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# History of neurology

# Anglo-French neurological interactions in the 19th and early 20th centuries: Societies and Journals



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#### ABSTRACT

We have reviewed seminal interactions between British and French physicians prior to and following the establishment of the Paris and London Schools of Neurology from the mid-19th to the early 20th centuries. Our first article focused on British and French physicians, places and events. In this second part of our review we have examined the interactions between British and French Neurological Societies and Journals, including: (1) The Neurological Society of London founded in 1886, which became the Section of Neurology of the Royal Society of Medicine; (2) The Société de Neurologie de Paris founded in 1899, later renamed as The Société Française de Neurologie; (3) The journal Brain and its precursors and successors; (4) The journal Revue Neurologique and its precursors. We illustrate the constructive influence of Anglo-French interactions on the early development of neurology by the distinguished physicians who were corresponding members respectively of the British and French Neurological Societies and the scientific articles published by French authors in Brain and by British scientists in Nouvelle Iconographie de la Salpétrière, Archives de Neurologie and Revue Neurologique.

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# 1. Introduction

The development of neurology as an independent discipline in the mid-19th century was considerably influenced by the almost simultaneous foundation of the National Hospital for the Paralysed and Epileptic and its School in London and the Salpêtrière School initiated by Jean-Martin Charcot (1825–1893) in Paris in the 1860s.

We have recently reviewed seminal interactions between British and French physicians prior to and following the

establishment of the London and Paris Schools up until World War One [1]. Examples included the appointment of Charles-Edouard Brown-Séquard (1817–1894) to the National Hospital; the frequent visits of Charcot to the United Kingdom; the visits of numerous British physicians to the Salpêtrière; the interaction of John Hughlings Jackson (1835–1911) and Paul Broca (1824–1880) on aphasia and the influence of Jackson on French views of epilepsy and cortical localisation; and the numerous interactions created by the international Medical Congresses in London and Paris in 1881, 1900 and 1913 and by the Entente Cordiale of 1904. The clinicopathological studies of

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the Salpêtrière were complimented by the clinical assessment skills of the physicians at the National Hospital. Although neuropathology developed later in London the establishment of neurosurgery there by Victor Horsley influenced its subsequent development in Paris.

The above review focused on physicians, places and events. We here now review later interactions involving British and French neurological societies and journals.

#### 2. Methods

We studied the evolution and interaction of neurological societies in Britain and France from the foundation of the Neurological Society of London in 1886 and the Société de Neurologie de Paris in 1899 until the First World War. We also examined the evolution and interaction of British and French neurological journals, especially Brain (1878) and Revue Neurologique (1893), their precursors and successors.

# 3. British and French Neurological Societies

#### 3.1. The Neurological Society of London and its successors

The Neurological Society of London was founded in 1886 on the initiative of Armand de Watteville (1846-1925), who was acting editor of Brain at the time (Table 1). At a meeting at his house, 30, Welbeck Street, November 14th 1885, the need for a Neurological Society was agreed. The first formal meeting of the Society at the same venue was held on January 14th 1886 at which Hughlings Jackson was elected President, with Samuel Wilks (1824–1911) and James Crichton Browne (1840–1938) as Vice Presidents. Other Council members included Henry Charlton Bastian (1837-1915), William Henry Broadbent (1835-1907), John Bucknill (1817-1897), Thomas Buzzard (1831-1909), David Ferrier (1843-1928), Francis Galton (1822-1911), Jonathan Hutchinson (1828-1913), George J Romanes (1848-1894) and Edward Sharpey-Schäfer (1850-1935). The Secretaries were de Watteville and Alexander Hughes Bennett (1848-1901), with John Bristowe (1827-1895) as Treasurer [2,3].

Hughlings Jackson delivered an inaugural Presidential address on "The scope and aims of neurology" at the National Hospital on March 20th 1886. Meetings were held more than once a year, often at the National Hospital but alternative venues included University College and the Bethlem Hospital. Many of the presentations were published in *Brain* which in 1887 became the official Journal of the Society with de Watteville as its sole editor. The same year Jean-Martin Charcot and Charles Edouard Brown-Séquard in Paris became the first foreign corresponding members of the Society. Prior to

1907 Jules Joseph Dejerine (1849–1917) (Paris), Joseph Grasset (1849–1918) (Montpellier) and Théodule Ribot (1839–1916) (Paris) were also elected. In 1891 Charcot was furthermore elected an Honorary member of the Society.

