to stimulate formation of an organisation to combat epilepsy (see Chapter 1; Donáth 1909). The idea of joining the two probably arose during the International Congress of Neurology, Psychiatry and Psychology in Amsterdam in September 1907, for there a recorded statement of Muskens make it clear that he supported the idea of a society as well as a journal (see Chapter 1).

In the report, in *Epilepsia*, of the very first meeting of the ILAE held on 30 August 1909, Auguste Marie records that the journal was 'placed graciously at the disposition of the League' (Marie 1909, 231). In the secretary's report of the same meeting it was stated also that 'the proposal by E[ij]kman is that *Epilepsia* will be the official journal 'as long as the ILAE does not have its own' (Secretäre

<sup>8</sup> See Chapter 1, n. 23.

<sup>9</sup> Few figures in epileptology are as revered as John Hughlings Jackson (1835–1911). Macdonald and Eileen Critchley subtitled their biography of him *Father of English Neurology*. Ironically, his will stipulated that all his personal papers be burned, and details of his private life are few. He was born in Green Hammerton, Yorkshire, and apprenticed to a local doctor at 15. He subsequently trained in medicine at York and London, and ultimately landed up at the National Hospital for Paralysis and Epilepsy at Queen Square.

1909, 233). This proposal was acted upon, and already by the third issue of 1909, the journal was recorded on its title page as the 'Organe officiel de la Ligue internationale contre l'épilepsie'.

One striking feature of the journal was the committee of patronage. This was a brilliant device. As noted above, it was conceived already in 1907, and Muskens had by then agreement from Bekhterev,<sup>8</sup> Binswanger, Hughlings Jackson,<sup>9</sup>

Where others prided themselves on the speed of their assessments, Jackson observed minutely and thought long. Consequently, he vastly enriched the knowledge of 'neurological signs', he recognised the role of the cerebral cortex in movement, and he is credited with making the ophthalmoscope a tool of neurology in Britain (although others grant this achievement to Gowers). He was by all accounts an indifferent experimentalist, an 'untidy writer', as Francis Walshe put it, awkward with patients, and yet was acknowledged worldwide as the outstanding neurologist and neurophilosopher of his time. Jackson helped to found the journal *Brain*, and together with William Gowers and David Ferrier, he also established the National Society for the Employment of Epileptics (now the National Society for Epilepsy). All his life he avidly read the English and French neuroscience literature. He lent his patronage to the nascent *Epilepsia*, and when he died, Muskens wrote in the journal, 'Not only we who were his pupils, but all those interested in the study of Neurology feel that a personal loss has been sustained' (Muskens 1912; Morrish 1999; Swash 2005; Reynolds and Andrew 2007).



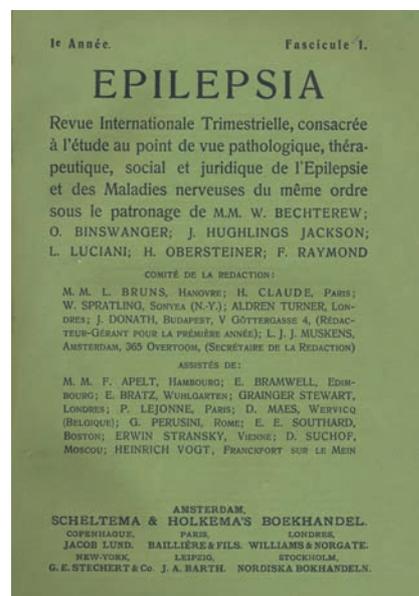
Monakow and Raymond.<sup>10</sup> When the journal actually came to be published, the committee of patronage comprised Bechterew, Binswanger, Jackson, Luciani,<sup>11</sup> Raymond and Obersteiner.<sup>12</sup> The existence of this committee was prominent on the front page of the journal and no doubt added weight and lustre to the fledgling periodical. Of this committee, only Binswanger and Raymond contributed any papers to the journal, and indeed only Bekhterev and Binswanger were listed as ILAE members in the first membership list in 1911; the committee's involvement with the journal must therefore have been largely honorific. The establishment of the committee is testament to the clarity of vision and powers of persuasion of the early founders. The committee stayed in place for the whole series, with Dejerine<sup>13</sup> replacing Raymond on his death in 1910 and Sir William Gowers<sup>14</sup> replacing Jackson on his death in 1911.

<sup>10</sup> See Chapter 1, n. 24.

<sup>11</sup> Luigi Luciani (1840–1919) was an experimental physiologist, most notably of the cerebellum. He was born in 1840 in Ascoli Piceno, Italy, to a family that included the biographer of Giuseppe Garibaldi. Luciani began to study medicine at Bologna in 1862, then transferred to Naples in 1864 only to be driven back to Bologna the next year by a cholera epidemic. His interest in physiology already awakened, in 1872 Luciani went to work under Carl Friedrich Wilhelm Ludwig in Leipzig where, working with frogs, he demonstrated the phases of cardiac activity. Following this 'most important period of my life as a scientist', Luciani returned to Bologna and Parma to teach experimental physiology, then moved in succession to Siena, Florence and Rome. In Parma, Luciani's friend Augusto Tamburini let him work in the insane asylum near Reggio, where Luciani focused on cerebral localisation and function. He also investigated the physiology of fasting. Luciani died in 1919 of a chronic genitourinary disease (Morabito 2000).

<sup>12</sup> Why Constantin von Monakow (1853–1930; Russian-Swiss neuropathologist) was no longer on the committee of patronage and Mott and Max Nonne no longer on the editorial committee is not known. All were highly distinguished neurologists and at the peak of their powers. Monakow was a pioneer of cerebral anatomy and connectivity (the cuneate nucleus is sometimes called the nucleus of Monakow). Nonne (1861–1959) was a leading clinical neurologist in Germany and indeed one of the four German neurologists called in to treat Vladimir Ilich Lenin, and survived the experience – as, sadly, Bekhterev did not after his consultation with Stalin. Frederick Walker Mott (1854–1926) was a leading neuropathologist of the time, carrying out distinguished work in many fields, including cerebral anatomy and function, infections and shell shock (and perhaps best known for establishing that general paralysis of the insane was due to syphilis). None had a particular interest in epilepsy, and this may be the reason for their non-appearance.

<sup>13</sup> In 1871 Joseph Jules Dejerine (1849–1917) left his native Switzerland and went to Paris to study under Charcot and Vulpian.



The undated cover of the first issue of *Epilepsia*.

His first position, in 1875, was clinical head at the Hôpital de la Pitié. After completing his doctorate in 1879 on acute ascending paralysis, he joined first the Hôpital Bicêtre, then La Salpêtrière where in 1910 he became professor of neurology. Together with his wife (American Augusta Klumpke, herself a trail blazer), Dejerine took advantage of newly discovered staining and sectioning techniques to focus on anatomical and anatomo-pathological studies. He gave his name to a wealth of syndromes, and was the premier aphasiologist of his time. In 1899 Dejerine had helped to found the French Neurological Society. Although he did not travel widely, he was well connected and enjoyed visits from eminent neurologists the world over. He was esteemed by his colleagues, and in 1914 only the war prevented him giving the Hughlings Jackson lecture at the Royal Society in London. Dejerine died in 1917 of Bright's disease (Schurch and Dollfus 1998; Bassetti and Jagella 2006).

<sup>14</sup> Together with his colleague, Hughlings Jackson, William Richard Gowers (1845–1915) spent his entire professional life at the National Hospital for the Paralysed and Epileptic in Queen Square, London. Like Jackson, he was a prime reason for the young institution's growing reputation. Born north of London, Gowers trained in medicine at University College Hospital and became a medical registrar at Queen Square in 1870. Exercising his keen powers of observation in the clinic, he also published fast and prolifically. His still-classic monographs include *Epilepsy and Other Chronic Convulsive Disorders* (1881); *Pseudo-Hypertrophic Muscular Paralysis* (1879); *Manual and Atlas of Medical Ophthalmoscopy* (1879); and *Manual of Diseases of the Nervous System* (1886–1888). He definitively described muscular dystrophies (and in particular 'Gower's sign') and other neurological disorders, brought the ophthalmoscope into the neurologist's toolkit and coined the term 'knee jerk' for the patellar tendon reflex. His work on localisation of spinal cord tumour is credited with having made neurosurgery thinkable (Tyler 2003).

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There was also an editorial committee comprising generally younger men who already had major reputations in the field of epilepsy or neurology: Turner, Spratling,<sup>15</sup> Muskens, Ludwig Bruns<sup>16</sup> and Claude<sup>17</sup> – with the latter two replaced by Ernst Veit ('Veith' in the journal)<sup>18</sup> and James Munson<sup>19</sup> from the second volume. Each contributed papers and reports to *Epilepsia*. With this editorial team and committee of patronage, it is not surprising that the journal got off to an excellent start. Over 5 years, five volumes were produced with a total of 2,237 pages.

In these early years the journal seems to have had three main functions. The first and most important was to publish original scientific articles and reviews. Approximately 80 such papers appeared in the five volumes. These included

<sup>15</sup> In 1900 William P. Spratling (1862–1915) and philanthropist William P. Letchworth together founded the National Association for the Study of Epilepsy and the Care of Treatment of Epileptics. Spratling was born in Alabama. He took his first degree in business and then turned to medicine and neurology. In 1894, he became the first medical director of Craig Colony for epileptics in Sonyea, New York. He pioneered the training of neurologists specialising in epilepsy, and coined the term 'epileptologist' (Fine 2004). In 1904 he published a textbook titled *Epilepsy and Its Treatment*. In 1908, Spratling left Craig Colony to take up the chair of nervous diseases and physiology in the College of Physicians and Surgeons in Baltimore. 'I desire', he confided to a colleague at the time, 'more opportunity for study which I propose to give largely to diseases of the mind and nervous system' (Spratling 1908). He died unexpectedly at 53 in Welska, Florida.

<sup>16</sup> Ludwig Bruns (1858–1916) studied in Göttingen and Munich from 1877 to 1892. He opted for neurology, and served as an assistant under Julius Hitzig at the provincial lunatic asylum in Nietleben. In 1895, he moved to the new psychiatric and nerve clinic in Halle, then worked in Berlin and Paris, and ultimately Hannover. Three disorders carry his name: Bastian–Bruns sign, Bruns' ataxia and Bruns' syndrome. He wrote, among other books, *Hysteria in Childhood* (1897) and, with August Cramer, the *Handbook of Childhood Nervous Disorders* (1912).

<sup>17</sup> Henri Claude (1872–1945) trained as a neurologist and psychiatrist in France. He worked under Fulgence Raymond at La Salpêtrière in Paris, before going on to head mental illness and brain diseases at l'Hôpital Sainte-Anne from 1922 to 1939. A promoter of Freudian ideas of psychoanalysis, Claude established the laboratory of psychotherapy and psychoanalysis at the University of Paris school of medicine. He was the first to describe syndromes of lesions of the brain stem, among which are Claude syndrome and Claude's hyperkinesia.

<sup>18</sup> Ernst Veit (?–1914) was medical head of the Wuhlgarten epileptic asylum in Berlin. He gave a number of talks at the early League meetings, including on criminality in epileptics and twilight states in epilepsy, and otherwise took an active hand in deliberations. He died young, at 49, of a chronic kidney infection (Nekrolog Ernst Veit 1915).



An early advertisement in *Epilepsia*, for a therapy of medieval vintage.

original papers by leading figures – the first issue had, for instance, and among others, two papers and reviews by Binswanger (1909a,b) and three by Muskens (1909a,b,c). The scientific papers in *Epilepsia* were published in English, French and German, and the authorship and scope were truly international. No editorial statement ever appeared to explain the objectives of the journal, but there seems little doubt from the quality and range of papers that the primary aim, then, as now, was scientific.

Notwithstanding this, the journal also had a second important role, to publish ILAE news and reports. Indeed, today these early issues of *Epilepsia* remain the major

<sup>19</sup> It was James Frederick Munson (1881–1918), secretary-treasurer of the US National Association for the Study of Epilepsy and the Care and Treatment of Epileptics, who in response to a call for help from Dutch colleagues suggested Budapest as a place for starting an international society to consider the problems of epilepsy. Munson was the resident pathologist at Craig Colony for Epileptics in Sonyea, New York, and established a national centre on epilepsy injuries. Munson was a starting member of the ILAE and regularly contributed reviews of the literature in *Epilepsia*. In 1912, the US National Association failed for financial reasons and folded into the ILAE (Report 1908; Fine 2004).

source of information about the League in this period. A major initial focus was to collect statistical material from various countries, and this was published in conjunction with reports of the national committees (Marie 1909, 229–231).

The third function of the journal was abstracting and indexing. A section titled ‘Analyse des travaux originaux’ summarised journal articles on epilepsy published elsewhere. Additional sections included a bibliography of epilepsy publications (books) and reports of society meetings. The critical abstracts were edited by Loeb and very well done; these small abstracts seem, in the humble opinion of the author at least, generally superior to, and more informative than, the current author-written online indexes of Medline and PubMed, for instance. This concept followed closely (although it was done rather better than) that of another society-linked journal of the period, *Revue Neurologique*, owned by the Société Neurologique of Paris (which was probably the model for the ‘Analyse des travaux originaux’ in *Epilepsia*), and also the abstracts section in *Brain*.

The publisher of the first volume was Scheltema and Holkema in Amsterdam, but at the second meeting of the ILAE in Berlin, it was decided – for reasons which were not clear – to change publishers. A proposal was received from the publishing firm of Johann Ambrosius Barth of Leipzig to publish *Epilepsia* if at least 100 members joined the League, and at that time the annual dues were set at 10 marks (equivalent to about £40 today) – which was to include 9 marks for the publisher. The proposal was obviously approved, as the second volume of *Epilepsia* was put out by Barth, who continued to publish the rest of the first series, with a title page that was similar but arguably of a higher design quality than that of volume 1. In parallel with the journal, the ILAE had also developed strongly, and by 1912 there were chapters in 16 countries and a total of 96 members. From 1909 to 1913, membership included a compulsory subscription to *Epilepsia*, 20 British shillings in 1912 (Anon. 1912, 318) – equivalent to £70 today.<sup>20</sup> But at the fourth ILAE conference in London in 1913 it was decided to admit into the League two classes of members: full members paid 25 francs per annum (roughly equivalent to 20 British shillings) and received full privileges and a copy of *Epilepsia*; associate members paid 4 francs (equivalent to about £12 in today’s values) and did not receive the journal (Anon. 1913, 24). Ninety per cent of the ILAE dues at that time were passed to the

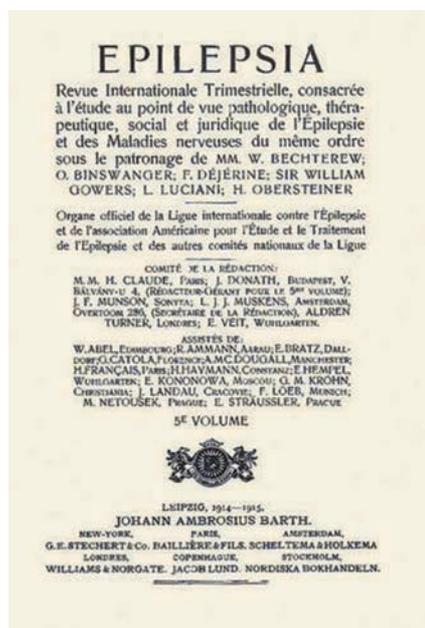


Arthur Meiner, *Epilepsia*’s publisher at Johann Ambrosius Barth.

publishers, and it is clear enough that the journal was then considered the major activity of the League.

The journal during these years was surely assuming a significant role in the field of epilepsy and had started well. One could imagine how it might have matured and even wrested the position of primary publisher in epilepsy from the mainline neurological journals, thus stimulating advanced work in the field. Unfortunately, all this potential was lost with the advent of the European war in 1914. The ILAE was disbanded, and *Epilepsia* went into hibernation for over 20 years. Muskens mentions in his last

<sup>20</sup> In this chapter, we have converted original currencies into current values using the British retail price index (RPI) converted into 2007 sterling values as the primary measure until 1945, and then after 1945 the American Consumer Price Index (CPI) converted into 2007 dollar values. These measures are chosen as being the most representative, but other measures could be used and would result in widely differing calculations. For instance, 20 British shillings in 1912 would amount to £70 using the retail price index, £90 using the GDP deflator, £375 using average earnings, £442 using per capita GDP and £594 using the GDP. Exchange rates also have varied considerably over the years. For convenience, I have converted other European currencies into sterling before 1945 and then converted the figure into current sterling values. The data are taken from tables published on [www.MeasuringWorth.com](http://www.MeasuringWorth.com) where an explanation of the measures is also given.



The title page of *Epilepsia* in 1914; a model of typographical elegance.

article, dated December 1936 and published shortly after his death, that the 'liquidation of the periodical [in 1915] was beset with manifold difficulties' (Muskens 1938, 87). Although it is unclear exactly what these were, he later named financial and other difficulties but wrote that a 'proper finishing' was finally achieved (Muskens 1937, 14).

### The second series of *Epilepsia* (1937–1950)

#### Editorship of Hans Iacob Schou 1937–1947 and William Lennox 1947–1950

In 1935, the ILAE was resuscitated (see Chapter 1), and at its very first meeting the decision was taken to revive the journal. The publication of the first issue of what was to be called the second series was achieved by 1937. That the journal was so rapidly established was, one suspects, due to the enthusiasm and energy of William G. Lennox, the then ILAE president,<sup>21</sup> who was a keen and prolific author. By 1939, the journal was in full operation, and Lennox could write that, as was the case 25 years earlier, 'All are agreed that the first and foremost enterprise

<sup>21</sup> See Chapter 1, n. 54.

[of the ILAE] is the publication of *Epilepsia*' (Lennox 1939, 175).<sup>22</sup>

The second series was from its outset a slimmed-down version compared with the previous series. It consisted of one issue a year, with four issues gathered together into quadrennial volumes (although in fact the last volume comprised only two issues, and thus there were 14 issues in all). H.I. Schou, head of the Filadelfia Colony in Dianalund, Denmark, was appointed its first editor.<sup>23</sup> Schou was a pious and respected Danish psychiatrist. The publisher was now Munksgaard from Copenhagen (under the personal guidance of Ejnar Munksgaard). There was also appointed a board of assistant editors: J. Tylor Fox (Great Britain: 1937–1945),<sup>24</sup> Lennox (United States:

<sup>22</sup> At least one previous effort must have been made to keep the journal – or one like it – going. On 1 July 1929, Adolf Meyer, a member of the precursor organisation to the American branch, wrote to his colleague G. Kirby Collier, 'With regard to the Centralblatt für Epilepsie, [Ulrich] is also, in contrast to Wuth, in doubt whether Springer would undertake it without good guarantees and he wonders whether Springer would take over the editorship. He doubts the possibility of gathering in the papers on epilepsy in one periodical, because other journals are also on the lookout for any good contributions on epilepsy' (Meyer 1929).

