1: The concept of neurosis

The concept of ‘neurosis’ was coined by William Cullen, the Scottish physician, and appeared first in his Synopsis Nosologiae Methodicae (1769) and then in his First Lines of the Practice of Physick (1777). In studies published between 1835 and 1841 three followers of the German Romanticism have disagreed with this fact and attributed the term to Felix Platter, the Swiss physician of the Renaissance. This dissenting view, however, is based upon a misinterpretation of the term ‘functionum laesiones’, utilized by Platter in his treatise of practical medicine. For Cullen the term ‘neurosis’ was no more than a useful neologism with which to refer to ‘nervous disease’, a concept current in the medicine of his time. Its meaning then, vastly different from the one in usage nowadays, embodies a view of neurosis that had currency before its anatomoclinical re-interpretation.

That the term ‘nervous disease’ had originated a century before was common knowledge amongst the writers who modified it during the second half of the eighteenth century and a number of studies available during Cullen’s time echoed views from a British tradition that had been started by Willis and Sydenham. Cullen stated in Synopsis (IV, p. 182) ‘Since the time of Willis, British physicians have grouped some diseases under the category of nervous’. The Swiss Simon André Tissot, reported in his Traité des Nerves et de leurs Maladies (1778) (written 10 years earlier): ‘Sydenham... was the first to remark on the protean character of the nervous disease and to suggest that its symptoms might result from a disturbance in nervous function’. Additional evidence could be called upon to confirm the role played by Willis and Sydenham and to highlight the differences that came to separate the Galenic and modern views with respect to those diseases that ‘we (eighteenth century writers) refer to as nervous’.
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The starting point: the views of Willis and Sydenham on ‘Hysterical and hypochondriacal distempers’

Thomas Willis (1622–1675) was one of the main representatives of iatrochemistry during the second half of the seventeenth century. This movement, the first to formulate a medical system in the ‘modern’ sense, based itself upon the many ideas that had successfully challenged traditional Galenic medicine. In addition to the new chemical medicines and the Paracelsian view of disease, iatrochemistry included experimental and conceptual contributions as varied as the anatomical knowledge that had accrued from Vesalian reform; the doctrine of the circulation of the blood (and other physiological discoveries); the post-mortem search for anatomo-clinical correlations; the philosophical tenets of the inductive method and of the atomistic philosophy; and, the Cartesian view of man.¹⁰

Of the six books that constitute Willis’s Opera Omnia, four are dedicated to the nervous system and its diseases. Cerebri Anatome (1664), one of the classical neuro-anatomical treatises of all times, suggests an iatrochemical re-interpretation of the traditional doctrine of the ‘animal spirits’. The animal spirits are, according to Willis, made out of ‘extremely subtle matter’ and distilled from arterial blood in the cerebral cortex; therefrom animal spirits travel down the nerves to reach all regions of the organism where they are responsible for sensation and movement.¹¹

In Specimen (1667) Willis included his views on ‘cerebral and nervous pathology mainly in relation to epilepsy and other convulsive distempers’. In keeping with his iatrochemical views he used the term ‘convulsive distempers’ only in relation to diseases resulting from disorders of the nerves. Hysteria and hypochondria, which he considered as related but differentiable diseases, he included in this group. Hysteria ‘the so-called uterine disease is primarily a convulsive disease caused by an alteration of the nerves and the brain’¹² and hypochondria is ‘a spasmodic distemper’ analogous to hysteria which involves the spleen and is also associated with a ‘disorder of the animal spirits’.¹³

Willis wrote a book defending the ‘nervous’ or ‘spasmodic’ origin of hysteria and hypochondria against the view of Nathanael Highmore who had suggested as cause a haemodynamic alteration of the cardio-vascular system. Willis’s work, Affectionum quae
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discuntur hystericæae et hypochondriæae pathologia spasmodica vindicata (1670) includes two important physiological sections.

De Anima Brutorum (1672), the fourth of Willis's neurological treatises, touches upon the notion of 'anima sensitiva' and its pathogenic role. 'Anima sensitiva' originates from the 'flamy and subtil' part of the blood and is responsible for aspects of animal life such as sensation, movement and impulse; its disorder may lead to cephalalgia, lethargy, somnolence, insomnia, vertigo, apoplexy, paralysis, delirium, melancholia, mania etc.

Thomas Sydenham (1624–1689) made clinical observation the cornerstone of modern nosology. His empiricist stance led him to oppose all medical systems, particularly traditional Galenism and iatrochemistry, which had not yet freed itself from speculation. He sought to develop a new medical science which offered 'a graphic and natural description of disease' and was based on: (1) A classification into species of all clinical cases 'as carefully as it is done in botany'; in keeping with this desideratum Sydenham described the morbid type that is, a recurrent and typical way of becoming ill which can be identified by observing the regular patterns attending pathological phenomena; (2) A suspension of all theoretical preconceptions during the examination of the patient; and (3) A clear distinction, within each morbid type, between primary and accidental symptoms, the latter being associated with patient’s variables such as age or response to treatment.