In 1897 the triennial Hughlings Jackson Lecture was established with the first lecture by Jackson himself. The fifth Hughlings Jackson Lecture was due to be given in 1913 by Jules Dejerine of Paris but was postponed due to ill-health but then overtaken by World War One and Dejerine's death in 1917. In the meanwhile Dejerine was awarded the prestigious Moxon Gold Medal of The Royal College of Physicians in 1915.

Prior to 1901, the Society had held only two provincial meetings, one in Cambridge (1900) and one in Manchester (1901). But of its 230 members 107 were living outside London, including some in Scotland, Wales and Ireland. Therefore in 1905 the name of the Society was amended to the Neurological Society of the United Kingdom. However two years later in 1907 fourteen specialist medical Societies, including the Neurological Society amalgamated to form The Royal Society of Medicine (RSM). Thus, the Neurological Society of the United Kingdom now became the Neurological Section of The RSM. Charles E. Beevor (1854–1908) was now the President, followed by Charles Sherrington (1857–1952) in 1909. The link with Brain was severed in favour of the Proceedings of the RSM. Meetings remained largely clinical and London-based and continued during and after World War One.

It was not until 1932 that a new more elite Association of British Neurologists was founded at a meeting on July 28th at the London home, 9 Wimpole Street, of Gordon Holmes (1878–1965). It was motivated by the desire to establish a more national, less London-based, and more distinct discipline of neurology than that reflected by a Section of the RSM. The 25 founding members, who were largely London based, were initially restricted to Consultant Physicians with a specialist interest in neurology or its related scientific disciplines [4]. The first President was Wilfred Harris (1869–1960), with Gordon Holmes as Secretary and Samuel Alexander Kinnier Wilson (1878–1937) as Treasurer.

# 3.2. The Société de Neurologie de Paris

The Société de Neurologie de Paris was founded in 1899 six years after the establishment of Revue Neurologique in 1893 which was also the year of Charcot's death [5] (Table 1). Pierre Marie (1853–1940) and Edouard Brissaud (1852–1909) were the founding editors of Revue Neurologique and the former was the prime mover of the Société of which Revue Neurologique became the official journal.

The founding Officers ("Bureau") of the Société, all being Charcot's disciples, were Alix Joffroy (1844–1908), primarily a neuropsychiatrist, as President; Fulgence Raymond (1844–

Table 1 – Neurological societies and their evolution in the United Kingdom and France.					
United Kingdom		France			
1886–1905	The Neurological Society of London	1899–1949	Société de neurologie de Paris		
1905-1907	The Neurological Society of the United Kingdom	1949-	Société française de neurologie		
1907-	The Section of Neurology of the Royal Society of Medicine				
1932-	The Association of British Neurologists				

Table 2 – List of distinguished British corresponding members of Société de Neurologie de Paris from its creation in 1899 to 1914. From: Assemblée Générale Annuelle. Election des membres correspondants étrangers, Revue Neurologique (Paris), all volumes from 1899 to 1914.

Year of electionName and date of birth and death City		
1899	John Hughlings Jackson (1835–1911)	London
1899	David Ferrier (1843–1928)	London
1900	Alexander Bruce (1854–1911)	Edinburgh
1900	Charles Sherrington (1857–1952)	Liverpool
1901	Byrom Bramwell (1847–1931)	Edinburgh
1910	Victor Horsley (1857–1916)	London
1910	Thomas Buzzard (1831–1919)	London
1911	Henry Head (1861–1940)	London
1914	Frederick Batten (1866–1918)	London
1914	Charles Macfie Campbell (1876–1943)	Edinburgh
1914	James Collier (1870–1935)	London
1914	Frederick Mott (1853–1926)	London
1914	Joseph Ormerod (1845–1925)	London
1914	William Osler (1849–1919)	Oxford
1914	James Purves–Steward (1869–1949)	London
1914	James Risien Russell (1861–1939)	London
1914	Howard Henry Tooth (1856–1925)	London
1914	Samuel Alexander Kinnier Wilson (1878–1937)	London

1910) as Vice-President; Pierre Marie as Secretary General, Henry Meige (1866–1940) as Meetings Secretary and Achille Alexandre Souques (1860–1944) as Treasurer. Among 12 additional founding members ("membres titulaires fondateurs") eight were pupils of Charcot, one notable exception being Jules Dejerine who was a pupil of Alfred Vulpian (1826–1887). In addition there were 19 founding national corresponding members representing French universities outside Paris.