<sup>23</sup> Hans Iacob (H.I.) Schou was born in Denmark in 1886. Following an early flirtation with engineering studies, he switched to medicine. He took his degree in 1913, and thereafter assumed a number of posts in neurology and mental diseases. In 1922 Schou was chosen by the strongly Christian board of the Indre Mission (a branch of the evangelical church) to succeed Adolph Sell, who founded the Filadelfia epilepsy colony in Dianalund in 1897. Schou served as the administrative and medical head of Filadelfia until 1939, when he left half of the leadership (the epilepsy department) to H.P. Stubbe Teglbjærg. Schou himself stayed on in the mental diseases department. His written contributions in Danish included a monograph on syphilis (1922), volumes on the physiology of feelings (1936) and the physiology of manic-depressive psychosis (1945), and sundry popular articles and religious pamphlets. Schou suffered from manic-depressive illness all his life (D. Jerne, personal communication). His son, Mogens Schou, also a psychiatrist, proved the efficacy of lithium in treating the disease. Schou retired in 1951 and died shortly after in 1952. In a notice to the readers of *Acta Psychiatrica et Neurologica Scandinavica*, Stubbe Teglbjærg wrote, 'With his death the heart of the Scandinavian Medical Society for the Study of Epilepsies stopped' (Stubbe Teglbjærg 1954). The more murky side of Schou emerged when he publicly approved a proposed policy to sterilise handicapped persons, and his approval carried a great deal of weight. Many of the ILAE leaders at this time were enthusiastic eugenicists (including Schou, Lennox and Stauder, and earlier Bullard, Weeks and Donáth), and articles on eugenics appeared in the journal (an early example was by Erwin Katzen-Ellenbogen, who was eventually convicted at the Nuremberg trials).

<sup>24</sup> See Chapter 1, n. 51.

1937–1947), Muskens (Netherlands: 1937), Karl-Heinz Stauder (Germany: 1938–1947),<sup>25</sup> Denis Williams (Great Britain: 1946–1947; Table 1).<sup>26</sup> The objectives of the journal were very different from the scientific aims of the first series. As Schou stated in his first report as editor: ‘In the course of the past 20 years (1915–1935) neurological and psychiatric periodicals have appeared in so great a number that all scientific works on epilepsy and its treatment can be published there. The first aim of the reorganised League must be the social care of epileptics and not so much scientific research into epilepsy. The new edition of *Epilepsia* must follow these lines. It must be the organ for our League’ (Schou 1937, 12).

This change in policy and particularly the swing in emphasis away from scientific research to social care reflects, I suspect, the interests of Schou and the anxieties of the international situation and the impact of political changes in Europe. Social concerns were then a strong theme of epileptology in the Low Countries, and remain so to this day.

<sup>25</sup> Karl-Heinz Stauder (1905–1969) is probably best known in the medical world for being one of the first to show that hippocampal sclerosis causes epilepsy. Himself the son of a physician, Stauder completed his medical studies and went into clinical practice and research in 1929 at the age of 24. His particular interest was epilepsy and neuropharmacology. In 1937, he resigned from the clinic, opting instead for private practice in neurology in Munich, where he continued to publish. From 1951 to 1961 he also edited the journal *Medizinische Klinik*. Stauder had always been drawn to writing and to journalism, and under the pseudonym Thomas Regau he wrote a number of dramatic works (e.g. a play, ‘Thomas Morus’ (1950)), as well as travel and nonfiction books (Hippius *et al.* 2008, 119).

<sup>26</sup> Denis Williams (1908–1990) chose neurology early on in his medical career. He obtained his medical degree from Manchester University, and worked first at the National Hospital, Queen Square, before going to the Harvard Neurological Department in the Boston City Hospital on a Rockefeller travelling fellowship to study EEG. On returning home, he took a small recording machine with him and later would be the first to put such an apparatus to clinical use in Britain. He served in the Royal Air Force during the Second World War, and once the war was over, set up a clinical practice at Queen Square with a special interest in epilepsy and EEG. He published extensively, including on temporal lobe epilepsy. He contributed in particular to the understanding of cerebrovascular disease and subacute sclerosing pan-encephalitis. He was much admired for his affable manner, despite a heavy workload, and in demand as a teacher and mentor. From 1954 to 1975 he was editor of both *Brain* and *Modern Trends in Neurology*. He also led the academic board of the Institute of Neurology, and was instrumental in establishing the Brain Research Trust to fund neurological research. His death, as reported in the *Times*, came ‘after a long and distressing illness’ (Denis Williams 1990; Zilkha 1990).

Finance, however, was a problem. In those days, the ILAE membership fee was set at 5 shillings a year or 15 shillings for a 4-year period,<sup>27</sup> and this included a subscription to *Epilepsia*. By 1939, the ILAE had 320 members. The additional 1937/38 sales of *Epilepsia* were very small indeed, only 9 shillings, and furthermore many members were receiving the journal but not paying their dues. The total cost of production and postage was small, only £50.6.8 in 1938 and £25.6.0 in 1939 (Tylor Fox 1938, 165), but the journal was not breaking even and it was the main expense of the ILAE. In 1939, Schou and Lennox proposed that a new branch of the League be formed, ‘an association of laymen interested in epilepsy’, whose members would either pay subscriptions to *Epilepsia* and thus increase its circulation or have a special periodical written ‘in a popular form and adapted to layman’s knowledge’, which would financially support the league and *Epilepsia* (Schou 1939, 178).

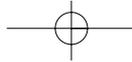
The initial annual issues reflected the changed editorial policy, comprising compilations of statements of ILAE intentions and desires, the constitution of the branches, reports from the branches, programmes of the branches’ annual meetings (usually rather second-rate affairs) and summaries from different countries of ‘epilepsy statistics’ (although usually hardly justifying this term). Schou hoped that the journal in this way would become ‘a useful connecting link between the different countries of the world, which especially in our time need connection’ (Schou 1937, 13). Gone was the scientific function, and gone too were the scientific articles.

The annual bibliography of abstracts, which had been a feature of the first series, was reintroduced, albeit with briefer (and less useful) abstracts than before. These were, in 1939 and 1940, contributed country by country, and the bibliography was only partly in English. The idea of division by nationality became impossible by 1941 (Lennox 1941, 12), and thenceforward the abstracts writing became based entirely in the United States and edited entirely by Lennox from 1937 to 1945, using the new *Index Medicus*.

Eight hundred copies of the first number of the second series were produced at a cost of £3.6.0.<sup>28</sup> Schou wrote

<sup>27</sup> At current values, the amounts in this paragraph work out as follows: 5 shillings (£11), 15 shillings (£34), 9 shillings (£21), £50.6.8 (£2,303) and £25.6.0 (£1,124).

<sup>28</sup> Equivalent to £153 at today’s value.

**Table 1** The four series of *Epilepsia* and their editors.

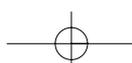
	<i>Editor (or equivalent)</i>	<i>Associate editors (or equivalent)</i>
<i>1st series</i> 1909–1915	Rédacteur-Gérant: Donáth G (Hungary)	Comité de la Redaction: Bruns L (Germany: 1909/10–1910/11), Claude H (France: 1909/10–1914/15), Spratling W (USA: 1909/10–1914/15), Turner WA (Great Britain: 1909/10–1914/15), Muskens LJJ (Holland: 1909/10–1914/15) secrétaire de la redaction, Munson JF (USA: 1911/12–1914/15), Veith E (Germany: 1911/12–1914/15)
<i>2nd series</i> 1937–1947	Editor: Schou HI* (Denmark)	In collaboration with: Fox JT (Great Britain: 1937–1945), Lennox WG (USA: 1937–1947), Muskens LJJ (Holland: 1937), Stauder EH (Germany: 1938–1947), Williams D (Great Britain: 1946–1947)
1948–1950	Editor: Lennox WG (USA)	Associate editors: Watson CW (USA: 1948), Cantlon B (Argentina), Stubbe Teglbjaerg HP (Scandinavia), Alcock HS (Great Britain), Ledebøer B Ch (Holland: 1948), Rémond A (France: 1949–1950), Kloek J (Holland: 1949–1950), Merlis JK (USA: 1949–1950)
<i>3rd series</i> 1952	Editors: Lennox WG (USA), Merlis JK (USA)†	Publications committee of the American branch of the International League Against Epilepsy
1953–1955	Editor: Merlis JK (USA)	
<i>4th series</i> 1959–1961	Editor-in-chief: Walshe Sir F (Great Britain) Managing editor: Lorentz de Haas AM (Holland) Editors: Gastaut H (France), Glaser G (USA)	
1962–1967	Managing editor: Lorentz de Haas AM (Holland) Editors: Gastaut H (France), Glaser G (USA)	
1968	Lorentz de Haas AM (Holland; managing editor) Editors: Gastaut H (France), Glaser G (USA)	
1969	Managing editor: Magnus O (Holland) Editors: Gastaut H (France), Glaser G (USA)	
1969–1975	Chief editor: Lennox-Buchthal M (Denmark)‡ Editors: Gastaut H (France), Glaser G (USA)	
1975–1986	Editor-in-chief: Ward AA (USA)	
1986–1994	Editor-in-chief: Cereghino JA (USA)	
1994–2001	Editor-in-chief: Pedley TA (USA)	
2002–2005	Editor-in-chief: Fisher RS (USA)	Associate editors: Moshé N (USA), Jackson G (Australia), Perucca E (Italy), Serratosa J (Spain)
2006–2009	Editors-in-chief: Shorvon SD (Great Britain), Schwartzkroin PA (USA)	Associate editors§: Becker A (Germany: 2006), Beghi E (Italy), Berg A (USA: 2006–08), Bertram E (USA), Brooks-Kayal A (USA), Cook M (Australia), Duchowney (USA: 2007–), Guerrini R (Italy), Hermann B (USA: 2007–), Patsalos P (Great Britain), Schmitz B (Germany: 2006), Sperling (USA: 2007–), Tomson T (Sweden: 2008–), Vezzani A (Italy), Walker M (Great Britain)

\* Schou was listed as editor, but from 1939, because of the difficulties of communication during the war, played no part in the editing which was carried out by Lennox.

† Editing assigned to the publications committee of the American branch of the ILAE, under the chairmanship of Jerome K. Merlis.

‡ Margaret Lennox-Buchthal was listed as 'chief editor', 'managing editor' and 'editor' in different parts of the journal.

§ 2006–present time unless otherwise stated.



in his 'Secretary's notes' that the first number of the second series of *Epilepsia* was being printed in English, first, because all the authors in the issue used the English language in their contributions to international journals and, second, because the reorganisation of the League took place in London and the participation of members till then was – he was 'sorry to say' – mostly from America and the northern part of Europe. Schou expressed the wish that all three main languages would be represented in each subsequent issue, a wish that was sadly not realised (Schou 1937, 74).

In 1939, the Second World War broke out in the days after the Copenhagen meeting of the ILAE (during the International Congress of Neurology). Schou was listed as editor of the journal until 1945, although from about 1940 onwards, all editorial work was carried out by Lennox, who had become de facto editor. Publication of the journal moved from Copenhagen to the Graphic Press in Newton, Massachusetts, in 1941, and in 1942 to the George Banta Publishing Company in Menasha, Wisconsin, until 1945. Schou began the 1941 volume with a sad editorial epitaph: 'The editor of the first four numbers of *Epilepsia*, second series, much regrets that the present conditions in Europe render it impossible to edit this issue of the *Epilepsia* from Denmark. It is extremely difficult for persons in the various countries to communicate with each other, and the medical collaborators are largely occupied by other work. It was difficult to collect material for *Epilepsia* no. 4 and it has proved impossible to edit the present number' (Schou 1941, 7).

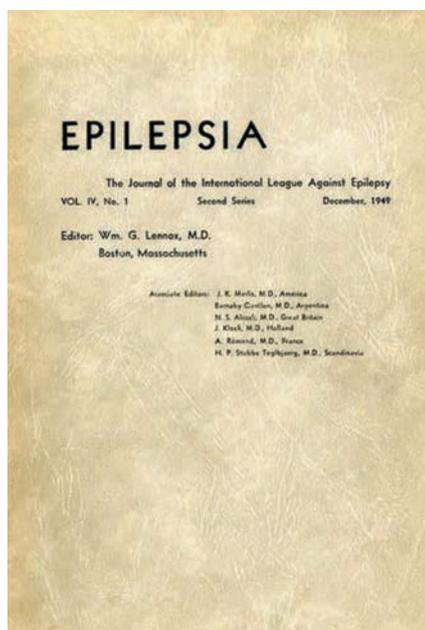
All ILAE activity outside the United States ceased. For the next 8 years, *Epilepsia* carried reports only from the US chapter and the Laymen's League (Schou 1941, 8–9) and few original articles, some of which were contributed by Lennox. Lennox, too, it was who provided annotated indexes of the published literature (these occupied 85% of the printed pages of the journal). Indeed, he had become so influential that *Epilepsia* was essentially a one-man enterprise. Lennox seemed less concerned by the international situation than his European colleagues, and in his annual bibliographic review of 1941 could write: 'Looking back, the year 1939 was a good year. Fellowship and co-operation between scientific workers of various nations found expression in the second International Neurological Congress held in Copenhagen [a remarkable statement in view of what was in fact happening in Europe]' (Lennox 1941, 12). Tylor Fox from England and Stauder

from Germany were, together with Lennox, officially listed as assisting Schou in the editorship throughout the war years, although neither made any obvious contribution to the journal.

The delayed first postwar issue, dated 1945 but published in 1946, began with an editorial by Lennox in his characteristic tone: 'As the blackness of war gives way, we are thankful that we can again join efforts with friends of a common hope and purpose who are separated from us by nothing more substantial than salt water' (Lennox 1945, 7). He reported that *Epilepsia* had managed to survive during the war years because of the support of the American Epilepsy League and that the ILAE officers had voted to make *Epilepsia* a joint organ of the International and American Epilepsy Leagues (the newly renamed Laymen's League; Lennox 1945, 11–13) which shared the editorial and financial responsibilities for the journal. Two thousand copies were printed in 1944, and advertising appeared for the first time in 1941.

The close involvement of *Epilepsia* and the US chapter increased at its meeting in 1946. There, Lennox's proposal that the American Epilepsy League be named as an affiliate of the ILAE and of the American branch was approved. At the same meeting, the ILAE formally asked the American Epilepsy League to share editorial as well as financial responsibilities for the publication of *Epilepsia*. As Lennox wrote: 'This action legalises decisions made by the officers of the League a year ago. For several years the American Epilepsy League has borne the expense of printing *Epilepsia*. This resolution recognises the important place played by non-professional persons and recognises that these groups can aid the cause not only financially, but also in carrying out social studies which will be beneficial to all. It is hoped that these lay organisations will provide collaborators on the Editorial Board' (Lennox 1947, 177). The influence of the lay organisation on editorial policy can be seen immediately, and the only original publication of the issue was a survey entitled 'The Higher Education of Epileptics' by Lennox *et al.* (1947).

The journal continued under the editorship of Lennox until 1950, latterly with a team of associate editors, one chosen from each of the six countries or country groupings then members of the ILAE: C.W. Watson (United States: 1948), B. Cantlon (Argentina: 1948–1950), H.P. Stubbe Teglbjaerg (Scandinavia: 1948–1950), H.S. Alcock (Great Britain: 1948–1950), B. Ch. Ledebøer (Netherlands: 1948), A. Rémond (France: 1949–1950), J. Kloek (Holland:



The *Epilepsia* cover of 1949 marked the second series of the journal, published by Levin and Munksgaard in Copenhagen, and a new crisp, elegant and modern design.

1949–1950) and J. Merlis (United States: 1949–1950). Now, as the world began to recover from war, the journal began to fade. There were only one or two original articles (most by Lennox) and the annual annotated bibliography lessened in value. The only other content was annual ‘reviews of progress’ (by Lennox) and notices and reports from the ILAE chapters. A thin archive shows Lennox struggling to get members of the American branch of the League to send him copy. In January 1949, Francis McNaughton, then president of the ALAE, wrote in the newsletter *Wings*, ‘Number 4 of Volume III [of *Epilepsia*] is being printed (oh, so slowly). Literature for 1948 is now being abstracted for the next number’ (*Wings* 1949).

In 1949, the American Epilepsy League merged with the National Association to Control Epilepsy, and inter alia decided to reduce or withdraw its funding for *Epilepsia*. The precise details of this decision are not clear, and it flies in the face of the assurances given by Mrs Potter in 1946 (Haddow 1947). The focus of this organisation was to provide national services at the state level, and presumably *Epilepsia* was not considered to be a priority for funds. Whatever the reasons, this action was a hammerblow to the journal, which relied heavily on the funds and which

had anyway only 2 years earlier begun to share editorial as well as financial responsibility with the lay organisation. The action was instrumental in the decision to close down the already ailing publication. It is not clear what Lennox’s view about this was, but he must have been disappointed to see the journal disappear and the collaborative arrangement fail.

### The third series of *Epilepsia* (1952–1955)

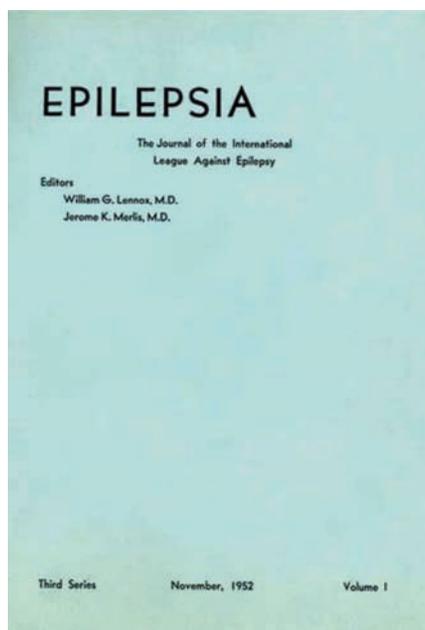
#### Editorship of William Lennox and Jerome K. Merlis (1952), and then Merlis (1953–1955)

In 1949, in Paris, the ILAE held its first ‘full-fledged meeting in nine years – nine sad and broken years’, as Lennox put it (Lennox 1948, 270). It was at this meeting that the decision was made to terminate temporarily the publication of the second series of *Epilepsia* and to set up a committee to study the value and viability of the journal. The report of the three-man committee is lost, but clearly the decision was made to restart the journal, and a new (third) series was initiated in 1952.