From the beginning the Société developed strong international links with Europe, including the United Kingdom, Russia and the United States. Each monthly meeting attracted foreign scientists in Paris and encouraged publications in Revue Neurologique by Parisian and other French neurologists as well as researchers from Europe, Russia and North America.

Already in 1899 Hughlings Jackson and David Ferrier were elected British corresponding members [5]. The following year Alexander Bruce (1854–1911) and Charles Sherrington were added. By 1914, following the 17th International Medical Congress in London in 1913 [6], among 100 international foreign corresponding members, 18 were from the United Kingdom (Table 2). Most were from the National Hospital in London but three were from Edinburgh in addition to Sherrington from Liverpool and William Osler (1849–1919) from Oxford.

The Société flourished and expanded before World War One with regular British participation in Paris meetings, notably by Alexander Bruce and Kinnier Wilson. At a meeting of the Société at the Salpêtrière on May 11th 1905, a British delegation included, among others, Charles Beevor, Alexander Bruce, Byrom Bramwell (1847–1931), Frederick Mott (1853–1926), Thomas D Savill (1857–1910) and Kinnier Wilson [7]. At the meeting on March 5th 1914 in Paris James Purves Stewart (1869–1949) and Henry Meige both made speeches celebrating the close interaction between the French and British Neurological Societies [6].

In the report of L'Assemblée Générale of the Société in Revue Neurologique in 1926 the membership of the Société included 41 "membres titulaires", 23 "membres anciens titulaires" and 12 "membres honoraires" together with 60 "membres correspondants nationaux" throughout France and 128 "membres correspondants étrangers" from all over the world [8,9]. It was not however until 1949 that the Paris Société changed its name to the Société Française de Neurologie in recognition of the growing contribution of French universities outside Paris [5].

# 4. British and French Neurological Journals

#### 4.1. Brain, its precursor and successors

The forerunner of Brain in the United Kingdom were the annual Medical Reports of the West Riding Lunatic Asylum in Wakefield, Yorkshire, between 1871 and 1876, edited by James Crichton Browne (Table 3). Crichton Browne, Medical Director from 1866–1876, established the reputation of Wakefield as the most progressive and influential Asylum in the United Kingdom by initiating physiological, pathological and histological research into brain and mental diseases. In addition to his own research staff, including his successors, Herbert Coddington Major (1850-1920) and William Bevan Lewis (1847-1929), he invited leading United Kingdom scientists to undertake research in the Wakefield laboratories, notably David Ferrier, and also to participate in annual scientific and teaching "Medical Converzasiones". The annual Reports incorporated both Wakefield and United Kingdom-wide clinical and scientific studies, including seminal papers by Ferrier and Hughlings Jackson [10].

When Crichton Browne moved to London in 1876 to become the Lord Chancellors Visitor in Lunacy the Wakefield Reports ceased, leaving a vacuum. He was therefore probably the prime mover in establishing Brain in April 1878 with himself, John Bucknill (1817–1897), David Ferrier and Hughlings Jackson as joint editors. According to Critchley and Critchley [11], Crichton Browne did most of the editorial work but in 1880 Armand de Watteville came to the assistance of the editors at a critical time.

Although born in the United Kingdom, de Watteville was of Swiss/French origin and served in a French ambulance in the Franco-Prussian War of 1870. As physician to the West End Hospital for Nervous Diseases in London he wrote extensively about neurology, including electrical treatments. By 1885 he was acting editor of *Brain* and, as described above, was a prime mover in establishing the Neurological Society of London of which *Brain* became the official Journal. He served as Secretary of the Society until 1889 and continued as editor of Brain until 1900, when he was thanked not only for the survival of the Journal but also for establishing its European reputation.