The concept was still the publication of one volume a year, comprising a single issue, and the journal was



Lorentz de Haas (1911–1967) had completed only half his term as ILAE President and *Epilepsia* Editor when he died in 1967.



*Epilepsia* cover in the third series – based on that of the second series, but poorer typographically.

still largely American-based. It was decided to hand over the editing work to the publishing committee of the American branch of the ILAE under the chairmanship of Jerome K. Merlis,<sup>29</sup> and 87% of the published articles and reviews in the journal were from North American authors. The journal had a changed perspective, which was made clear in the introduction to volume 1 in 1952: 'With this issue, *Epilepsia* inaugurates a new editorial policy. Any publication must have a *raison d'être*; as an annual abstract journal, *Epilepsia* has lost much of its significance. Abstracts of the literature pertinent to epilepsy are now available from many sources, and although coverage may be incomplete in any one publication, the usefulness of *Epilepsia* becomes more and more limited. Similarly annual review and report of progress in the field appear regularly elsewhere' (Anon. 1952, 5).

The editorial committee also noted that many new journals were being established for reports of original clinical and laboratory work and 'with the growing volume arousing dismay in the hearts of editors, writers and readers alike' (what would they have thought of the 1.2 million articles published annually and the 16,000 indexed

periodical journals in science, technology and medicine today?). The committee therefore decided on a new publication strategy. They would not publish abstracts or original research articles, but concentrate on critical reviews (interestingly, the category of critical reviews was reintroduced in 2006). As they wrote about the general trend in scientific journals: 'Accent is placed on reporting new data, on reducing introductions, bibliographic citations and discussions. This stress on "facts" is not an unmixed blessing ... facts of themselves advance our sciences not at all. It is the thinking which uses the facts, which integrates them and synthesises broad concepts, which makes for progress in our understanding ... *Epilepsia* ... would like to offer its pages to people who wish to critically examine what has been done in the past, to point out to us what new facts were required, who can present new ideas based on facts already in hand ... The things you read in this issue are in the nature of trial balloons. You may wish to puncture some, and release new ones' (Anon. 1952).

This policy was not only rather confusing but evidently contentious. B. Ch. Ledebøer (the then secretary-general) wrote in his 1953 secretary-general's report: 'Personally I would prefer that inserting of original articles be not the main thing. These articles could also be published in all other periodicals appearing all over the world and they would have more readers than. It would be very advisable if the unique position of the journal *Epilepsia* for all epileptologists could return ... *Epilepsia* should indeed be more evidently the journal of the International League and its branches. Therefore it should contain more reports from these branches' (Ledebøer 1953, 104).

The resulting annual publication was rather a curate's egg. The bulk of the journal at least initially consisted of reviews, generally excellent, and some historical landmarks in their field. As time passed, these were largely replaced by original articles (despite the editors' protestations). The journal also contained annual reports of the committee on research of the American League Against Epilepsy, which provide interesting historical summaries of contemporary research. Hangovers from the past included the reports from the branches of the ILAE, society proceedings of the American and British branches, and a bibliography of the published literature, which now consisted only of titles without abstracts.

Thirty-nine original articles and reviews appeared in the 4 years of this series, and outstanding among these were reviews.<sup>30</sup> However, the journal seems not to have been

<sup>29</sup> See Chapter 2, n. 12.

a great success. The stated reasons are given below, but I wonder whether the failure was not in part due to the rather confusing editorial policy, which was anyway not consistently applied, or to the fact of the journal's generally rather unhappy mixture of science and non-science. The nadir perhaps was an excruciating six-page poem titled 'The Invisible Wall' (Terrell 1953) and the rather eccentric articles typified by Lennox's 'The Reign of the Uterus' (Lennox 1955). This formula was wrong, and publication of the journal petered out, without warning, after only 4 years.

### *Epilepsia* fourth series: 1959–present

At Brussels, the ILAE General Assembly 'resolved that the status of *Epilepsia* should be carefully appraised and appointed a committee of three – the then president of the League, the president-elect<sup>31</sup> and the editor of *Epilepsia* (Henri Gastaut, Merlis and A. Earl Walker) – to survey the matter and specifically gave this committee power to abolish, to reorganise as a quarterly or to modify the publication so as to make it meet the growing needs of the League' (Gastaut *et al.* 1959a, 2). Later, at the executive in Venice in 1972, Gastaut reported that Walker and Merlis had been reluctant to continue publication of the journal and that, at the time, the difficulties appeared 'overwhelming'.<sup>32</sup>

The committee noted that most publishers considered epilepsy too narrow a field without wide appeal even to

neurologists (Gastaut *et al.* 1959a, 2); and one can muse how far epilepsy had fallen from the days of Gowers and Hughlings Jackson. Conversely, it was recognised that 'although there were numerous publications in the field of neurology, almost all had a year's backlog of unpublished manuscripts.' Two publishers (Elsevier and Pergamon Press) did show an interest in publication, but only Elsevier made an attractive offer. The committee, one suspects largely under pressure from Gastaut, who was an enthusiastic editor and writer, eventually recommended a relaunch of the journal.

The letters from P. Bergmans of Elsevier Publishing Company to Gastaut are preserved in the ILAE archive. In a letter dated 21 February 1958, Bergmans laid out the terms for reviving *Epilepsia*. He estimated about 1,000 subscriptions, with two-thirds going to the American Epilepsy Society (AES) and the rest to the members of the 'European leagues'. On 20 March, Gastaut wrote back that he and two other members of the 'commission charged with revising the editing of the journal *Epilepsia*' (Walker and Merlis) found the proposal most promising. Gastaut was eager to have the first issue appear at the end of December 1958, for that, he said, would constitute the 50-year anniversary of the very first issue of the journal ('in 1908 in Leipzig'<sup>33</sup>). Walker and Merlis insisted that the journal be published entirely in English, although with French and German abstracts. This last point makes plain a tug-of-war between European and American ways of doing things in the ILAE that would persist over time and cause no small amount of friction along the way. The ordinary subscription price would be set at \$11.50 in the United States, £2 in the United Kingdom and 42.5 Dutch florins for other countries. Elsevier was to retain the subscription income but remit to the ILAE 10% of all income for subscriptions over 1,500. Actually, this point was forgotten until 1972, when Elsevier remitted back payments from 1969 to 1971 of 1,598 Dutch florins.

The publishing committee also proposed that the price of the journal be incorporated into the AES dues and that all members of the society should receive the journal. This guaranteed 600 bulk subscriptions, and Elsevier set this price at \$8.<sup>34</sup> Curiously, Gastaut later (in 1972) told the

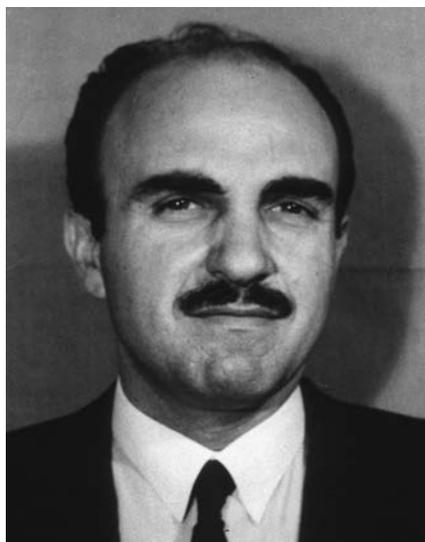
<sup>30</sup> Excellent reviews were published for instance on consciousness and cerebral localisation (Cobb 1952), the role of alcohol in convulsive seizures (Berry 1952), mechanisms of drug action (Toman and Taylor 1952) and febrile convulsions (Schmidt and Ward 1955). There were definitive symposia on seizure mechanisms (chaired by Earl Walker 1952) and temporal lobe epilepsy (chaired by Gastaut 1953). Original papers covered such topics as consciousness in petit mal seizures (Shimazono *et al.* 1953), epilepsy in cerebral vascular disease (Richardson and Dodge 1954), surgical treatment of 'focal' epilepsy (Meyers 1954), propagation of cortical and subcortical discharges (Faeth *et al.* 1954), social conceptions of epilepsy (Rose *et al.* 1955), cerebellar influences on electrically induced seizures (Cooke and Snider 1955), massive spasms in infancy and childhood (Druckman and Chao 1955), and the effects of strychnine (on spinal afferents: Wall *et al.* 1955 – which incidentally had little connection with epilepsy at all). The series began (inevitably) with a paper on classification (McNaughton 1952).

<sup>31</sup> This is clearly a reference to Gastaut.

<sup>32</sup> Unless otherwise noted, sources for the ILAE-related correspondence and minutes reported in this chapter are the ILAE's archive, based at the Swiss Epilepsy Centre in Zurich.

<sup>33</sup> Gastaut was mistaken. The journal was first published in 1909, and the main publisher was Scheltema and Holkema, in Amsterdam.

<sup>34</sup> The relative figures in current values are as follows: \$11.50 (\$82), £2 (£34) and \$8 (\$57).



Henri Gastaut, who held various *Epilepsia* editorial positions between 1959 and 1975. (Courtesy National Library of Medicine)

Executive Committee that no official contract was ever formed between the League and Elsevier, but that there was a ‘moral agreement’ – one presumes this refers to the 1958 letter. It was a businesslike and straightforward missive and would surely have had contractual force in any event. This ‘lack of a contract’ became an important issue when conflict with Elsevier developed in 1972 (see below).

The size of the journal was set at 480 pages, and it was decided to publish quarterly in four issues a year. As the committee put it: ‘The growing ILAE needed a medium of communication which was more flexible in time and space than an annual volume. Reports of society meetings were out of date long before they appeared in print. From the standpoint of circulation, an annual publication left much to be desired. Both advertising and scientific papers shunned a medium which was apt to be forgotten between issues and which was almost a year behind current literature’ (Gastaut *et al.* 1959a, 2).

#### 1959–1961: Editorship of Sir Francis Walshe

The committee thought it essential to appoint an experienced editor-in-chief to guide the metamorphosed journal in its formative years. They chose Sir Francis Walshe, who was the newly retired editor-in-chief of *Brain*. Editors in both the Old and New Worlds would be necessary too (Gastaut *et al.* 1959a, 2), and so Gastaut (Marseilles), A.M. Lorentz de Haas (Heemstede) and Gilbert

Glaser (New Haven) were appointed to assist Walshe.<sup>35</sup> A distinguished editorial board of 12 persons from 11 countries was also formed.<sup>36</sup> Walshe was a renowned neurologist and a fellow of the Royal Society with an outstanding research record mainly in the neurophysiology of reflexes. These were the primary reasons for his selection. He was also a friend and colleague of Macdonald Critchley, who was president of the ILAE from 1949 to 1953 and at the time of the World Federation of Neurology (WFN), and Denis Williams, who was ILAE treasurer from 1946 to 1953 and then vice-president for 4 years. In other ways, though, he was a curious choice. Although he had been a member of the ILAE since its inception in 1939, he had no particular interest in epilepsy. He was very much a product of British clinical science, and his neurology was firmly based at Queen Square.<sup>37</sup> Walshe

<sup>35</sup> Gill Glaser was an anglophile and by inclination would no doubt have got on well with Walshe. Both seriously disliked Gastaut, whom they considered overbearing. It is not clear if the editors ever met together, but if so, the meetings one suspects must have been rather tense affairs.

<sup>36</sup> The original editorial board set up in 1959 was Th. Alajouanine (Paris), F. Bremmer (Brussels), J. Chandy (Vellore), O. Henriksen (Oslo), D. Hill (London), Dieter Janz (Heidelberg), Heinrich Landolt (Zurich), Francis L. McNaughton (Montreal), Jerome K. Merlis (Baltimore), G. Moruzzi (Pisa), Paolo Niemeyer (Rio de Janeiro) and D.A. Pond (London).

<sup>37</sup> Francis Martin Rouse Walshe (1885–1973) was a neurologist who, for his entire post-war career, was based at the National Hospital, Queen Square. During the First World War, he served as consulting neurologist to the British forces in Egypt and the Middle East. As Macdonald Critchley wrote in his obituary in *Brain* (1973), ‘[Walshe] was one of the few critic-philosophers of our time. Tall, spare and erect in build, tastefully apparelled, he was conspicuous amongst his contemporaries’. He was the highly successful editor of *Brain* between 1938 and 1954. However, he was a difficult man, with conservative views, who suffered fools badly and was not at all clubbable. When future ILAE president Francis McNaughton wrote Walshe on 8 October 1953, to congratulate him on being knighted, Walshe replied on 24 October, ‘Quite unexpected by me, for I thought that my double-ended tongue had probably put me out of the running for an official stakes’ (McNaughton 1953; Walshe 1953). He spoke and wrote vehemently on European medical research in general (he remained sympathetic to US science), Penfield’s work which he detested and particularly in relation to the centrencephalic system, socialist ideology which he also detested, and he was a particularly vocal opponent of the formation of a National Health Service in Britain. A eulogy in the *Lancet* mentioned the originality of Walshe’s early work on diphtheritic paralysis and on beriberi, among others (Obituary 1973). Walshe was a committed catholic. Despite his blunt views, he was widely respected across the world for his scientific and intellectual standards. It is difficult to see him thriving in the rather chaotic ILAE structures of the day, and indeed it seems that he did not.

had notably high scientific standards, and his influence on the journal was immediately seen. He strongly held that the journal again be primarily a journal of scientific intent, and that as such, social, political or internal ILAE topics had no place. His view directly conflicted with that of Ledebøer, and one imagines this must have occupied considerable debate in the publication committee. In his introductory editorial, Walshe (1959a) laid out his stall, with characteristic clarity:

[*Epilepsia* aimed at] as wide a generality of understanding of the many and complex problems involved in epileptic manifestations as can be achieved and to avoid a narrow or too technological outlook ... [The journal should provide] informed, original and critical studies covering the fields of aetiology, pathogenesis, course, manifestations, investigations of every relevant kind, and treatment both medical and surgical ... [It should address] all who seek to advance the study of epileptic manifestations: whether they work as clinicians, surgeons, electrophysiologists, biochemists or physical chemists. We are anxious to avoid a narrow specialism, and to keep our subject in that close touch with internal medicine which alone can provide wisely oriented thought and work in the field of epilepsy. We shall not encourage the isolation of epilepsy from the body of neurology or from that of general medicine.

These editorial precepts still describe the main thrust of the journal today.

The fourth series was launched in 1959 but, as the publishers put it, did not appear until 1960 'for technical reasons'. It is not clear what those were, but late publication was one of the issues that resulted in the removal of Elsevier as publishers 10 years later. Volume 1 would comprise five issues covering the years 1959/60, and thereafter annual volumes of four issues would and did appear (Table 2). Volume 1 was not launched until there was a collection of articles already with the editor, and Walshe commissioned papers from his extensive contacts in the scientific world. The 2 years of his editorship produced outstanding clinical science. The first volume is an excellent series of papers, almost all of them of the highest quality; some remain classics still.<sup>38</sup> This high standard was repeated, and in 1961 a wide range of subjects was covered, keeping with Walshe's stated intentions. But gone are the reports of ILAE sections or indeed any ILAE news or reports. Where the social science of epilepsy was represented, it was done in a hard-edged scientific manner.

Although the new publishers had said, as had the previous publishers, that they favoured having papers in three languages, from now on the journal was almost entirely in English. Indeed, the last non-English paper published in the *Epilepsia* was in 1961, in French by an Italian group (Maspes *et al.* 1961). Nevertheless, the journal was truly international in its perspective, and in the first volume, papers were from 12 countries (with 52% from the United States). About 40% of the papers were essentially basic science studies, and clinical studies also usually displayed a high standard of scientific method. One additional member was added to the editorial board in 1962 (A. Subirana, a distinguished epilepsy specialist from Barcelona), and the board stayed in place otherwise unchanged until 1971. Their functions, as spelled out in a letter dated 22 January 1959 from Walshe to Francis McNaughton (one of the invitees), were 'to assist the two editors, to review papers, and, from time to time – say once in two years – to write themselves a specialized review on some aspect of epilepsy' (Walshe 1959).

Walshe resigned from the editorship in 1961 after only 2 years, and also left the ILAE Executive Committee. The reasons are not entirely clear, although he alludes in one letter to difficulties in dealing with the AES and with Henri Gastaut, who he complained did not even have the decency to acknowledge his resignation letter. A very terse statement announcing his withdrawal appeared in *Epilepsia* (Anon. 1961), and the absence of any obituary in the journal after his death in 1973 is notable. Perhaps the personality differences between Walshe and Gastaut made editorship impossible, and Walshe's aloofness and seeming disinterest must have frustrated the Gallic temperament of the loud and passionate Gastaut. Apart from the two items of correspondence mentioned here, neither Walshe's archive of personal letters (at University College London) nor his numerous published writings make a single reference to *Epilepsia* or indeed to epilepsy. Walshe's apparent lack of interest in the subject is in great contrast to the lasting and important contribution

<sup>38</sup> Arguably among the best papers of this exceptional issue are those of Bloom *et al.* (1960), Buchthal and Svensmark (1960), Critchley *et al.* (1960), Dongier (1959), Gastaut *et al.* (1960), Gibbs and Gibbs (1960), Gibson (1960), Hunter (1959), Kurland (1959), Merlis and Misrahi (1960), Miller and Neill (1959), Morrell (1960), Noguchi *et al.* (1959), O'Leary and Goldring (1959, 1960), Pond and Bidwell (1960), Scholz (1959), Servit (1959), Steriade and Stoica (1960a,b), Ward (1960) and Wyke (1959).

<i>Series I</i>	
Volume 1	4 fascicules: 1909–10
Volume 2e	4 fascicules: 1910–11
Volume 3e	4 fascicules issues and <i>Ergänzungsheft</i> (supplement): 1911–12
Volume 4e	4 fascicules: 1912–13
Volume 5e	6 fascicules: 1914–15
<i>Series II</i>	
Volume I	4 issues: 1937, 1938, 1939, 1940
Volume II	4 issues: 1941, 1942, 1943, 1944
Volume III	4 issues: 1945, 1946, 1947, 1948
Volume IV	2 issues: 1949, 1950
<i>Series III</i>	
Volume 1	1952
Volume 2	1953
Volume 3	1954
Volume 4	1955
<i>Series IV</i>	
Volume 1	5 issues: 1959–60
Volume 2–18	4 issues a year: 1961–77 (except for the printing of extra issues in 1972 (6 issues) and 1975 (5 issues))
Volume 19–35	6 issues a year: 1978–94
Volume 36–	12 issues a year: 1995–present

**Table 2** The four series of *Epilepsia*. The nomenclature of the volumes and issues of *Epilepsia* changed over the century as shown here, and this has caused considerable confusion for archives, indexes and citations. The publication frequency of issues also changed. The first issue was undated, but as shown in this chapter almost certainly appeared in March 1909 and covered the period January – March 1909. The centenary issue of the journal was published in March 2009 and is accompanied by a special supplement featuring aspects of the history of epilepsy in the century of the ILAE.

Note: *Epilepsia* has had a confusing system of numbering its issues, due to the interruption of publication on three occasions (creating four 'series') and changes in editorial policy. The original concept was of a single volume annually, each comprising four quarterly issues. Actually, in 6 years of its existence, only five volumes were produced. When the second series was initiated in 1937, it was planned to have one volume covering a 4-year period, with one issue a year. This scheme was followed between 1937 and 1948, but the last volume (IV) comprised only two issues before publication again ceased. When *Epilepsia* was resuscitated again in 1952, it was intended to publish one volume in a single issue each year. This plan was followed for 4 years and again publication ceased. The fourth series was launched in 1959, with one volume a year comprising initially four issues each year. The first volume actually occupied 2 years and contained five issues. In 1978, the journal expanded to six issues a year, and in 1995 there was a further major increase in size with 12 issues a year. The term 'series IV' was dropped in 1974, although the volume numbering (i.e. 1974 = volume 15) was continued (Shorvon 2007).

he made by setting *Epilepsia* on its current trajectory as the major journal in the field of epilepsy.

#### 1962–1968: Editorship of Lorentz de Haas

Walshe's abrupt departure as editor-in-chief was an obvious blow to the journal. Gastaut and Glaser remained named editors until 1975, but the main work of the *Epilepsia* was put into the hands of Lorentz de Haas,<sup>39</sup> who had been managing editor during Walshe's short tenure, and who had also been managing editor of *Psychiatria, Neurologia, Neurochirurgia*. For a reason

which was not recorded, Lorentz de Haas did not assume the title of editor-in-chief, but continued as managing editor for the next 6 years until his death in 1967. The editorial board bequeathed by Walshe stayed in place unchanged over this period. Nevertheless, it was Lorentz de Haas, it seems, who carried out all the editorial work. It has not been possible to find any ILAE executive committee minutes or *Epilepsia* reports for this period,

<sup>39</sup> See Chapter 2, n. 33.

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and so behind-the-scenes details about this period are scarce. But Lorentz de Haas did not have the international reputation of Walshe nor the breadth of vision. Perusing the journal in these years, one is struck by a certain conservatism, with the journal continuing on the same path already set and showing no particular innovation or flair. Nevertheless, the editorship was undoubtedly a solid achievement.

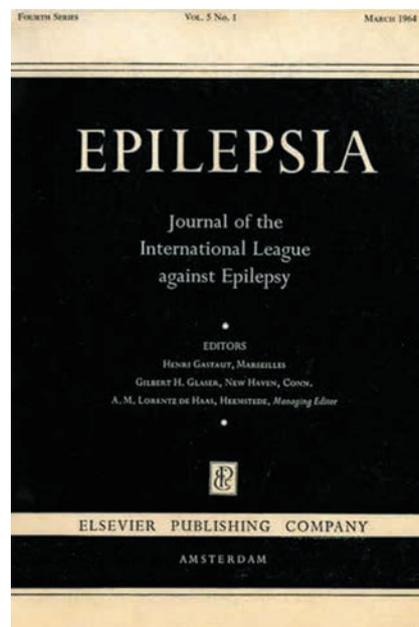
The 1962 issue of *Epilepsia* was rather small, perhaps because of the sudden editorial change, with only 12 original articles published. Still, it contained the proceedings of an excellent symposium on reflex mechanisms in the genesis of epilepsy (held at the Institute of Physiology of the Czechoslovakian Academy of Sciences, Prague). The original papers included contributions from the editors, with Lorentz de Haas publishing his own paper on social aspects of epilepsy in children and Gastaut on non-Jacksonian hemiconvulsive seizures. Glaser's own magnum opus was his paper on sodium and seizures in the 1965 volume. Other newcomers to the journal included Millichap, Caveness, Jeavons and Janz, who all were to publish extensively over the years. There was also an interesting report of status epilepticus treated by intravenous urea, a therapy with excellent results but which seems not to have caught on. It might be worth a second thought (Carter 1962).<sup>40</sup>

In 1963, an editorial note indicates a reversion to the policies of previous periods (indeed, to the very origin of *Epilepsia*): 'It is our intention to publish in *Epilepsia* a series of surveys on various aspects of the fight against epilepsy in different countries. Knowledge of the situations and problems elsewhere will undoubtedly yield suggestions for improvements in the organisation of treatment and social integration of epileptics in readers' own countries' (Anon. 1963, 93).

The first such article was a survey of the situation in England and Wales by Pond and Burden in the 1963 volume. This was followed by five articles about services in other countries – Scotland and Belgium (1963), Russia (1964), the Netherlands (1965 – by Lorentz de Haas) and Japan (1966). Perhaps the idea was Lorentz de Haas'. The interest in surveys of social aspects and service organisation certainly reflected the then style of Dutch

epileptology, but one wonders whether this reignited the tensions between the concept of *Epilepsia* as a scientific journal (the Walshe position) or as a vehicle for social and societal reform and for ILAE communication (the role preferred by Ledebøer).

Over the next few years, the journal published somewhat more papers (1963, 21; 1964, 30; 1965, 27; 1966, 28; 1967, 20; 1968, 28), most of reasonable quality. Contributors included J.C. Eccles, who had just been awarded his Nobel Prize (one of only two Nobel Prize winners published in *Epilepsia* – the other was E. Kandel). Other figures who were to make major contributions to epilepsy and who were published at that time included Ajmone Marsan, Bickford, Bladin, Broughton, Burden, Chatrian, Daly, Doose, Dravet, Gloor, Jasper, Kellway, Hunter, Lowenthal, Merritt, Mirsky, Naquet, Niedemeyer, Pond, Prince, Rasmussen, Reynolds, Roger, Seino, Tassinari, Victor, Wada and Ward. Many of these figures appeared subsequently on editorial boards or on the ILAE Executive Committee; this was a time when the epilepsy community was beginning to expand. The journal retained the mixture of basic, social and clinical papers rather successfully. In 1965, for instance, there were 13 clinical papers, 9 basic science papers, 5 social or psychological papers and in



The severe cover of *Epilepsia* 1964, under its new Dutch publisher, Elsevier.

<sup>40</sup> The history of the treatment of status epilepticus between 1909 and 1973 is covered in an article in *Epilepsia* (Neligan and Shorvon 2009).

1968 11 clinical, 13 basic papers and 3 psychological or epidemiological studies. A number of symposia were also published in the 1960s, but this practice was to become a bone of contention in later decades. Examples include symposia on basic mechanisms of the epileptic discharge (from the American Electroencephalography Society) and on reflex mechanisms in the genesis of epilepsy, which occupied 156 pages of the 1962 issue, a symposium on post-traumatic epilepsy (1961; AES) and a symposium on adrenocorticotrophic hormone and corticosteroid (1961; French ILAE chapter).

By 1969, the number of subscriptions had risen above 1,500 for the first time,<sup>41</sup> and the journal was establishing itself as a leading epilepsy publication. Some of the papers published during Lorentz de Haas' editorship were of lasting value. On the other hand, editorial policy was erratic, the journal was not particularly innovative and one can detect a fall-off in quality in the later papers. The extent of the problems with *Epilepsia* were to become apparent in the following few years.

#### 1968–1969 The interregnum: Otto Magnus as managing editor

Although terminally ill with cancer, Lorentz de Haas continued his efforts on behalf of the League well into 1967. But he died in October, and this left the ILAE again without an editor. Gastaut and Glaser were both listed as the editors in the opening issues of 1968, apparently largely honorific positions. Otto Magnus<sup>42</sup> was then taken on as managing editor for a short period while a more permanent editor was sought. By this time, there was a serious shortage of submissions, a situation of great concern to the ILAE. The extent of the editorial vacuum can be seen by the fact that the 1969 volume consisted of four issues, the first two of which were occupied completely by symposia proceedings. In the first issue, *Epilepsia* published a symposium (on epilepsy and heredity) from the annual meeting of the French League Against Epilepsy, and in the second a symposium titled 'Laboratory Evaluation of Antiepileptic Drugs', held in May 1968. Only the third and fourth issues included original unsolicited papers, and only 13 original papers were published that year.

<sup>41</sup> Subscription numbers are recorded in Elsevier's letter to David Daly of 13 October 1972. These were 1969, 1,537; 1970, 1,570; 1971, 1,684, including the compulsory subscriptions of the AES members.

Although it was clear that *Epilepsia* was having problems attracting unsolicited original papers, the quality of both symposia was high. The first opens with Gastaut's own views on heredity in epilepsy, and the whole symposium is interesting as a snapshot of advanced thinking on a topic which has again become very topical.

The second symposium, on laboratory evaluation of antiepileptic drugs, was a landmark meeting. The symposium came about as a result of the appointment by the US Surgeon General of an Advisory Committee on the Epilepsies which established a three-man task force for applied neuropharmacology of anticonvulsant drugs (Dixon Woodbury, Houston Merritt and Preston Robb). The chair of the department was Louis Goodman, who with Alfred Gilman was later to write the classic book on clinical pharmacology. The goals of the task force were 'to develop a better understanding of the pharmacology of antiepileptic drugs and to stimulate the development of new agents useful in the treatment of patients and to provide means of testing their efficacy. Especially desired is the development of new anticonvulsant compounds effective in refractory patients; also, development of drugs which may be only as effective as presently available agents – but having less toxicity.' The meeting had excellent papers by Ewart Swinyard on the history and current

<sup>42</sup> Otto Magnus (1913–) was the designated successor to Lorentz de Haas as head of the Meer en Bosch epilepsy centre in The Hague. But on the death of Lorentz de Haas in 1967, a decision by the trustees to split the medical directorship was not to Magnus's liking, and he left the institution. Magnus had been at Meer en Bosch since 1950, when he took over the reins of the EEG laboratory. His interest in clinical neurophysiology was serendipitous: during the Second World War he fled the Netherlands for Switzerland, and obtained a position with W.R. Hess. Following the war, Magnus spent a year at the Montreal Neurological Institute before accepting an offer as clinical electroencephalographer to support the surgical work of A.C. de Vet in Wassenaar. Vet had been doing surgery at Meer en Bosch, but in 1955 Lorentz de Haas decided to move all surgery to Wassenaar. Magnus temporarily filled the gap left by Lorentz de Haas, assuming his commitments, including the editorship of *Epilepsia*. At the next ILAE election (1969–1973), Magnus was elected secretary-general, and the editorship of the journal passed to Margaret Lennox-Buchthal. Their relationship, however, was uncomfortable. In 1971, frustrated by the influence of the Americans in the League, and especially by the transfer of the journal from Elsevier to Raven, Magnus broke with the ILAE. That same year, together with Mia Slag of the Netherlands Health Organisation for Applied Research, he founded a committee to stimulate and support national epilepsy research. In 1993, the committee was moved to the National Epilepsy Fund (Meinardi 2002).



Margaret Lennox-Buchthal (right), editor of *Epilepsia* 1969–1975, with husband Fritz Buchthal and daughter, 1997. Both Margaret and Fritz Buchthal were distinguished clinical scientists who made significant contributions to their respective fields. Margaret was a well-loved, feisty and determined person as perhaps can be detected from this photo of her aged 84, and as her editorship was to prove. (Courtesy Troels Kardel)

status of laboratory methods for evaluating antiepileptics, and Woodbury (later both members of the *Epilepsia* editorial board) on the issues relating to serum level testing of antiepileptic drugs in the clinical setting – and is perhaps the first major review of the topic. There are also fascinating papers on the role of animal models for testing pharmaceuticals. This task force was to prove very important in stimulating the rapid development of clinical pharmacology in epilepsy, and it must have been satisfying to the ILAE to have the proceedings of this meeting in the pages of the journal.

By the time Magnus gave his editorial report to the ILAE General Assembly in New York on 27 September 1969,<sup>43</sup> things seemed to be improving – and he concluded his remarks by pronouncing: ‘The journal now appears to be well-established and generally recognised as the international medium for publication of articles on investigations concerning all aspects of epilepsy’ (Magnus 1970). Although the supply of papers did improve during

his short interregnum, the fundamentals were not secure and the journal remained in difficulty.

#### 1969–1975: Editorship of Margaret Lennox-Buchthal

The ILAE selected Margaret Lennox-Buchthal<sup>44</sup> as managing editor of *Epilepsia* in 1969. Her appointment was an important one, for the Executive Committee was still showing concern about the viability of the journal in general and the delay in publication and the standards of papers in particular. Lennox-Buchthal was chosen to sort out the problems, but her editorship would prove to be

<sup>43</sup> The editorial report is published in *Epilepsia* (1970). It was noted that subscriptions had nearly doubled in the past 10 years (1959, 766; 1969, 1,428). There were 116 published articles in the previous 4 years (47% from Western Europe, 41% from the United States and Canada, 8% from Eastern Europe, 3% from the Middle East and one manuscript each from Asia and Latin America), although as Magnus admitted, these figures included manuscripts from the publication of symposia proceedings which was a concerning trend. The number of submissions had also increased, and there was no shortage as before – with sufficient manuscripts in stock for two or three issues.

<sup>44</sup> Margaret Lennox-Buchthal (1913–2001) was the daughter of William Lennox. She obtained her medical degree from Yale University in New Haven, Connecticut, and did her postgraduate studies in paediatrics in New York. In 1942 she returned to Yale to head both the electroencephalography and epileptology clinics. She left Yale in 1951 to follow Fritz Buchthal to Copenhagen, Denmark, and in 1957 assumed an academic position in the Institute of Neurophysiology at the University of Copenhagen (she and Buchthal married in 1958). Lennox-Buchthal worked closely with her father, for example co-authoring his two-volume monograph on epilepsy, which was completed just before his death. She is reported to have suffered epilepsy as a child (Lombroso 2006), though this information is difficult to corroborate, as well as polio, which left her with a crippled leg. She was, in the words of one colleague, ‘a wonderful person and sharp as a knife’ (C. Krarup, personal communication). She had a special interest in febrile convulsions and wrote extensively on this topic (including a short monograph which was published as a supplement to *Electroencephalography and Clinical Neurophysiology*). Margaret and Fritz moved to California in 1984. She died in 2001 after a long illness.

a rollercoaster ride, punctuated by bruising encounters with Magnus, the then ILAE secretary-general, and a series of remarkably impulsive actions; the next 5 years were not a tranquil period for the journal. In the ILAE archives, there is a long and interesting correspondence between Lennox-Buchthal, Magnus and other members of the Executive Committee which throws light on the dire state of the journal in 1970 and the style of ILAE management.

Lennox-Buchthal was clearly determined to make significant changes. At the ILAE Executive Committee meeting held in June 1970 at her house in Helsingor, Denmark, at the time of the 3rd European Symposium, the committee approved her proposition that the main goal of the editors was to increase distribution by raising the standard of articles accepted for publication and shortening publication time. Lennox-Buchthal was well respected, particularly it seems by the American epilepsy community, and with her appointment the flow of good manuscripts had begun to increase. However, her presence and that of Magnus on the executive were an incendiary mixture, and trouble flared up on three fronts.

First, there was the question of editorial structure and in particular editorial control. Lennox-Buchthal considered these her prerogative, but Magnus disagreed. In November 1971, Lennox-Buchthal, without reference to the Executive Committee, introduced the post of ‘consulting editor’ and appointed 14 of them, each with an intended term of 4 years. She thus reduced the previous editorial board, which had been in place for 10 years and no doubt had outlived its usefulness, to the category of ‘advisory editors’. In February 1972 Magnus wrote a long patronising letter to Lennox-Buchthal expressing his disapproval. He pointed out that the appointment of editors was a prerogative of the Executive Committee. He proposed a variation on the editorial structure, based on that of the *EEG Journal*. This structure, he wrote, would ensure that policy decisions were coordinated and made by committee. He also objected to the list of consulting editors that Lennox-Buchthal had appointed – on grounds of lack of geographical representation (10 were from the United States or United Kingdom, three from Germany and one from Belgium) and also specifically to the appointment of Martin Ingvar. He suggested a further 20 non-US/UK names. Lennox-Buchthal responded sarcastically within a few days, ‘You are most kind to consider *Epilepsia*’s problems so carefully, and I am impressed that you can do so in addition to your demanding job for the

International League.’ She added that he should ‘keep in mind that *Epilepsia* was in desperate straits [sic] when I took it over from you’ and that the managing editors need ‘editors whose judgement we can trust, i.e. if an editor recommends a paper, we would probably be willing to accept it. The Consulting Board of Editors, to serve four years, answers this criterion.’ Magnus responded by remarking that the role of the managing editor and the Executive Committee were not well defined, and whereas in the past this had not been an issue, there now needed to be more role definition and better coordination between managing editor and secretary-general. War was declared.

A second issue on which Magnus and Lennox-Buchthal took opposing view was the question of the publication of symposia, and in particular the publication of the 4th European Symposium, which was of course Magnus’s own project. Lennox-Buchthal pronounced herself also against the publication of symposia in general, as these had in her view ‘only limited clinical value’. This in itself was a side-swipe at Magnus who had published a series of symposia during his short time as editor. She was not able to attend the Executive Committee meeting of September 1971, and although *Epilepsia* was not discussed at length, it was agreed to publish the abstracts of the 4th European Symposium in Amsterdam, presumably at the behest of Magnus, in the face of her clear objections. In 1972, Lennox-Buchthal pointed out bitterly that the publication of this particular symposium had been ‘a great mistake, because the papers are of very poor quality. I would have thought that you and Dr Meinardi would have had better judgement than to recommend it. Of course, once committed, we had to go through with it, and it puts us in the difficult situation that we will exceed our allowance of pages in 1972. Since the main responsibility is yours and Dr Meinardi’s I think it reasonable that the Dutch society subsidise the issue. If you are not willing to do so, I will have to look for subsidy elsewhere.’ Magnus must have been furious. He retorted that the Dutch branch was already paying his expenses and could not subsidise *Epilepsia*, and that he and Meinardi had insisted on the European Symposium being published in full. Looking at the issue today, one can sympathise with Lennox-Buchthal, as the publication is of little scientific value. Furthermore, the issue of page count was also proving critical, and despite the fact that Magnus specifically asked Lennox-Buchthal not to expand the journal beyond its 480-page contracted length, she did so. The next letter on record is

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from Elsevier confirming that it would publish 600 pages with pages borrowed from the 1973 issue. The price would increase to 0.15 Dutch florins per page (about \$0.23 at current values).