Abstracts of foreign, especially French and German, neurological articles were a regular feature of *Brain*. Between its launch in 1878 and 1893, when *Revue Neurologique* was founded, 20 original articles by French neurologists were published in *Brain* (Table 4). Most of the authors were in Paris, including Charcot and Pierre Marie, the latter contributing a major review on acromegaly. Bordeaux, Lyon, Nancy and Montpellier (Grasset) were also represented. Many of the

	United Kingdom		France
1871–1876	Annual Reports of the West Riding Lunatic Asylum	1873–1982	Le Progrès Médical
	J. Crichton Browne		D. Bourneville
1878-	Brain	1877-1880	Iconographie Photographie de la Salpêtrièr
	J. Crichton Browne, J. Bucknill		D. Bourneville, P. Regnard
	D. Ferrier, J. Hughlings Jackson	1888-1918	Nouvelle Iconographie de la Salpêtrière
1903-1918	Review of Neurology and Psychiatry		G. Gilles de la Tourette
	A. Bruce		A. Londe, P. Richer
1920-1938	Journal of Neurology and Psychopathology	1880-1909	Archives de Neurologie
	S.A. Kinnier Wilson		D. Bourneville
1838-1944	Journal of Neurology and Psychiatry	1881-	L'Encéphale
1944-	Journal of Neurology Neurosurgery and Psychiatry		B. Ball, B. Luys
		1893-	Revue Neurologique
			E. Brissaud, P. Marie

articles, including those by Charcot and Paul Richer (1849–1933), and by Grasset, were on hysteria. Later in 1910 Kinnier Wilson published a major review in *Brain* on "Some modern French conceptions of hysteria", based on his own experience of Parisian neurology [12]. We have previously described Charcot's influence on British neurology through translations of his Lectures, his travels in the United Kingdom and the visits by many British physicians to his Clinics at the Salpêtrière [1].

Alexander Bruce in Edinburgh was Scotland's first physician to practice primarily as a neurologist and in his case also

as a neuropathologist. In 1903 he established the Edinburgh-based monthly "Review of Neurology and Psychiatry" with Edwin Bramwell (1873–1952) as his assistant editor. The objective was to include both original articles and abstracts and reviews of publications elsewhere in the United Kingdom or continental Europe. It was well supported by neurologists and psychiatrists in England and Scotland, including Queen Square neurologists. When Alexander Bruce died in 1911, his son Ninian Bruce (1882–1968) took over as editor and his son-inlaw, Kinnier Wilson, became an assistant editor. The Review

Table 4 – List of articles published by French authors in Brain from its launch in 1878 until 1893, the founding year of Revue Neurologique.			
Author(s) & city	Title	Reference	
Duret H (Paris)	On the role of the dura matter and its nerves in cerebral traumatisms	1878; 1: 29–47	
Magnan V (Paris)	General paralysis and cerebral tumor, with atrophy of the ascending parietal convolution of the left hemisphere–no paralysis on the right side–convulsions on left	1879; 1: 561–565	
Magnan V (Paris)	On simple aphasia, and aphasia with incoherence	1879; 2: 112-123	
De Varigny H( Paris)	On the alterations of cortical excitability by cold applied to the surface of the brain	1884; 7: 224–227	
Grasset J (Montpellier)	The relations of hysteria with the scrofulous and the tubercular diathesis	1884; 6: 433-460	
Grasset J (Montpellier)	The relations of hysteria with the scrofulous and the tubercular diathesis (continued from vol 6)	1884; 7: 13–28	
Grasset J (Montpellier)	The relations of hysteria with the scrofulous and the tubercular diathesis (continued from vol 7)	1884; 7: 161–177	
Pitres A (Bordeaux)	On the early occurrence of ankle clonus in hemiplegia	1884; 7: 310-314	
Richet C (Paris)	Note on mental suggestion	1884; 7: 83–85	
Féré C (Paris)	Sensation and movement	1885; 8: 210-229	
Féré C (Paris)	Nerve troubles as foreshadowed in the child	1885; 8: 230–238	
Charcot JM & Richer P (Paris)	On a muscular phenomenon observed in hysteria and analogous to the 'paradoxical connection'	1885; 8: 289–294	
Parinaud H (Paris)	Paralysis of the movement of convergence of the eyes (translated from the French MS. by Henry Jules)	1886; 9: 330–341	
Féré C (Paris)	A contribution to the pathology of dreams and of hysterical paralysis	1887; 9: 488-493	
Féré C (Paris)	On paralysis by exhaustion	1888; 11: 208-213	
Marie P (Paris)	Acromegaly (translated from the French original by William Dudley)	1889; 12: 59-81	
Blocq P (Paris)	Syringomyelia	1890; 13: 289-316	
Blocq P (Paris)	Semeiology of sleep	1891; 14: 112-126	
Blocq P (Paris)	Neurasthenia	1891; 14: 306–334	
Chauveau A (Lyon)	On the sensorimotor nerve-circuit of muscles	1891; 14: 145–178	
Dupuy E (Paris)	The Rolandic area cortex	1892; 15: 190–214	
Bernheim H (Nancy)	On the psychical nature of hysterical unilateral amblyopia and sensitive-sensorial hemianaesthesia	1893; 16: 181–190	

ceased publication in 1918, but two years later Kinnier Wilson was the prime mover and founding editor of the *Journal of Neurology and Psychopathology*, which is still published today as the *Journal of Neurology*, *Neurosurgery and Psychiatry* (Table 3).