The third point on which they clashed was the most serious. By 1971, Lennox-Buchthal was losing patience with her publisher over issues of publication time and cost. She wrote to Elsevier on 21 September 1971 that on a recent visit to the United States she had come to understand that the AES was considering publishing its own journal (*American Journal of Epilepsy*) because of dissatisfaction about *Epilepsia* on three grounds: delay in publication ('all issues except one have appeared too late'); no attempts at promotion; and near doubling of price without prior notification or consultation.<sup>45</sup> Elsevier replied on 5 October 1971 countering each point. The publisher claimed that the main cause of delay was insufficient manuscripts and provided a supporting table. Similarly, a table of growth in *Epilepsia* subscriptions was submitted as evidence of promotion. Moreover, Elsevier considered its pricing to be reasonable.<sup>46</sup> Lennox-Buchthal at this point expressed her view that *Epilepsia* should consider changing publishers. She was of the opinion that Elsevier never seemed to take seriously her views on publishing time or cost, nor were raising sufficient advertising revenues. Magnus weighed in with a letter to Lennox-Buchthal (30 September 1971), expressing disapproval of any suggestion of moving publishers, and requesting that such letters not be copied to others and that there be better communication between themselves. This letter clearly aggravated Margaret, and her relations with Magnus were never to recover.<sup>47</sup>

<sup>45</sup> Magnus later lobbied the AES, likely with the purpose of undermining Lennox-Buchthal's position. On 10 December 1971, Merlis wrote to Lennox-Buchthal to say that things had gone well and that the AES was not actively considering a new journal.

<sup>46</sup> The price of the journal was tiered – a special price for AES members who were obliged to take out a subscription with the cost bundled into their annual dues, and a full price. The price for AES members had been \$8 from 1960 to 1970 and was raised to \$10.75 in 1971 and a proposed \$12.75 in 1972. The price to non-members of the league was \$8 from 1960 to 1968, then \$12 in 1969, \$15 in 1970, \$16 in 1971 and proposed \$19 in 1972 (about \$94 at current values).

<sup>47</sup> Lennox-Buchthal's row with Magnus intensified when she wrote to the publishers again on 26 October 1971 and suggested that the delay could be reduced by printing the journal bimonthly instead of quarterly. She then sent a report to Magnus for discussion at the Executive Committee which he omitted to include on the agenda. He responded stating that he wished the journal not to increase in size.

In the early part of 1972, a series of acrimonious letters were sent and meetings held, and there was open talk of moving publishers; by then, Lennox-Buchthal had clearly made up her mind to do so. On 18 July, an emergency meeting was convened at the Imperial Hotel in London on the occasion of the 5th European Symposium on Epilepsy by Lennox-Buchthal with editors and others notionally 'to exchange views on how to improve our journal'. Walker, Janz, Ounsted, J. Kiffin Penry, Grass, Mulder (from Elsevier) and Magnus were present. The meeting took place despite Magnus's express direction to Lennox-Buchthal to cancel it. The discussion largely concerned the relationship between Elsevier and the ILAE, and Magnus taking offence at the direction of the debate, walked out. Indeed, throughout this time, it is notable that Elsevier was dealing with Lennox-Buchthal and Magnus independently. Lennox-Buchthal contended that Magnus was interfering, condescending and also clearly favouring a Dutch publisher.<sup>48</sup> The resulting turmoil was perhaps unsurprising.

Lennox-Buchthal obviously had her way, and in July it was agreed to put the *Epilepsia* contract out for tender. The following months were notable for chaotic price negotiations. There are on record letters from Lennox-Buchthal actively soliciting other publishers and exchanges with the editors and executive committee, but notably excluding Magnus. Magnus, on the other hand, was engaged in correspondence with Elsevier to arrive at better terms than they were currently offering.

In 1972, there was another bizarre twist. Without the prior knowledge of Elsevier or the Executive Committee, Lennox-Buchthal arranged to publish two extra issues of *Epilepsia* using two different printers in Copenhagen (Forum and Philip). Elsevier was asked to provide the covers, and these two issues came out as additions to the regular (four-issue) journal. This was an extraordinary and impulsive act, and Elsevier (and Magnus) were, with

<sup>48</sup> Lennox-Buchthal was probably right about the relationship of Magnus and Elsevier, which was very close as is evident from the considerable correspondence between Elsevier (usually Bergmans, vice-president of Elsevier) and Magnus. Magnus also had close professional ties with the company not least as the editor of the epilepsy volume published in 1974 in the *Handbook of Clinical Neurology* – a point not mentioned in any of the exchanges but which surely was significant. Furthermore, on reading the correspondence, it is easy to detect strong nationalistic tendencies contributing to this preference for a Dutch-based publisher.

some justification, beside themselves. The cost of this extra publication was borne by a one-off subsidy from the William Lennox Trust, which was set up in honour of her father and to which she applied – again without the prior knowledge of Magnus or the ILAE executive. She justified the publication on the basis that this was the only way to clear the backlog of good papers accepted by the journal. But one wonders, too, whether it was not a response to the meddling, as she saw it, of Magnus.

The question of the publishing contract was discussed at the Executive Committee meeting held 3–4 October 1972, in Venice (those present were Gastaut, Merlis, Melin, Oller-Daurella, Magnus, Daly and Lennox-Buchthal). *Epilepsia* was a major topic of discussion. Gastaut outlined the history of the relationship with Elsevier, and pointed out that no formal contract was in existence but that there was a ‘moral contract’. Lennox-Buchthal proposed that the contract for *Epilepsia* be put out for tender – on the basis of cost, unacceptable delays in publishing and inadequate promotion. Magnus countered with a strong plea for continuing publishing with Elsevier, ‘the difficulties between the Managing Editor and Elsevier notwithstanding’. Offers from other publishers who wished to bid for the journal were discussed,<sup>49</sup> and after some debate, Elsevier was abandoned and Raven Press adopted as the publisher of *Epilepsia*.

At the time Raven Press was a small company, founded by Alan Edelson during his years as a graduate student. He was a close friend of Penry, and presumably it is as a result of this friendship that Raven was in contention as the *Epilepsia* publisher. For the same reason, the press evolved over the next two decades to become the major publisher of epilepsy-related books. Edelson’s daughter was also said to have had epilepsy. In December 1973, the editorial board published a notice about the change of publisher: ‘We feel indebted to Elsevier, we esteem them and we regret that financial considerations beyond their control or ours called for the decision to transfer publication of *Epilepsia* to Raven Press in New York [sic].’ The note also mentioned that Raven would assure 30% more pages (Editorial Board 1973).

Magnus had lost this bitter fight, and was also having other difficulties with the Executive Committee at the



Jerome Merlis (1914–1982) at one time ILAE president, treasurer and editor of *Epilepsia*.

Venice meeting which related to his financial arrangements. The treasurer’s memorandum contains the following statement: ‘In the past I have personally questioned the wisdom of what appeared to be individual solicitation and use of funds in the name of the League without budgetary control by the Executive Committee. For this reason I record a formal objection to the Secretary-General continuing such activities.’ The reference is to Magnus, who protested at the inclusion of these remarks. He had obtained funds, made personally to him, from the Dutch ILAE Branch, the Dutch Medical Research Organisation and Hoffman-La Roche, and pointed out that this support was vital for the extended role of the secretary-general (for travel and so on). The treasurer’s request seems surely reasonable, but Magnus was incensed. The following year, he resigned prematurely from the Executive Committee of the League, citing the transfer of the contract from Elsevier as the reason.

It is not clear how smooth the transfer of publishers was – and there are no letters on file giving any details – but it seems to have been achieved without great hiatus. The journal certainly continued to grow. In the meeting of the ILAE executive in Brussels in September 1974,

<sup>49</sup> On file there are offers from Karger, Raven Press, Amquist and Wiksell Periodical Company, and Forum Printer; it is not clear that Elsevier were even considered to have tendered.

Lennox-Buchthal distributed 'several pages of statistics on the subscriptions and sources of manuscripts for *Epilepsia*'. She reported that in 1971 there were 1,700 subscribers to *Epilepsia*, and this was rising mainly due to US and Japanese subscriptions. Fifty per cent of subscriptions and 33% of manuscripts came from the United States (a total of 30 manuscripts out of 91 submitted over a period from January 1973 to September 1974). Great Britain and Canada purchased 10% of subscriptions and submitted 15% of manuscripts. Only one manuscript came from Japan. She also reported that the delay in publication had been reduced from 11 months in 1973 (a range of 9–14 months) to 9 months (range 7–13) and suggested a goal of 6 months. The publication of abstracts of symposia was also causing concern. These had been received from the United States, France and Germany, were often late, and the French and German abstracts required considerable editing work.

It is worth looking at what had happened to the journal content during these turbulent years. In 1970, only 26 original full-length articles were published, 15 on clinical topics, 5 on clinical EEG, 4 on basic science and one on social topics.<sup>50</sup> Furthermore, the journal opened in 1970 with a rather confusing editorial statement:

We have discussed ideas and plans for *Epilepsia* and suggest a change of emphasis. First and foremost we welcome dialogue between readers, contributors and editors. This space will be available for editorials, and we plan as far as possible to publish letters to the editor. We agree that *Epilepsia* fills the need for a journal devoted to epilepsy in all its aspects. We will not, however, aim primarily to attract articles in competition with monthly journals, but rather to publish articles which do not have quick access to the monthly journals of the specialties: by fast publication of particularly interesting and timely original papers, and by now and then including outstanding longer papers or reviews which otherwise command no forum. (*Epilepsia* 1970, 1)

It is not clear exactly what sort of articles would result from this policy – but certainly, the journal seemed to be in trouble.<sup>51</sup> The editorial was signed 'the editors', although it is not clear whether this reflected the views of

<sup>50</sup> Although there were few papers, those that were published included some classics, still referred to today. In the first issue, what is perhaps the most highly cited of all epilepsy articles, the international classification of epileptic seizures, was also published (Gastaut 1970).

the outgoing editor Otto Magnus, or the newly appointed Lennox-Buchthal, or Merlis or Gastaut who continued to hold the title of editor; the latter seems likely.

Once Lennox-Buchthal had taken over the reins of editorship, the journal did in fact show steady signs of improvement. In 1971, there were 30 original papers and four issues. In 1972, with her two extra issues, 70 papers were published, and the page count increased from 357 in 1971 to 840 in 1972. This massive increase seems to have cleared the way for more modest growth, and although the 1973 and 1974 issues again comprised four issues, an extra issue was again published in 1975, with 799 editorial pages published during the year.<sup>52</sup> In 1972, Magnus had written to Lennox-Buchthal proposing that the journal should have a 'blue pages' section for ILAE news, along the lines of a similar section in the *EEG Journal* and in *Neurology*. She seems to have ignored this proposal, and no such section was ever published. Magnus's desire to enshrine ILAE activity is evident from the publication of the minutes of the ILAE Executive Committee meetings and the General Assembly, which appeared in the 1970 and 1971 volumes. As far as I know, these were never published again, reflecting perhaps Lennox-Buchthal's desire to rid the journal of Magnus's influence. The journal did publish the programmes of ILAE national meetings (American, German, Japanese, Italian, Dutch and French) over the next few years. But during the editorship of Lennox-Buchthal (and subsequently Ward), there was a noticeable move away from providing the details of bureaucratic activity. In 1970, a new section

<sup>51</sup> This policy statement resulted in the appearance of a section called the Editorial Mailbox. This opened with suggestions from Janz about how the journal could be improved: faster publication so that authors were more tempted to submit to *Epilepsia*, more review articles (especially on clinical topics), announcements of meetings and the publication of book reviews. A book review editor, Maurice Charlton, was appointed in 1972 for the first time. The Editorial Mailbox seems not to have been a success and was soon dropped. A few letters continued to be published, as did announcements and book reviews over the next few years, but none occupied a major place in the journal.

<sup>52</sup> In a report on *Epilepsia* to the editorial board datelined 'Berlin, June 18, 1975', Lennox-Buchthal wrote, 'We are indebted mainly to NIH, and that means Kiffin Penry', for the extra pages. Later, writing to Harry Meinardi on 2 February 1977 about publishing proceedings in the journal, Penry stated, 'I was involved four years ago and again last November in the printing of an extra issue of *Epilepsia*. In both instances I had to obtain a subvention of approximately \$10,000 to pay for the extra issues.'

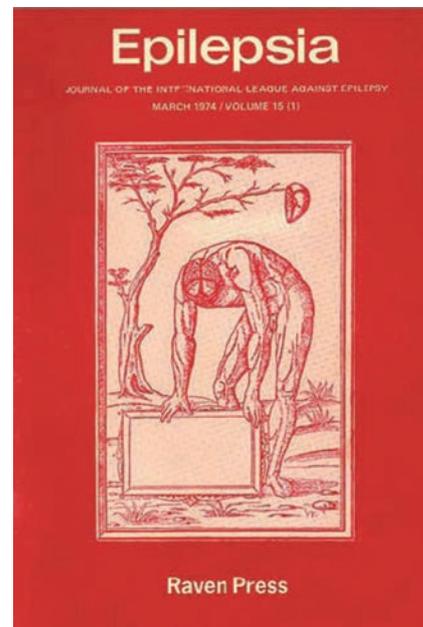
for brief communications was also announced (Clinical and Laboratory Notes), but this, too, seemed to peter out within a year. Sporadic brief communications were subsequently published under other headings, and this practice was reinstated in 1994.

In 1973, Penry was elected for the first time to the Executive Committee, and his major contribution to the ILAE and *Epilepsia* began to be felt. At the September 1974 Executive Committee meeting, he suggested that specific rules should be adopted for the publication of abstracts (less than 200 words, standard format, published in smaller font), and the model he suggested is still in place. He pointed out that an increasing number of good manuscripts were now being produced, and he was embarrassed by the delay in publication it was causing. The executive agreed to increase the size of the journal, a decision Lennox-Buchthal had been pressing for over the previous 2–3 years. Penry's energy was also evident as the author and inspiration behind the first publication of an ILAE commission report – that of the Antiepileptic Drug Commission – which appeared in print in 1974 (Penry 1974). Similarly, an article titled 'Principles for Clinical Testing of Antiepileptic Drugs' was published, which laid out methods for assessment which still apply today (Penry 1973).<sup>53</sup>

By 1975, the journal had a modern look, and a content and style that would be recognised today and which fulfilled in part the aspirations of Walshe. The December 1975 issue, for instance, had a very high standard, containing a classic neuro-epidemiological study from Rochester (Hauser and Kurland), the first really major study of epilepsy and pregnancy (Knight and Rhind) and of teratogenicity (Janz), a paper on telemetry with stereo-EEG (by Talairach, Bancaud and colleagues) and a stereo-EEG study of orbito-frontal seizures (Ludwig, Ajmone Marsan and Van Buren, as well as studies of idiosyncratic reactions to (Booker) and acute toxicity of antiepileptic drugs (Plaa).

In 1975, Lennox-Buchthal stood down from the editorship of *Epilepsia*. The move could not have been a surprise. 'Since I have no desire to continue as Chief Editor longer than absolutely necessary,' she told the editorial board in Berlin in 1975, 'I feel free to suggest ... how *Epilepsia* could be managed more rationally

<sup>53</sup> This was followed up 5 years later by two further important papers from Penry and his colleagues at NINDS: Krall *et al.* 1978a,b).



The attractive and rather antique cover of *Epilepsia* in 1974, created when Raven Press took over responsibility for the production of the journal.

and effectively than at present.' Among her suggestions were to allocate papers by subject rather than geographical location (and in particular to separate clinical and experimental work), and to bring in new editors. The Executive Committee minutes from the Berlin meeting show David Daly, then ILAE president, approving the idea of dividing editorial responsibilities but maintaining there still should be an editor-in-chief. He proposed Arthur A. Ward, and said he would bring the matter up with him.

When exactly Lennox-Buchthal left is not stated, and a missing set of minutes for 1976 obscures the change-over. She had had an extremely difficult time, and acted impulsively on several occasions. Her row with Magnus must have left its mark. That notwithstanding, she set the journal on a successful trajectory, and its style was maintained and enhanced by Ward, who succeeded her. 'I have great respect for her energy, devotion and dedication to *Epilepsia*', said Magnus in an anguished set of handwritten notes from the informal London meeting of 1972. Still, the absence of the customary note thanking her for her efforts is notable, and the transfer of editorship to Ward is not even mentioned in the editorial



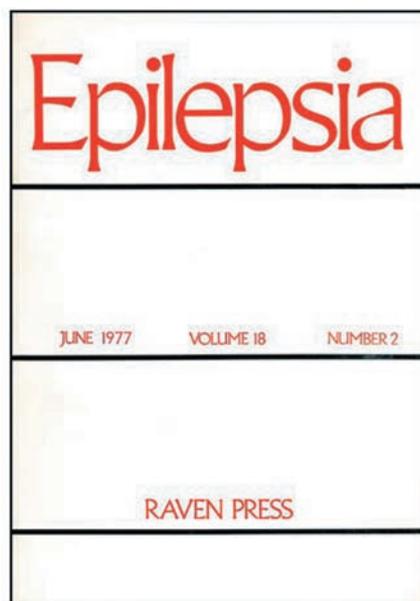
Arthur A. Ward brought a degree of calm following a fractious period in the journal's history.

pages. No obituary ever appeared in the journal, and personal details of her life are hard to find.<sup>54</sup> One wonders whether all this reflects a soured relationship with the ILAE establishment.

#### 1975–1986: Editorship of Arthur Ward

Arthur Ward was a neurosurgeon and a highly respected and well-regarded researcher. He was also an urbane man, politically adept and well connected to the National Institutes of Health (NIH). One can detect the hand of Penry in replacing Lennox-Buchthal with Ward, who became editor of *Epilepsia* for 9 years and served on the ILAE Executive Committee during this time. Following the lead of Margaret Lennox-Buchthal, regular reports were made to the ILAE executive at each of its meetings by the editor-in-chief of *Epilepsia*, and these provide an insight into the workings and success of the journal. At the

<sup>54</sup> Lennox-Buchthal's character as revealed in the League's archive is sometimes at odds with the quieter personality that others (and sometimes she herself) describe. 'I was never "brilliant" – never left much of a mark on epilepsy nor on neurophysiology,' she once wrote Cesare Lombroso (Lennox-Buchthal 1987). The overall impression is one of a complex individual.