Both Alexander Bruce and Kinnier Wilson studied in Paris, were fluent in French and maintained strong links with French neurology throughout their careers [1]. For example Alexander Bruce was only the third United Kingdom neurologist after Jackson and Ferrier to be elected a corresponding member of the Société de Neurologie de Paris in 1900; and Kinnier Wilson was likewise elected in 1914 soon after presenting his seminal thesis on hepatolenticular degeneration in Paris in 1912 [1].

#### 4.2. Revue Neurologique and its precursors (Table 3)

Prior to the foundation of Revue Neurologique in 1893 by Edouard Brissaud and Pierre Marie, four precursor neurological journals evolved under the direction of Charcot and flourished briefly as listed in Table 3 [13]. Charcot never edited a journal but he encouraged the publication of Le Progrès Médical edited by Désiré-Magloire Bourneville (1840-1909) as early as 1873, in which all the work of the School of La Salpêtrière was published before the appearance of Iconographie Photographique de la Salpêtrière from 1877-1880, edited by Bourneville and Paul Regnard (1850-1927) and which was notable for photographic illustrations of hysteria and hysteroepilepsy. It was succeeded in 1888 by Nouvelle Iconographie de la Salpêtrière, edited by three of Charcot's pupils, George Brutus Gilles de la Tourette (1857-1904), Albert Londe (1858-1917) and Paul Richer, which continued to publish articles by Charcot, his collaborators and successors on the wide range of neurological diseases studied in the Salpêtrière and illustrated by numerous photographs, colour lithographs and drawings by Richer.

A fourth early journal directed by Charcot but edited by Bourneville was Archives de Neurologie, which was published from 1880 until Bourneville's death in 1909. It had a broader aim to include articles of general neurological and psychiatric interest submitted mainly by French but occasionally by international authors from Europe, Britain, Russia and the Americas. Among seven British articles, four were by David Ferrier, including the French translation of his Croonian Lectures to the Royal College of Physicians in London in three parts between 1890 and 1892 and his presentation to the 13th International Congress of Medicine in Paris in 1900 on the distinction between organic and hysterical hemiplegia.

Among Charcot's pupils, Bourneville had a key role in the development of the Paris Neurological School [14]. He contributed to Charcot's studies of hysteria and described congenital myxoedema and tuberous sclerosis. Interestingly, the first of Bourneville's papers on tuberous sclerosis was published in the first issue of Archives de Neurologie in 1880, whereas the second paper on the pathology of the disease was co-authored with Edouard Brissaud the following year in the same journal. Most importantly, Bourneville was a talented editor who disseminated the work of the Charcot School and contributed to Charcot's international reputation. Indeed, Bourneville began in 1872 by editing Charcot's "Leçons sur Les Maladies Nerveuses Faîtes à la Salpêtrière" and founded several journals as outlined above (Table 3).

Several differences distinguish Revue Neurologique, initiated by Edouard Brissaud and Pierre Marie in 1893 from Archives de Neurologie. Indeed, Revue Neurologique was encouraged by Charcot, who wrote the first article just before his death. In addition, as outlined by Edouard Brissaud and Pierre Marie in their introduction to the first issue of Revue Neurologique in 1893, the new journal was intended to be a real-time reflection of publications from around the world [15]. The section called "Analyses" covered many fields including anatomy, physiology, pathology, clinical neurology and psychiatry, and therapeutics. Oral presentations at neurological societies from the United Kingdom, USA, Germany, Russia and many other European countries were reported. In addition, several "mémoires originaux" (i.e. research articles) were published in each issue. Finally, with the foundation of the Société de Neurologie de Paris in 1899 and its formal association with Revue Neurologique, together with the demise of Archives de Neurologie in 1909, Revue Neurologique became and has remained the premier French neurological journal until this day, much as Brain has in the United Kingdom.

One other related but independent journal which deserves brief mention is *L'Encéphale*, which was founded in 1881 by two Parisian psychiatrists, Jules Bernard Luys (1828–1897), who was also a neuroanatomist, and Benjamin Ball (1833–1893), with a special emphasis on neuropsychiatry. It has also been published continuously until the present day. It is interesting that Ball was an Englishman who studied medicine in Paris and with the support of Charcot was appointed the first Professor of Mental and Brain Diseases at St. Anne's Hospital in Paris from 1877 until his death in 1893, before Charcot was appointed Professor for the Study of Diseases of the Nervous System in 1882. Ball also made original contributions to the psychiatry of Parkinson's Disease [1].

British neurologists contributed articles in French only occasionally to the early French neurological journals. Thomas Savill was appointed the British corresponding author to Nouvelle Iconographie de la Salpêtriére, providing several reports between 1894 and 1901. Thomas Savill, a London physician and neurologist, had studied in Paris and translated into English some of Charcot's Lectures.

Table 5 lists 11 articles in French by British authors in Revue Neurologique between its launch in 1893 and 1914. These publications were frequently associated with oral communications to the Société de Neurologie de Paris. Already in 1893, volume 1, Sherrington contributed an important summary of the inhibitory functions of the cerebral cortex. Alexander Bruce published two of his seminal neuroanatomical studies in 1896 and 1905. Charles MacFie Campbell (1876-1943), who studied neurology in both Edinburgh and Paris prior to a distinguished career as a neuropsychiatrist in the USA, including the Presidency of the American Psychiatric Association, wrote two papers with his French colleague Edouard Octave Crouzon (1874-1938) in 1902 and 1903. Five of the 11 British (mainly Scottish) contributions were by Kinnier Wllson between 1904 and 1912, including two with French co-authors and notably his seminal paper on hepatolenticular degeneration which he presented and published in Paris before his paper in Brain later in 1912.

Table 5 – List of articles published by British authors in Revue Neurologique from its launch in 1893 to 1914. Titles are in French with their translation into English in parenthesis.

Author(s) & city	Title	Reference
Sherrington C.S (Liverpool)	Sur une action inhibitrice de l'écorce cérébrale (On the inhibitory effect of the cerebral cortex)	1893; 1: 318–319
Bruce A (Edinburgh)	D'un faisceau spécial de la zone latérale de la moelle épinière (On a special fascicule in the lateral zone of the spinal cord)	1896; 4: 698–700
Campbell C MacFie (Edinburgh) & Crouzon O (Paris)	Étude de la diadococinésie chez les cérébelleux (A study of diaodocokinesia in patients with cerebellar syndrome)	1902; 10: 1186–1190
Campbell C MacFie (Edinburgh) & Crouzon O (Paris)	Étude de la « Marche de Flanc » chez les hémiplégiques (A study of lateral gait in patients with hemilplegia)	1903; 11: 233–244
Wilson S.A.K (Edinburgh)	L'état des nerfs oculomoteurs dans l'hémiplégie organique de l'adulte (A study of oculomotor nerves function in organic hemiplegia in adults)	1904; 12: 99–101
Wilson S.A.K (Edinburgh)	La choline dans le liquide céphalo-rachidien comme un signe de la dégénération nerveuse. Son importance clinique (Choline in the cerebrospinal fluid as a sign of neural degeneration. Its clinical importance)	1904; 12: 401–404
Crouzon O (Paris) & Wilson S.A.K (Edinburgh)	Un cas de sclérose combine sénile (A case of combined spinal cord sclerosis in the elderly)	1904; 12: 328–329
Léri A (Paris) & Wilson S.A.K (Edinburgh)	Poliomyélite antérieure aiguë de l'adulte avec lésions en foyer (Acute anterior poliomyelitis in adults with focal lesions)	1904; 12: 517–518
Bruce A (Edinburgh)	À propos de la distribution des cellules de la Colonne Intermédio-Latérale dans la région dorsale de la moëlle (On the distribution of cells of the intermedio-lateral column of the dorsal region of the spinal cord)	1905; 13: 553
Jones E (London)	La vraie aphasie tactile (True tactile aphasia)	1907; 15: 3–7
Wilson S.A.K (London)	Dégénération lenticulaire progressive. Maladie nerveuse familiale associée à la cirrhose du foie (Progressive lenticular degeneration. A familial nervous disease associated with cirrhosis of the liver)	1912; 23: 229–234