The more modern but rather bland cover design introduced by Ward in 1977. Versions of this cover design persisted until 2007.

beginning of his editorship, Ward inherited an editorial board of 12 persons and an editorial advisory board of 6.<sup>55</sup>

In 1977, he reported to the Executive Committee that the expansion of the journal had been achieved and the publisher had succeeded in bringing out the first number on time in September 1977. The circulation was now 2,807 and had overtaken that of the *EEG Journal* for the first time. Between January 1976 and July 1977, 175 manuscripts were submitted and 98 were accepted, of which more than half reported experimental work. Ward emphasised the need to improve the quality of the clinical papers, because less than 50% were accepted compared with two-thirds of the 80 experimental papers. Most of the clinical papers were from outside the United States and most of the experimental papers from within. Peer reviewing of papers had started

<sup>55</sup> *Epilepsia* editorial board, 1977. This comprised Cosimo Ajmone Marsan (Bethesda), David Daly (Dallas), Jeames Ferrendelli (St Louis), Pierre Gloor (Montreal), Brian Meldrum (London), Merlis, Allan Mirsky (Boston), Robert Naquet (Gif-sur-Yvette), J. Kiffin Penry (Bethesda), Hellmuth Petsche (Vienna), Oliver Pratt (London) and Carlo Tassinari (Marseilles). The editorial advisory board comprised Henri Gastaut (Marseilles), Glaser, Janz, Margaret Lennox-Buchthal (Copenhagen), Toyoji Wada (Sendai) and Walker. The book review editor was still Charlton.

under the editorship of Lennox-Buchthal. The time required from receipt of a manuscript to completion of editorial review was 3–4 months, and two-thirds of manuscripts received were not in the proper form. Again, the question of increasing the size of the journal was considered. Ward recommended increasing from four to six issues a year, and in 1978, the journal accordingly moved to bimonthly publication. The subscription rate increased from \$43 to \$59 (\$64 overseas). He also suggested that each chapter nominate a representative for *Epilepsia* – something that does not appear to have happened, for neither the archives nor the journal contain any further mention of it. Alan Edelson, president of Raven Press, was invited to the meeting (in Amsterdam). But although he made it there, he was exhausted by jet lag and the late arrival of his plane and failed to attend.

The 1978 Executive Committee entertained little discussion on the topic of *Epilepsia* except to note that under US law, each author needed to assign copyright to the ILAE – a motion that was approved. Also, Ward advised that advertising revenue would benefit if the circulation of *Epilepsia* increased to over 5,000. The bimonthly journal was also revamped, with ‘a clean typographic design’ (as Ward put it) replacing the cover picture and lending ‘a more modern image to the journal’. Ward’s January 1978 editorial mentions a change of typeface with improved readability because of a change in typesetting machinery, but this does not appear to have been introduced until June 1978 (Ward 1978).

In 1979, Ward gave an extended report to the ILAE Executive Committee concerning *Epilepsia*. The number of papers had increased by 20%, editorial pages by 50%, 39% of papers were rejected and 83% of the accepted papers were accepted only after revision. The delay from acceptance to publication was about 6 months. The editorial committee had worked to very high standards. Ward still recommended that six issues be published each year but that the number of pages should be further increased. He also recommended bulk subscriptions and more international advertising. On the financial side, at that time, Raven Press was sending a ‘subsidy’ of \$6,000 to the ILAE, and 50% of the advertising revenue seemed also to be paid directly to ILAE. However, Ward may have been reporting a period that did not correspond precisely to the fiscal year, for his financial statement for July 1978 through to June 1979 shows total income for the year of \$4,500 and expenses of \$5,163. The journal was in

the red to the tune of \$663, and was carrying a deficit of \$1,687 from prior years as well. Ward replaced six members of his editorial board that year.<sup>56</sup> He also listed 69 ‘ad hoc’ reviewers for the first time in his editorship (although Lennox-Buchthal had once previously listed her reviewers). Manuscripts were reviewed by several editors and where necessary an ad hoc reviewer. This was a relatively small number of people compared with today, but the proportion of reviewers to manuscripts is about the same (69 reviews for 175 manuscripts in 1979 compared with 850 reviewers for 900 manuscripts in 2006/7).

In 1980, Ward reported to the Executive Committee that 150 manuscripts were received, with a rejection rate of 46%. Forty-one per cent were from the United States. Clinical papers constituted 61% of manuscripts submitted and experimental papers 39%. Editorial pages had increased by 7% with no increase in subscription rate. Bulk rates were offered and were taken up by Japan. Advertising revenue continued to increase, and 50% was paid to the ILAE. Allen Wyler took over as book review editor after Walter Friedlander stood down after only 2 years, but he, too, was replaced in 1982 by James Cereghino.

In 1982, Ward reported that by August 128 manuscripts had already been processed of which 47 were accepted, 50 rejected and 31 returned for revision. Fifty-two per cent were from outside the United States, and approximately 66% were on clinical topics. The publication delay was 5.6 months. The total number of subscribers was 2,723, and advertising revenue, which had increased year on year from 1978 to 1981, was down 38%. The subscription rate had increased to \$79 (\$98 outside the United States). The expenses of the *Epilepsia* office (paid by the ILAE) were \$8,757 and the income \$13,078, with accumulated deficits

<sup>56</sup> *Epilepsia* editorial board, 1979. The board still had 12 members, but six were retired: Marsan, Daly, Merlis, Naquet, Pratt, Tassinari; and the following six were added: Jerzy Majkowski (Warsaw), Robert Gumnit (St Paul), Ted Reynolds (London), Alan Richens (London), Leonard Kurland (Rochester) and Ewart Swinyard (Salt Lake City). In 1982, 11 members were retired: Ferrendelli, Gloor, Gumnit, Kajkowshi, Meldrum, Mirski, Penry, Petsche, Reynolds, Richens and Swinyard. The 1982 board now consisted of Haro Akimoto (Tokyo), Lennart Gram (Hvidovre), Emilio Perucca (Pavia), John Annegers (Houston), Henn Kutt (New York), Roger Porter (Bethesda), Jean-Jaques Chevrie (Paris), Ilo Leppik (St Paul), Michael Trimble (London), Fritz Dreifuss (Charlottesville), Naquet and Dixon Woodbury (Salt Lake City). All these members were new, with the exception of Naquet, who seems to have been the only editorial board member to survive on the board, having been appointed in 1977.

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from previous fiscal periods of \$5,435. This left a negative balance to the ILAE of \$1,113 (about \$2,391 at current values), and he warned that the situation might deteriorate if advertising revenues did not pick up.

The question of contract renewal with Raven Press was raised. Again, the minutes report that the ILAE had an ‘agreement’ not a ‘contract’. Ward felt it would be desirable for the ILAE to form a long-term contract with Raven Press in which the publishers would meet the entire cost of the editorial office and guarantee income of \$10,000. Kiffin Penry circulated details of the advertising revenue for the previous 3 years and urged that it be increased.<sup>57</sup> He also mentioned that there was talk of another epilepsy journal being launched by Wiley, which was viewed by the ILAE as unwelcome competition.

In 1983, Ward reported that a delay incurred by the publication of abstracts of national chapter meetings was having a detrimental influence on the journal. Increasing page numbers and paying via advertising was not thought to be feasible. A suggestion was made that each society should pay for its publication. This motion was approved, and the change was announced in the journal in 1984. At the same time, the ILAE bylaws were changed so that the ILAE Executive Committee encompassed the ‘Editorial Advisory Board’. This was a largely honorific task, though, and the advisory board appeared to play little active part in the journal.<sup>58</sup>

In October 1984, an ILAE Executive Committee meeting was held at The Homestead in Virginia. By then the journal had adopted a larger format (8.5 inches compared with 7 inches), which allowed more page space and was more modern. A total of 108 editorial pages were planned for 1984, which was equivalent to 136 small-format pages. In effect, the editorial space had increased by 13% and again by a further 12% in 1985. The turnaround time was shorter than before, although Ward still wanted to

shorten it to below 3 months. Quarterly cheques from Raven totalled \$17,600, and expenditure amounted to \$21,050. Paid advertising came to 57.5 pages. The subscription rate was increased by 6% to ‘prevent erosion’, and Ward invited the national societies to take advantage of bulk subscription rates (for over 800 subscribers) as the Americans and Japanese had done.

In April 1985, at the ILAE meeting in Rheinfelden, Switzerland, the question of monthly publication was again discussed. Ward felt that the publication delay was now not a major issue, but the cost of monthly publication might be prohibitive. Note was made of the fact that a new European journal of epilepsy was in the planning stage with Dieter Schmidt as editor (the journal became *Epilepsy Research*). Penry – who was determined to increase the size of *Epilepsia* – thought this was another reason to move to monthly publication. Moreover, an Italian journal was now also being produced (*Bollettino della Lega Italiana contro l'Epilessia*), although this was more for the national society, with papers in Italian, and it was not considered a competitor of *Epilepsia*. Ward also announced that a successor as editor-in-chief should be thought about ‘certainly within the next five years’ – in fact he was replaced within a year.

From the beginning of Ward’s editorship, *Epilepsia* established an editorial pattern which was not to change during his tenure. The journal contained original papers (over 750 in the 10 years of his editorship), the occasional editorial (annual from 1978), announcements (of meetings, prizes, appointments), symposia abstracts and programmes (from various ILAE and non-ILAE meetings) and book reviews. Supplements appeared for the first time in 1982. There was quiet progress and, during this time, the journal consolidated its position as a major vehicle for the communication of epilepsy research. In fact, in those 10 years *Epilepsia* published 5% of all articles on epilepsy indexed, compared with 10% today.

The ILAE scheme for the International Classification of the Epilepsies was published in 1985, the result of the work of the Commission on Classification and Terminology (Commission on Classification 1985). The investigatory advances of the time included the widespread introduction of positron emission tomography (the first neuroimaging tool to have a major impact on management of epilepsy), computed tomography and the first papers on magnetic resonance imaging, and all three were covered in *Epilepsia*. The journal also offered widespread coverage

<sup>57</sup> In a report to the ILAE Executive Committee dated April 1986, looking back at his 10-year tenure, Ward wrote: ‘In 1984 the publisher initiated a guarantee of \$10,000 annually for advertising to ILAE. For 1985, the publisher reports that the net advertising income was \$24,882.97. On March 31, 1986, the publisher mailed a check for \$2441.49 beyond the already distributed \$10,000 ... This check might be used to help the new Editor-in-Chief begin operations.’

<sup>58</sup> The then editorial advisory board was composed of Gastaut, Glaser, Janz, Lennox-Buchthal, Toyoji Wada and Walker, many of whom had been involved with the journal since the inception of the fourth series in 1959. These people now stood down.

of antiepileptic drug monitoring. Contemporary drug treatment of epilepsy was dominated by the introduction of valproate and carbamazepine, although papers also appeared on progabide, methsuximide ('a reappraisal'), stiripentol, zonisamide and various benzodiazepines; one entire issue was devoted to the subject of phenytoin and a supplement to valproate. Surgical therapy, too, occupied many pages, with the introduction of video-EEG monitoring and depth recording. A follow-up report of the Antiepileptic Drug Commission was published in 1981 (Commission on Antiepileptic Drugs 1982).<sup>59</sup> This was a period of consolidation, during which time the ILAE was also evolving.

Ward's tenure also coincided with an ill-fated effort to fuse the ILAE and its lay counterpart, the International Bureau for Epilepsy (IBE) into a single organisation called Epilepsy International (see Chapter 2). Conceived in 1975 and abandoned for good a decade later, the project consumed considerable ILAE time and effort. One overlooked aspect of the proposed merger was the effect it would have on *Epilepsia*. The question was raised in a brief flurry of correspondence that took place in the summer of 1981 and is a simple but powerful illustration of the journal's importance to the ILAE. In a letter to Penry dated 30 June, Ward carefully laid out a number of threats to *Epilepsia*, not least of which were ownership and copyright issues. 'From the standpoint of the proposed merger,' he wrote, '*Epilepsia* also represents the most visible and distinguished asset of the ILAE ... It would seem that before the ILAE disappears from the face of the earth, it would be prudent to take steps to assure conservation of its assets!' Moreover, *Epilepsia* risked passing to lay organisations, with serious consequences for a journal that had 'now grown into the largest international professional journal in clinical neuroscience'. In a follow-up letter to Harry Meinardi dated 14 August, considering

options, Ward reiterated that '*Epilepsia* represent[ed] a physical capital property of some significant worth'. The plans for a merger eventually collapsed, and although the copyright issue was one factor in their demise, it was probably not a major one.

#### 1986–1994: Editorship of James Cereghino

In 1986, the ILAE had to grapple with a number of issues concerning the running of the journal that are worth noting.

First, the editor-in-chief needed to be replaced. In 1985, then ILAE president Fred Dreifuss asked for nominations for the post of editor-in-chief. Fifteen names were suggested to the ILAE executive, of whom six were from Europe.<sup>60</sup> The desire for a European editor was not reciprocated in the United States. Richard Mattson, president of the American chapter, pressed hard for James (Jim) Cereghino, although he did concede (as a 'secondary proposal') that a joint editorship would be acceptable and suggested Brian Meldrum. The Executive Committee met on April 1986 in Switzerland, and Ward described the profile of a successor, who was perceived to need scientific credibility, broad knowledge in the field of epileptology, knowledge about potential experts and publishing managerial qualities. The process became bound up in the feeling that the journal was 'too American' and the rise in European activities. In the end, three candidates were shortlisted from the list of 15. These were discussed and voted on, with a majority (but not all) in favour of Cereghino. The reasons for the choice were not made public, but he was the protégé of Penry at NIH and it seems likely that he was Penry's choice.<sup>61</sup> This selection was then ratified by votes from the 14 chapters, with only one dissention (from Denmark; it is interesting that the Danish past-president was on the Executive Committee and one suspects supported the candidature of Lennart Gram).

The feeling among the epilepsy community that *Epilepsia* was too American was indeed one reason for the launch

<sup>59</sup> Some of the best papers during this editorship were: Aguglia *et al.* (1984), Anon. (1982, 1985), Asconapé and Penry (1982), Blume and Pillay (1985), Chevie and Aicardi (1978), Conran *et al.* (1985), Dam *et al.* (1985), Delgado-Escueta and Bajorek (1982), Dodrill (1978), Fariello (1976), Franzoni *et al.* (1983), Gastaut and Gastaut (1976), Gloor (1979), Gloor *et al.* (1976), Gram *et al.* (1982), Harding *et al.* (1978, 1985), Hauser *et al.* (1980), Holmes and Weber (1985), Janz (1982), Juul-Jensen and Foldspang (1983), Kalff *et al.* (1984), Krall *et al.* (1978a,b), LaManna *et al.* (1977), Leestma *et al.* (1984), Li *et al.* (1985), Loiseau (1981), Mazziotta and Engel (1984), McLachlan *et al.* (1985), Oldendorf (1984), Pei *et al.* (1983), Rasmussen (1983), Reynolds *et al.* (1981), Wilensky *et al.* (1985) and Yerby *et al.* (1985).

<sup>60</sup> The 15 names suggested for the ILAE executive to consider in 1986 were, from Europe, Meldrum, Trimble, Richens, Gram, Shorvon, Janz; from North America, Engel, Pedley, Cereghino, Gumnit, Woodbury, Wada, Gloor, Porter and Klass.

<sup>61</sup> Cereghino had been appointed book editor in 1982, and at the time, the Executive Committee was predominately American. The choice of Cereghino would have caused little discussion.

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in 1986 of a new journal, *Epilepsy Research*, which was perceived by the ILAE as a competitor to *Epilepsia*.<sup>62</sup> Furthermore, the delay from acceptance of a paper to publication in *Epilepsia* was a great concern to the ILAE, and to an extent *Epilepsy Research* might have been conceived as a possible solution. However, 2 years later, in the Executive Committee meeting of March 1988, Cereghino reported that neither the number of submissions to *Epilepsia* nor the number of subscribers were as yet affected by the advent of the new journal (or of a second potential competitor, the *Journal for Clinical Epilepsy*).

René Levy (personal communication) considers that the evolution of a European-based journal was not motivated by ‘anti-Americanism’ but was an inevitable consequence of the rapid expansion in scientific research in Europe, following the expansion in the United States from the 1970s (in which large research centres were created). This seems likely, as a similar phenomenon was occurring in many fields of medicine. Young researchers and new research centres were springing up in the field of epilepsy in Europe which were more independent than in the United States and without the overarching control of the NIH. Indeed, the new journal was referred to by some members of the ILAE executive (and presumably others) as the *European Journal of Epilepsy Research*, just as many AES members viewed *Epilepsia* as the *American Journal of Epilepsy*. Harry Meinardi suggested that editorial board members of *Epilepsy Research* be invited to serve on the editorial board of *Epilepsia* in the hope that this would lead to ‘fruitful cooperation’. How exactly that could be achieved was not made clear. Cereghino pointed out that, as the main role of the editorial board was to review manuscripts, it would put too high a burden on people, and the idea was dropped (at that time, over 200 manuscripts were received by *Epilepsia*, and the editorial board numbered 18<sup>63</sup>). Nevertheless, one editorial board member of *Epilepsy Research* was reported by Cereghino to be in regular touch concerning the activities of the journal. Tensions were present from the beginning. In June 1987, the ILAE president wrote to the editor of *Epilepsy Research*

complaining about the latter’s publication of an announcement from the ILAE Commission on Antiepileptic Drugs and insisting that all such announcements should be published in *Epilepsia*. Cereghino also suggested in 1987 that *Epilepsia* should have right of first refusal for full papers based on abstracts submitted to ILAE congresses.

Concern about competition and the proliferation of journals was fuelled in 1988 by the entry into the arena of another new epilepsy journal – the *Journal of Epilepsy*. Its appearance was purported to be a result of a feeling among ‘psychosocial’ scientists in the United States (as Cereghino put it) that their subject was ignored by *Epilepsia*. In those days, as the attrition rate of new journals was very high, *Index Medicus* did not index articles until a journal had been in existence for 3–4 years. Cereghino believed that this policy would limit the attractiveness and thus the financial health of the new journals. The advantage of the compulsory subscription scheme (of the AES and the Japanese chapters) also would ensure the competitive edge and survival of *Epilepsia*. The *Journal of Epilepsy* did in fact cease publication in 1998 after a rather erratic publishing history. It was ‘incorporated’ into *Epilepsy Research*, which continued to thrive and developed a distinctive style, in particular publishing some excellent basic science papers. At the executive committee meeting in Basle in March 1988, Dreifuss commented that *Epilepsia* as the ‘Journal of the League as a whole’ should publish social and scientific material, and be ‘all things to all men’ – a difficult balancing act which *Epilepsia* has had to continue to perform to this day.

Another recurring issue was page count and, when a backlog of articles developed, publishing delays. This topic had been debated almost every year over the prior decade, and the journal had progressively increased in size. In 1986 Ward opposed the move to monthly publication. Cereghino resurrected it only to see it turned down

<sup>62</sup> Although *Epilepsy Research* was a competitor in the sense that it had the same scope as the ILAE’s journal, it should have been abundantly clear at the time that there was enough high-quality research for both to thrive; as proved to be the case – for at the time of writing, 20 years later, both journals are important vehicles for research publication.

<sup>63</sup> The editorial board in 1988 comprised Harold Booker (Cincinnati), Robert Fisher (Baltimore), Gian Franco Rossi (Rome), Blaise Bourgeois (Cleveland), W. Allen Hauser (New York), Sasumo Sato (Bethesda), Thomas Browne (Boston), Yngve Løyning (Sandvika), Phil Schwartzkroin (Seattle), Robert DeLorenzo (Richmond), Shunsuke Ohtahara (Okayama), Hermann Stefan (Erlangen), Carl Dodrill (Seattle), Alan Richens (Cardiff), Juhn Wada (Vancouver), Natalio Fejerman (Buenos Aires), Joseph Roger (Marseilles) and Peter Wolf (Bielefeld). The book review editor was Joseph Gree (Lubbock), and the Editorial Advisory Committee was comprised of the seven members of the ILAE executive.

again (monthly publication did not in fact start until 1995). However, the Executive Committee did vote to expand the size of the journal by 25% in 1990 and by a further 25% in 1992.

By 1990, the executive was expressing dissatisfaction with the lack of performance statistics from *Epilepsia*, and unfavourable comparisons were being made with the *Annals of Neurology*, in particular by Roger Porter, then the League's secretary-general who also sat on the editorial board of the *Annals*. The unease was heightened when, in 1991, the publisher W.B. Saunders wrote to a number of epilepsy specialists proposing the launch of a new journal (the eventual result was *Seizure*). The response of the ILAE was to suggest that instead Saunders might be asked to bid for *Epilepsia*, as the publishing contract with Raven Press was expiring.

The ILAE was rapidly growing at this time, and its activities were extending. *Epilepsia* was affected in several ways. Increasing pressure to publish supplements of the proceedings of conferences prompted discussion on a number of occasions by the ILAE Executive Committee. Cereghino was keen to publish abstracts as a way of increasing the scientific quality of the meetings. One question was whether the abstracts should appear in the main journal, as was the current practice, or as a supplement. Cost considerations were central, and Cereghino reported in 1988 that the price of a page of the journal for six abstracts was \$155 and that few countries had paid or would pay this fee to publish their national conferences. He recommended instead an abstract supplement, which cost only \$60 for 96 pages. In the past, abstract supplements had been published in the main journal (the first was 1971 from the 4th European Symposium in Amsterdam). This change in practice was approved, and in 1991, for the first time, the abstracts of the International Epilepsy Congress were published as a supplement.

In 1987, Cereghino introduced three non-peer-reviewed, industry-sponsored supplements. Although this move generated more income, the supplements were not well received by the members of the ILAE executive, who complained that they had not been informed in advance of the change in policy. Another issue brought up in 1989 was the question of publication of the reports of ILAE commissions. Cereghino asked for guidance, and it was clear that these reports sat uneasily in the scientific pages of the journal. He thought such reports might be better in the newsletter (*International Epilepsy News*, in which the ILAE

had a four-page allowance) or circulated unpublished to chapters. This issue was a sign of the recurring tension between the scientific role of *Epilepsia* and its role as a vehicle for ILAE communication.

Financial considerations had been a significant problem for *Epilepsia* since its foundation. In 1989, Cereghino reported that there were 3,000 subscribers and that *Epilepsia* now had an account in Washington with about \$30,000 in reserve. This was welcome news. The ILAE felt that the monies accrued should be prioritised for use to improve the journal, and delegated management of them to the editor-in-chief. In 1989, at the ILAE congress in New Delhi, it was announced for the first time that the finances of *Epilepsia* were in the black. The ILAE was by then also financially sound, and surpluses were accruing in its accounts. The need to protect *Epilepsia* was considered uppermost and in 1992 a reserve was created of \$125,000 for the operations of the journal and \$150,000 for the ILAE general budget. In 1994, the cost of *Epilepsia* to subscribers varied between \$205 and \$401 (depending on the subscription scheme) and this was considered a competitive level.

Another problem that Cereghino encountered was with the AES. There were personality clashes with some of the AES leadership, and the society was also irritated by its perception of too high a price for the journal, the lack of editorial information and the lag time to publication. There were also complaints that manuscripts had been lost or were very delayed and the system for handling submission was indeed in need of some repair. Financial reporting too was rather haphazard. The pressures built up and according to a letter from Jerome (Pete) Engel, Jr., to Ted Reynolds dated 31 October 1995, the AES then set up a Journal Oversight Committee to assess the performance of *Epilepsia* and to decide whether to discontinue the mandatory subscription of AES members and transfer this to the competitor journal *Epilepsy Research*. This would have been a disastrous option for *Epilepsia*, and fortunately it seems to have been rejected. Nevertheless, the unhappiness of the AES towards the journal and the editor was worrisome for the ILAE executive.

Cereghino summarised the achievements of his editorship in his valedictory editorial (Cereghino 1994). Among these was the undoubted growth of the journal – the number of new manuscripts submitted rose from 188 in 1986 to 319 in 1993, and page numbers had increased from 787 to 1,166. Cereghino gave other statistics of interest: 80% of the manuscripts were clinical and 20% basic science;



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45% of the submitted papers were from the United States and 32% from Europe; acceptance rates were 50% (60% in 1993, according to minutes of the 1995 Executive Committee meeting), without noticeable geographical bias. The manuscripts could now also be submitted in electronic form on disc using the newfangled computer technology of wordprocessing, in conjunction with the traditional paper manuscripts. Cereghino did not mention the fact that *Epilepsia* was now producing a surplus for the ILAE – which was a great achievement (indeed, in future years *Epilepsia* was destined to be the major source of income for the League). The impact factor of the journal was also mentioned (for the first time in its pages) and recorded as 2.7 in 1992. The work of the editor, the reviewers and the editorial board was then, as now, completely voluntary, and from 1989 the ILAE was to benefit greatly financially from this volunteer work.

1994–2001: Editorship of Timothy A. Pedley

Tim Pedley was appointed to the editorship of *Epilepsia* during the ILAE Executive Committee meeting in Oslo in 1993. Over the 8 years of his stewardship, the journal flourished greatly. His editorship was notable for its wisdom and balance, for his editorial quality and for his efficiency. Pedley (1994) immediately defined his objectives

in an *Epilepsia* editorial. A priority was to lessen publication delay. To remedy this, Pedley achieved what Cereghino could not, and that was to persuade the ILAE that the journal should be published monthly (from January 1995) and also to lower the acceptance rate of papers. Pedley also put authors on notice that the papers should generally shorten manuscripts: ‘Readers and editors alike appreciate clear and succinct expression; unnecessary repetition and vacuous words and phrases impede an author’s message.’ Pedley also enlarged the editorial board and introduced a policy of staggered 3-year terms on the board. The instructions for authors were revised, the cover changed so as to include the table of contents, and the translation of article abstracts into German, French and Spanish was abolished, as this was felt to be a rather anachronistic practice given the by then long hegemony of the English language in medicine and science. The processes of submission and review were speeded up. Pedley also persuaded the ILAE to pay for extra editorial pages for commission reports and other official documents of the League, which until 1997 had occupied editorial pages (Pedley’s changes in this regard lasted only 3 years).

Pedley’s efforts to resolve editorial turnaround time were soon paying off. By 1996, the time from submission to acceptance had fallen to 6 weeks and from acceptance (of the final manuscript) to publication to 4.5 months in 1995 (and 6 months in 1996). This was a major achievement and put *Epilepsia* into a competitive position in relation to other speciality journals. This period could not be markedly lowered until the practice of publication online in advance of print became established. This process was first possible with *Epilepsia* in 2007 and at the time of writing has lowered the target for publication time (from final acceptance to online publication) to 35 working days.

Subscriptions to the print journal were also rising. By October 1997, Pedley reported to the ILAE, there were 4,009 subscriptions (and 200 complimentary subscriptions) – 2,362 subscriptions from the United States and Canada (as part of the compulsory subscription to AES members) – 820 from Europe, 588 from Asia (almost all from Japan as part of the compulsory subscription to the Japanese Epilepsy Society), 180 from Central and South America, 30 from Africa and the Middle East, and 29 from Australasia. This included 672 personal subscriptions, 1,189 institutional subscriptions and 2,148 subscriptions through the AES/JES.

Policies for maintaining the scientific credibility and independence of supplements were defined. Cereghino



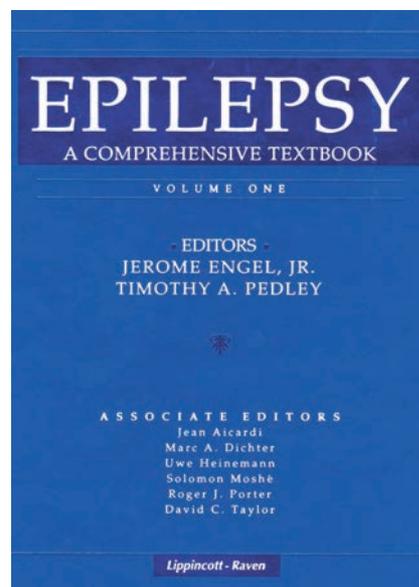
The cover of *Epilepsia* in 1995, with the innovation of the journal’s contents list printed on the outside cover.



was appointed supplements editor (and replaced in January 1998 by Robert Fisher), and guidelines were drawn out in 1995 which prohibited ‘bias in the interest of any sponsor’.<sup>64</sup> The policy, expressed in the Executive Committee minutes of that year, stated: ‘*Epilepsia* will not permit presentations with the scientific and educational portion of the supplement which extol a commercial product. Publication of supplements does not constitute product or sponsor endorsement by *Epilepsia* or the ILAE.’ A policy for advertising in supplements was also devised. No doubt these policy moves reflected the unease felt by the publication of flagrantly promotional supplements in some scientific journals in previous years – and the increasing sophistication of marketing by the pharmaceutical industry. This tension between maintaining scientific independence and attracting pharmaceutical sponsorship was indeed an issue that now affected many areas of activity within the ILAE, and equal anxiety was expressed about the satellite symposia at ILAE congresses where some heavily promoted ‘opinion leaders’ were unashamed in their enthusiasm for the particular product (the ‘it’s Thursday, it must be lamotrigine’ syndrome).

In his 1995 editorial Pedley thanked his publishers, Raven Press, for their efforts on behalf of the journal. Raven Press were the ‘epilepsy publishers’ at the time. In 1995, though, Raven Press ‘merged with’ – meaning were effectively bought out by – J.B. Lippincott (itself bought in 1990 by Wolters Kluwer) to form Lippincott-Raven Publishers, and then merged again with Williams & Wilkins in 1998 to form Lippincott Williams & Wilkins. The new company took on the Raven Press portfolio, but there were changes in style and approach. All through the publishing world in the 1990s, the more old-fashioned publishers were acquired by a new wave of more commercially minded and, in some cases at least, less academically inclined companies. This process has continued and the last two decades have seen the rise of large multinational publishing houses, and the demise of the small independent companies of which Raven Press was a good example.

Pedley produced a report on the progress of the journal each year of his tenure, and these provide an insight into his progress over time. In 1996, the contract with Lippincott



The third edition of Pete Engel and Tim Pedley’s exhaustive textbook was 5 years in the making.

was renewed (without being put out for tender) on the grounds that the terms were favourable to the ILAE.<sup>65</sup> The numbers of manuscripts received over this period were: 1994, 319; 1995, 385; 1996, 416; 1997, 451; 1998, 532. The acceptance rate was 36% in 1996, 32% in 1997 and 24% in 1998. In other words, the journal was getting busier and the quality of submissions was rising, as Pedley had hoped. By the end of the decade, the journal had fully regained its position as the major epilepsy journal, a position that had begun to be threatened 5 years before by *Epilepsy Research*. Other changes Pedley introduced in this period were the use of structured abstracts and the introduction of *Epilepsia Digest*, initially in India, in 1996. This last was an initiative, aimed at developing countries, to publish extracts from *Epilepsia* on a quarterly basis and at reasonable cost (see Chapter 3).

In December 1997, Pedley sent a formal letter to Lippincott-Raven concerning their online facilities – asking them how these compared with other journals and also about enhancement of their online potential.

<sup>64</sup> The policy stated: ‘*Epilepsia* will not permit presentations with the scientific and educational portion of the supplement which extol a commercial product. Publication of supplements does not constitute product or sponsor endorsement by *Epilepsia* or the ILAE’.

<sup>65</sup> The favourable aspects included a uniform discounted subscription rate to members, increased support of the editorial office, reduced cost of supplements for ILAE activities, support for *Epilepsia Digest* and a commitment to electronic publication.

Lippincott responded, but the ILAE remained concerned that they were falling behind in the provision of online services. Largely for this reason, the ILAE executive decided to approach Morna Conway, a freelance publishing consultant, to advise on the publisher's performance. Conway was quite critical and suggested that the publishing contract, which was due to expire on 31 December 2000, should be put out for tender and that Lippincott should not be granted an automatic renewal. A 'publisher search committee'<sup>66</sup> was constituted by the executive to liaise with Conway, and a request for proposals was prepared and sent out to 13 publishers of whom 10 decided to respond. A detailed specification was drawn up, and the publishers' responses were very varied. A short list of three publishers was drawn up by the ILAE executive,<sup>67</sup> and presentations were made in New York to the search committee. Blackwell won the contest and was awarded the contract. Pedley successfully oversaw the transition, and in January 2001 Blackwell took over publication of the journal. The major reason for the decision to change publishers was the better online facilities proposed by Blackwell and the higher guaranteed financial return than had been hitherto been received. Pedley published a 'message from the editor' in *Epilepsia* in January 2001 about the change in publishers, pointing out inter alia that Blackwell was the only independent and family-owned major scientific and medical publisher left after the scramble of mergers and acquisitions in the previous decade (a happy condition which was lost in 2007 when Blackwell was merged with Wiley). At the end of the 2001 term, Pedley stood down from the editorship after 8 years of stewardship during which the journal had thrived. In the next few years, Pedley completed his next task, which was to edit, with Pete Engel, the second edition of their major textbook on epilepsy published by Lippincott Williams & Wilkins.<sup>68</sup>

Pedley published a valedictory editorial in *Epilepsia* in December 2001, pointing out how the journal had grown over 8 years – 121% increase in submitted manuscripts, monthly publication, increase in editorial page number

from 1,155 to 1,648, reduction in publication lag time from 14 months to 4.5 months, enlarged editorial board (with terms of 3 years), new policies on instructions for authors and supplements and a rise in impact factor from 2.394 in 1994 to 3.718 in 2001, putting *Epilepsia* 11th among 137 journals in the 'clinical neurology' list. The logistics of the submission and reviewing process had also been completely overhauled. The option for submission on disc begun in 1995 was made compulsory in 1998. In 2001, electronic submission of manuscripts, electronic review and electronic communications were also started via a software platform called *Manuscript Central* which Blackwell utilised for its journals.

#### 2002–2006: Editorship of Robert Fisher

In January 2002, Robert (Bob) Fisher, a neurologist at Stanford University, took over from Pedley. He was chosen by the ILAE executive during the Buenos Aires meeting, and during the previous 4 years had been book review and supplements editor of *Epilepsia*. Fisher's pedigree for the post was outlined by Pedley in an editorial (2001). Fisher appointed Greg Bergey as supplements editor and Richard McLachlan as book review editor, as well as four associate editors.<sup>69</sup>

The change to Blackwell had been very rewarding financially. In 1994, at the beginning of Pedley's editorship, the royalties from *Epilepsia* amounted to \$428,668. In 2000, the Royalty revenue was \$460,100. In 2001, the first year of the Blackwell contract, this had risen to \$934,801, and by 2004 to \$1,422,703. This was felt by the ILAE to justify the publishing change, and there was general happiness with the new contract.

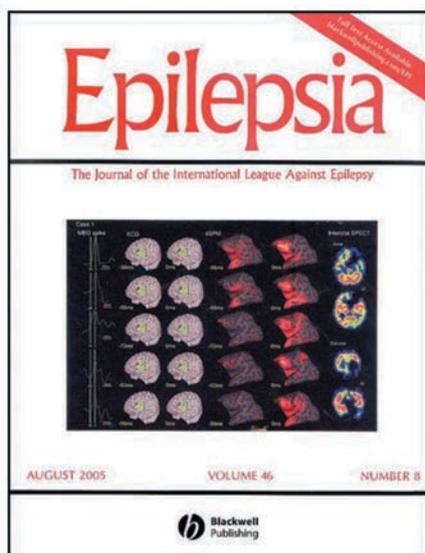
On the editorial front as well, the journal continued to thrive. In 2005, Fisher's report revealed that in 2004 submissions had numbered 714 and the acceptance rate was 40%. Figures on the international breakdown of the published articles revealed 39.5% from the United States, 11.2% from Japan, 7.1% from Germany and 5.5% from the United Kingdom (and at least 25 submissions were received from 23 countries); Fisher was pleased at the

<sup>66</sup> Tim Pedley (chair), Guiliano Avanzini, Simon Shorvon, Pete Engel and Peter Wolf.

<sup>67</sup> Blackwell, Wiley, Lippincott Williams & Wilkins.

<sup>68</sup> P. Engel and T.A. Pedley, *Epilepsy: A Comprehensive Textbook*, 2007. This three-volume mammoth of 309 chapters was expanded from the first edition published in 1997, and was 5 years in the making.

<sup>69</sup> This was the first time since 1950 that associate editors had been appointed, although it had been a practice in the past. The associate editors were chosen to handle the reviewing process of manuscripts in different areas: Solomon Moshé (basic science), Graeme Jackson (neuroimaging), Emilio Perucca (neuropharmacology) and José María Serratosa (genetics).



The *Epilepsia* cover in 2005, when a figure from the text in that issue was reproduced on the cover.

international nature of the journal. The time to publication online from submission was now 40 days (having fallen from 77 days in 2001). New features in the year included peer-reviewed letters and, in April 2005, an experiment with lay abstracts (which was abandoned in January 2006). A new 5-year contract was signed by the ILAE with Blackwell to take effect from 1 January 2006.

During his editorship, Fisher sent annual reports to the ILAE executive. He had to face a number of glitches and production mistakes, many of which were the fault of the publisher<sup>70</sup> and others which are long-standing issues for *Epilepsia* (and many other journals), including difficulty finding reviewers, the use of substandard English, the high volume of articles and complaints about rejection decisions (usually from senior figures who should know better). These made the job of an editor particularly arduous. Fisher used to say ruefully that all his weekends were taken up by editing – and all of this without any payment from the ILAE. The League's subsequent decision to remove the voting rights of the editor of *Epilepsia* was therefore particularly galling. Prior to his retirement, Fisher wrote to senior epileptologists

<sup>70</sup> Fisher listed such items as late delivery of issues, non-delivery of issues, production delays, loss of submitted manuscripts, failure to register these online and outdated subscription lists.

around the world, mentioning that the editorship was to be advertised.<sup>71</sup> He explained that it was a lot of work (the heaviest 'scut' job he had ever taken on) and summed up very well his views on what it was like being an editor in his farewell editorial: 'The difficult aspects of being an editor do not derive from mangled syntax. Rather the hard parts centre on the burden of constant decision making, on the need occasionally to reject the work of your best friends and colleagues, on the constant pleas to overworked reviewers, and on the effortful vigilance against misappropriated or substandard works. Nevertheless, the compensations outweigh the problems, because editorship provides an opportunity to have an impact on the literature of the world: not only to screen it, but also to improve it' (Fisher 2006).