### 5. Conclusion

Thomas Willis (1621–1675) is widely viewed as a founding father of neurology based on his remarkable attempts to correlate the anatomy, pathology and clinical disorders of the nervous system. However his use of the word "neurologie" or doctrine of the nerves refers to the anatomy and function of the vagus and sympathetic chain and their distribution to the organs of the thorax and abdomen [16,17]. In the Anglo-French literature to our knowledge the first use of the word "neurologie" as a clinical discipline was by Bournville in 1880 when he founded "Archives de Neurologie". This was developed by Brissaud and Pierre Marie in 1893 with "Revue Neurologique" and in 1899 with the foundation of the "Société de Neurologie de Paris" and by Pierre Marie again in 1911 in his book entitled "La Pratique Neurologique". In Britain this clinical concept was first illustrated by "the London Neurological Society" in 1886 and taken up in Edinburgh by Alexander Bruce with his "Review of Neurology and Psychiatry" in 1903, later developed by his son-in-law, Kinnier Wilson, with his "Journal of Neurology and Psychopathology" in 1920 and later his two-volume textbook entitled "Neurology" in 1940.

Our review illustrates how the many constructive and seminal interactions of the London (1886) and Paris (1899) Neurological Societies, their Journals, Brain (1878) and Revue Neurologique (1893), their antecedents and successors, contributed to the evolution of neurology as an independent discipline prior to World War One.

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The authors declare that they have no competing interest.

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#### REFERENCES

[1] Broussolle E, Reynolds EH. Anglo-French neurological Interactions in the 19th and early 20th centuries: physicians, places and events. Rev Neurol (Paris) 2021;177:859–70. <a href="http://dx.doi.org/10.1016/">http://dx.doi.org/10.1016/</a> j.neurol.2020.10.013.

- [2] Schurr PH. Outline of the history of the Section of Neurology of the Royal Society of Medicine. JRSM 1985;78:146–8.
- [3] Shorvon S, Compston A, Queen Square: A history of the national hospital and its institute of neurology. Cambridge: Cambridge University Press; 2019.
- [4] Purdon Martin J. British neurology in the last 50 years: some personal experiences. JRSM 1971;64:1055–9.
- [5] Bonduelle M. Histoire de la Société Française de Neurologie: 1899–1974. Rev Neurol (Paris) 1999;155:785–801.
- [6] Société de Neurologie de Paris. Séance du 3 mars 1914. Rev Neurol (Paris) 1914;27:501–2.
- [7] Société de Neurologie de Paris. Séance du 11 mai 1905. Rev Neurol (Paris) 1905;13:541.
- [8] Société de neurologie de Paris. Liste des membres (Année 1926). Rev Neurol (Paris) 1926;1:24–30.
- [9] Reynolds EH. Kinnier Wilson's French connections. Rev Neurol (Paris) 2015;171:81–3.
- [10] Rollin HR, Reynolds EH. Yorkshire's influence on the understanding and treatment of mental diseases in

- Victorian Britain: the golden triad of York, Wakefield and Leeds. J Hist Neurosci 2018;27:72–84.
- [11] Critchley M, Critchley EA. John Hughlings Jackson: father of English neurology. Oxford: Oxford University Press; 1998.
- [12] Wilson SAK. Some modern French conceptions of hysteria. Brain 1910;33:293–338.
- [13] Poirier J, Ricou P, Leroux-Hugon V. Birth and death of Charcot's scientific journals. In: Bogousslavsky J, editor. Following Charcot: A forgotten history of neurology and psychiatry. Front Neurol Neurosci. Basel: Karger; 2011.
- [14] Broussolle E, Poirier J, Clarac F, Barbara JG. Figures and Institutions of the neurological sciences in Paris from 1800-1950 Part III. Neurology. Rev Neurol (Paris) 2012;168:301–20.
- [15] Brissaud E, Marie P. Aux lecteurs. Rev Neurol (Paris) 1893;1:1–2.
- [16] Feindel W. Thomas Willis (1621–1675), the founder of neurology. Can Med Ass Journal 1962;87:289–96.
- [17] Compston A. All Manner of Ingenuity and Industry: A Biobibliography of Dr. Thomas Willis 1621–1675. Oxford: Oxford University Press; 2021.