Fisher also summarised the main accomplishments of the period of his editorship. Some were to continue processes set in place by Pedley and Blackwell: introducing electronic publishing, speeding up turnaround of papers, developing policies for supplements, encouraging basic science articles and initiating a program for free or discounted electronic issues to the developing world. He had also introduced peer-review letters, especially for case reports, re-introduced associate editors, begun lay abstracts and increased publications originating outside the United States and Europe. Finally, during Fisher's stewardship the financial return from the journal was increased – no mean feat in the face of increasing change in the publishing world.

#### 2006–present: Editorship of Simon Shorvon and Philip Schwartzkroin

In stepping down from the post of editor-in-chief, Fisher had suggested to the executive that a search committee be set up, but this was not deemed necessary, and the ILAE executive as a whole handled the process. The Executive Committee decided, for the first time, to advertise the post and consider written applications laying out the ideas of the candidate for the journal.<sup>72</sup> After extensive deliberation, the joint application of Simon Shorvon and

<sup>71</sup> Previously the post was appointed by the Executive Committee without written applications. The decision to advertise generated substantial interest, and six written submissions were short-listed.

<sup>72</sup> The advertisement invited the candidates to provide their ideas for changes to the journal.

Philip Schwartzkroin was approved, and they assumed the editorship in January 2006. The choice was made on the basis of a 'manifesto' which was invited from all applicants. In this document, Shorvon and Schwartzkroin laid out alterations to the journal which they believed would enhance its appeal and value, and indeed, the next 2 years witnessed a series of major changes.

The appointment of joint editors-in-chief signalled a new departure, suggested by the applicants on three grounds: first, the amount of work necessary in a situation where change was necessary was too much for one editor (the editors were unpaid volunteer positions); second, the increasing specialisation of epilepsy research meant that a clinical and basic science editor were needed to cover both fields in an authoritative manner; and finally, there was a need for greater geographical representation than had latterly been the case. This last point was a knotty one. According to the applicants, *Epilepsia* should have a US-based editor, if for no other reason than that the United States carries out the greatest volume of scientific research. However, it is also true that the ILAE is a global organisation (for instance, over one-third of its chapters are based in Europe) and its institutions should not be too narrowly based. Both the subscription base and the geographical spread of submitted articles (1999: United States, 33%; Europe, 28%; rest of world, 39%) was broadening. The ILAE would send, it was argued, appropriate signals worldwide by appointing a joint, ecumenical editorship.

In the previous few decades, journals and articles had multiplied massively. By 2006, there were over 2,000 publishers involved in medicine, 1.2 million articles published annually, 16,000 periodical journals in science, medicine and technology, and a sophisticated online system for indexing, abstracting and distributing articles (driven by freely available indexing systems such as Medline (Pubmed) and the Web of Science). There are three main reasons for this growth: the commendable increase in worldwide research activity; the increased importance placed on publishing research for career promotion; and profits from medical publishing, not least those derived from advertising and inflation in journal subscription costs. The previous decade had certainly been a time of financial plenty in publishing, as in most other industries. Publishing was no longer an academic backwater but had turned into a lucrative business. For instance, by 2006 Elsevier profits were 34% of its

operating costs, and in the period 1998–2003, the average cost of scientific journals had risen by 58% (Scientific publishing 2004).<sup>73</sup>

Financially, *Epilepsia* has also done well, and increasingly the ILAE has come to depend on its revenues. In 1999, the net royalty and subscription revenue earned from *Epilepsia* from Lippincott was only about \$490,335. One major reason for the switch to Blackwell was its much improved financial model. The choice was certainly successful, and the guaranteed income of \$750,000 annually from the journal from Blackwell was greatly exceeded, reaching, for instance, \$1,422,703 in 2004. This is the largest source of income of the ILAE, far surpassing that of membership dues, and the League has become heavily dependent on the financial return of the journal. With the changing publishing landscape, the squeeze on income due to open-access publishing, the loss of advertising revenue owing to the reduction in the number and impact of the print edition, the increasing number of epilepsy journals sharing a reducing advertising income, and the gloomy world financial outlook at the time of writing, it is certain that this income will fall.

A new and important change, introduced in 2007, was the requirement by the NIH and Wellcome Trust that research that they funded should be made publicly available at no cost. This 'open access' movement had the support of the US government and others. How this transformation will be achieved without critically undermining the viability of the research medical journals is not clear and has engendered considerable discussion. Another major development has been the rapid expansion of the Internet and the ease of online access, which has led some to predict the imminent demise of the print editions of journals (and of print libraries).

At the time of writing, the publishing industry is still in a period of flux. In 2007 Blackwell, the successful publisher of *Epilepsia* since 2001, merged with Wiley.<sup>74</sup> The new publisher (Wiley-Blackwell) has promised the

<sup>73</sup> The Elsevier profits were somewhat notorious and prompted much comment in the press. What were perceived as unacceptably high profits were indeed a major factor in the flowering of the 'open access' movement, which demands free access for all government-funded research. This was implemented as public policy by the US and UK governments in 2007; greed had killed the golden goose.

<sup>74</sup> Although as with the 'merger' of Raven and Lippincott, and then Lippincott with Williams & Wilkins, the merger could be better described as a buyout.

same attention and commitment to *Epilepsia*, but the previously calm and tranquil publishing sea is now more like a whirlpool. It was abundantly clear to the new editors that *Epilepsia* needed to change in a major way to successfully negotiate the rapidly shifting ground and retain its position as leading journal in the field of epilepsy.

For many years, *Epilepsia* had been the only specialised epilepsy journal. This privileged situation changed recently with the launch of an increasing number of potential competitors publishing original research and review articles (e.g. 1985, *Epilepsy Research*; 1991, *Seizure*; 1998, *Epileptic Disorders*; 2000, *Epilepsy and Behaviour*; and 2001, *Epilepsy Currents*). Articles on epilepsy also feature prominently in the major neurology and basic science journals, and these too have increased in number and scope in recent decades.

The rapid expansion of journals (and the need for academics to ‘publish or perish’) had also led to metrics to help readers differentiate journals and articles. The predominant system at the time of writing is the ‘impact factor’, which measures how often articles from a journal are cited in the scientific literature. Universities have begun using this metric to decide promotions and appointments, which drives authors to publish in the highest-impact journals. This turn of events distorts the editorial goals of individual journals by encouraging manipulation of content primarily to maximise impact factors. Impact factor league tables have sprung up, and like all such tables, they exert a hypnotic attraction on editors, authors and the wider academic community. In 2007, *Epilepsia* was ranked by impact factor as 27th among 146 clinical neurology journals. But this position was under attack.

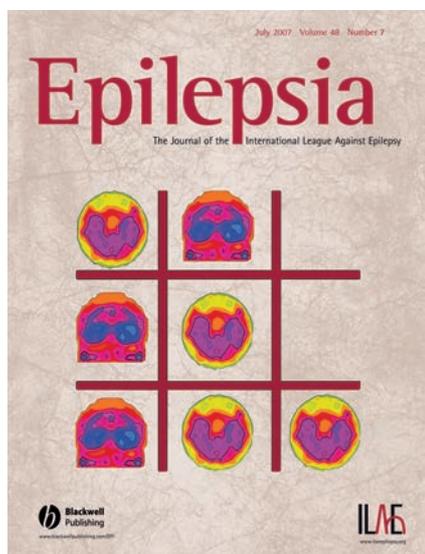
The significant changes to the running of the journal in 2006 and 2007 were summarised in an editorial (Schwartzkroin and Shorvon 2007). The advent of online publication of articles before they appear in the print edition has been a very important development, and allowed ‘publication’ at a speed which was undreamed of before.<sup>75</sup> The editors set a target of 35 days from acceptance of the article to publication, which was achieved in 2007. Thus, the boil which had so irritated Lennox-Buchthal and all the editors before and since was finally lanced – by the electronic revolution of the World Wide

Web. It is difficult to believe that the period can be further shortened, given the need to copyedit, make page proofs and obtain the necessary consents. But the competition between medical journals will no doubt ensure continuing pressure to shorten publication time. Being able to publish articles online in advance of the print version enabled the editors to make another change which they considered would assist in making the journal a more interesting read – that is, to group articles together to form themes freed from the need to publish accepted articles in strictly chronological order. Examples of themed issues from the first year of this initiative were print issues dealing with paediatrics, basic science, neurosurgery and neurophysiology. Of course, one consequence was that some articles were delayed in the print issue for a few months and others were advanced, but all had been published online and there was no delay in transmitting knowledge.

Another important change was the introduction of a new section, titled ‘Gray Matters’, which was designed to reinforce the connection between the journal and the ILAE – a link which in Lennox’s time had been very strong but had been progressively lost over the subsequent decades. The purpose of the section was to include summaries of ILAE activities, reports, an annual presidential message, summaries of ILAE conferences and workshops, and other forms of ILAE news. It would give the journal and ILAE focus and provide a historical record of League activities. The latter is important for, as this volume shows, memories fade rapidly; within a surprisingly short time, details of events can be completely lost. Articles in ‘Gray Matters’ are not counted separately for the denominator in the impact factor calculation. The entire section counts as a single article, so separating ILAE reports which are not likely to be cited in the scientific literature in this manner does not damage the rating of the journal. Other editorial changes which the new editors implemented included the introduction of invited reviews on topical or contentious issues and, where possible, paired reviews – one basic and one clinical; encouraging a role for *Epilepsia* as a forum for discussing new or controversial ideas and hypotheses; sets of short commentaries in the ‘Gray Matters’ section on complex subjects which provided contrasting views; and a new policy to encourage academic and educative supplements.

In January 2007, a new cover design was introduced which was a collage of elements taken from figures within the journal. In November 2007, the journal also changed

<sup>75</sup> Available at the Blackwell website for *Epilepsia* under ‘OnlineEarly’, <http://www.blackwell-synergy.com/loi/epi> (accessed 13 February 2008).



From 2007, the cover of each issue of *Epilepsia* has been illustrated with a collage of figures taken from articles within the issue.

to a full-colour format, designed by the editors. These moves were taken to increase the aesthetic appearance of the journal, which in turn was hoped would encourage submissions of the best papers and stimulate greater numbers of subscriptions. The full-colour pages also meant that authors did not have to pay for their colour figures, a practice that had been a source of irritation in the past. Other changes were made too: a section on the website for supplementary material (videos and so on), new instructions for authors, a new reference format and online tracking of papers for authors through the production process, and, finally, an OnlineOpen section for articles which are immediately accessible freely to all readers. New ethical standards stressed submission of the highest quality science, freed from the regrettable tendency for commercial or political interference. The journal joined the Committee for Publication Ethics, which was set up to assist medical journals in deciding ethical issues. For example, the committee discussed two issues relating to plagiarism that were encountered in the first year of editorship.<sup>76</sup> The number of editorial pages

<sup>76</sup> Serial deliberate plagiarism is a curious but not uncommon phenomenon which the editors also encountered. This seems to represent a particular form of psychopathology.

also increased to keep up with the increasing number of paper submissions – to 2,386 pages in 2007.

The primary purpose of *Epilepsia* was firmly stated in the inaugural editorial written by the new editors, and in the revised instructions for authors: to publish the highest quality science – both clinical and basic – to advance knowledge about epilepsy. This policy began to take effect by 2008, when the submission rate had increased to about 950 articles a year and the acceptance rate to 26%. In November 2007, another important milestone in the journal was achieved, namely, the publication online of a complete archive of back issues from 1909. This was achieved by digitising thousands of pages of printed copy, which were sourced from various libraries in England.

In 2006, Christopher Morris-Cooles, a London barrister suffering himself from epilepsy, discussed with Simon Shorvon his wish to make available a sum of money as a prize to encourage young researchers in the field of epilepsy to take up research. After some debate, it was proposed that an annual award, the Morris-Cooles Prize, of 10,000 euros, be awarded to the first author of the paper published in *Epilepsia* in the previous calendar year which, in the opinion of the judges, significantly advanced knowledge in the field of epilepsy research. The first prize was awarded in 2007 to Zita Gajda from Hungary for her paper on the functional significance of gap junction channels in epilepsy (Gajda *et al.* 2006) and the 2008 prize to Nicola Marchi, an Italian post-doctoral scientist working in Cleveland for his paper on disruption of the blood–brain barrier in epileptic seizures (Marchi *et al.* 2007).

### *Epilepsia*: Its first 100 years

What can we learn from the history of this journal? The question is one worth posing, for in medical publishing as in all walks of life, decisions made in ignorance of history inexorably result in the mistakes of history. If there is one truism demonstrated through this book, it is that history repeats itself; and the cyclical nature of history is as true for the story of *Epilepsia* as for any other. There are themes which have recurred regularly throughout the journal's first 100 years worth rehearsing here.

First is the tension between the contrasting roles of *Epilepsia* as a scientific journal and as the 'house journal'

The expansion in *Epilepsia* editorial content. The graph shows the greater than fourfold increase in editorial page number in the fourth series of *Epilepsia* between 1959/60 and 2008. The page size also increased as did the number of issues per year. In parallel with this has been a large increase in the number and quality of submissions to the journal.



of the ILAE. The pendulum has swung, with *Epilepsia* launched initially as a primarily scientific enterprise, oscillating in its second series to become almost exclusively an ILAE house journal and then swinging back again with the Walshe editorship into a wholly scientific journal. Now, with the advent of 'Gray Matters', *Epilepsia* is moving again slightly in the direction of ILAE news. The greatest clash was seen at the onset of the third series with the ILAE executive completely split about the direction of the journal. If Ledebor had had his way, it is doubtful that *Epilepsia* would now exist, and certainly not as the leading journal in the field. Linked to this function, *Epilepsia* has also previously acted as the public record of the ILAE and a printed repository of ILAE history. This function has been extremely important, and indeed, the pages of *Epilepsia* provide now virtually the only source record of the first 50 years of the organisation. In the last 50 years, this role has been lost, and so has a significant slice of ILAE history. This deficiency should be remedied, but not at the expense of *Epilepsia*'s role as a major scientific journal. With the Gray Matters section acting for the ILAE, both should be possible.

Concern over a lack of papers in the field of basic science is a second issue that has dominated discussion about *Epilepsia* at various times in its history. Almost all the editors since 1960 have argued for more basic papers. About 20% of papers in the third series were basic in nature, rising to 40% during Walshe's tenure and by 1977 to 50%, according to an editorial by Ward. The figure in 2006 and 2007 is now is about 20%. A related concern is

that the basic papers submitted are in general of a higher quality than the clinical papers submitted. This may be less true now than 30 years ago, although clinical science is generally more observational and less hypothesis-driven. In the last two decades, *Epilepsia* has attracted clinical papers that are among the best in the literature in its field, but the best basic papers are published elsewhere (e.g. in *Science*, *Nature*, *Neuron* and the *Journal of Physiology*). This tendency has been exacerbated by the rise of bibliometrics and the downward pressure on publication time.

The large financial returns of *Epilepsia* now to the ILAE, emphasised above, are a modern phenomenon. For many years, the ILAE used its resources to finance the journal. In the war years, Lennox had to ask the lay organisations to provide support, in exchange it seems for some editorial influence. It was only in 1989 that the income from publishing the journal exceeded the costs, and that the ILAE received surplus income from the journal. The contemporary profitability of the journal derives largely from two sources: subscription income, and income arising directly or indirectly from the pharmaceutical industry. The latter income stems from advertisements, industry-funded supplements (the first commercially sponsored supplement appeared in 1982) and large-volume reprint orders of papers concerning pharmaceutical products. All these sources of income are under pressure, and the profits of the journal seem certain to diminish in coming years. With online availability of journals, individual subscribing has again decreased, although it has been replaced by online institutional

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and consortia deals. The recent pressure to make journal articles available at no cost (online open access) will also undoubtedly damage subscription and advertising income. Many other journals have a greater subscription base because the journal subscription is an obligatory part of the membership of the relevant society – this is the case, for example, with *Annals of Neurology*, *Archives of Neurology*, the *Journal of the American Medical Association* and the *British Medical Journal*. In its second and third series, subscriptions for *Epilepsia* were included as part of the membership dues of the ILAE. But this arrangement has now become largely optional, to the detriment of the journal. The greater the subscription base, the greater the independence from commercial pressures. Editorial and academic freedom is a fundamental editorial principle of the journal, and a vital ingredient of modern science. Political or commercial interference is the executioner of ethical science.

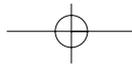
From its inception, *Epilepsia* has been an international journal. The first series carried papers from four continents, published in four languages. However, the international perspective was lost in the second series, during the Second World War, when the journal was saved from oblivion by the support of the American branch and the editorial and financial responsibilities were borne completely in the United States. The journal then became almost entirely American in content. With the ending of war, an international role was again re-established, but the strong relationship between *Epilepsia* and the American branch has continued. There have been American editors throughout the whole history of the journal, and American editors-in-chief for most of the period since the war. The journal publishes a larger number of articles by American authors than by authors from any other country (about one-third currently), the members of the AES provide the largest personal subscription base and the journal is published from a US office of an American company. It is the current objective of *Epilepsia* to maximise its international role. To this end, it has embraced a joint chief editorship from Europe and America and a team of international editors, and tries in its editorial pages to take a global perspective. The fact remains, of course, that the primary criteria for inclusion of articles now, as in the past, is scientific quality, and as the American high-quality research base is larger than that of other countries, the number of papers published from the United States is also likely to remain larger.

A final lesson of history is impermanence. Although *Epilepsia* has an undoubted position today as the premiere epilepsy journal, there is no room for complacency. There is a changing publishing landscape, the threats of open-access publishing, the potential demise of the print edition in an online era, the increasing number of epilepsy journals, new financial models and falling advertising income and, after a decade of plenty, a fall in ILAE royalties. The latter is now particularly important in view of the reliance on *Epilepsia* the ILAE has come to have for its financial existence. In the opinion of the current editors, the long-term future of the journal, both financially and scientifically, ultimately depends on its editorial quality, and maintaining that quality remains the editors' single greatest challenge.

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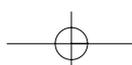
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