Sydenham fulfilled his programme partially. He offered descriptions of morbid types such as hysteria to which he dedicated part of his Dissertatio epistolaris (1682), addressed to William Cole. On the frequency of the condition Sydenham wrote: 'Of all chronic diseases hysteria...is the commonest; since just as fevers – taken with their accompaniments – equal two thirds of the number of all chronic diseases taken together, so do hysterical complaints (or complaints so called) make one half of the remaining third' (T.N.: in English in the original). He emphasized the protean nature of hysteria, noticing that it may affect females (hysteria sensu strictu) and males (hypochondria) and suggesting as a possible cause ‘ataxia or faulty disposition of the animal spirits’ (T.N.: in English in the original); i.e. he considered these conditions to be disorders of nervous function.

The view that hysteria and hypochondria resulted from a
disturbance of the nerves was a new one at that time and was put forward as an alternative to the Galenic doctrine that considered hysteria as caused by vapours that emanated from corrupt humours in the womb and hypochondria as resulting from vapours originating from 'atrabiles'; this term, that originally had meant 'black bile' or 'melancholia', was later used to refer to corrupt blood stagnating in organs placed in the hypochondria such as spleen, liver and stomach.  

The Galenic view had already come under attack in a book published in 1618 by Charles Lepois (Carolus Piso, 1563–1633) who claimed that hysteria could affect both sexes and, like epilepsy, resulted from accumulation of serum in the brain; this modern view, however, is lost amidst traditional remarks. Although historically less influential, Lepois's contribution must be considered as an important antecedent to the work of Willis and Sydenham, the real originators of the concept of 'Nervous Disease'.

The emergence of the concept of 'nervous disease' marks the beginning of the 'modern view' both in neurosciences (Willis) and in nosology (Sydenham). Its 'modern' character emanates from the two basic postulates of the new medicine: firstly, that a unitary principle regulates all organic functions; and secondly, that nosology must be inductive in character and hence be based on clinical observation. This theoretical and experimental search for the unitary principle distinguishes modern from Galenic medicine and is founded upon the conceptual separation between form and function (made possible by Vesalius) which, in due course, led to the creation of two independent disciplines.

Renaissance medicine had already attempted (e.g. Giovanni Argenterio and Francisco Valles) to identify a unitary principle by postulating that all traditional principles were under a superior regulator. When modern 'physiology' became an autonomous discipline during the seventeenth century, this regulator was identified with the nervous system. The 'nervous diseases' (what Cullen called 'neuroses') were believed to result from dysfunction in the unitary regulator. The novel feature of this concept (when compared to the traditional Galenic view) resides in the fact that it makes possible the identification of a group of conditions which can be considered both as functional and general in nature. As will be
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shown later, these two characteristics were to remain associated with the concept of neurosis for a long time to come. In a similar fashion, the inductive nosology developed by Sydenham allowed the concept of nervous disease to be clinically formulated in a way that had not been possible under the deductivist and essentialist control of the Galenic doctrine.

The consolidation of the concept of ‘nervous disease’

During the first half of the eighteenth century the concept of ‘nervous disease’ became gradually clearer in spite of the fact that traditional views were still widely accepted.

Boerhaave, Hoffmann and Stahl, often called the ‘great systematizers’ for their contribution to the organization of medical knowledge, dealt with the concept of ‘nervous disease’ during the first ten years of the eighteenth century. Their views on hysteria and hypochondria can be considered as transitional between the old Galenic views and the new concept of ‘nervous disease’.

Herman Boerhaave (1668–1738) synthesised, in an eclectic fashion, Cartesianism, iatromechanics (i.e. the application of Galilean mechanics to medicine), chemistry and the findings of post-mortem exploration. Following Sydenham, whose view he publicised, he considered clinical observation as the foundation of nosology. But classical views can also be detected in Boerhaave’s work as illustrated by the distinction between ‘hypochondria cum materia’ and ‘hypochondria sine materia’ in his Aphorismi de cognoscendis et curandis morbis (1709). Hypochondria cum materia he explained in terms of the old humoral doctrine of ‘atrabils’; hypochondria sine materia by means of the modern view of ‘nervous mobility’, that is of a ‘proneness to action’ in the ‘animal spirits’.

Also known as ‘Communis Europae Præceptor’, Boerhaave inspired many of his Dutch followers to adopt the twofold view of hypochondria. For example Gerhard van Swieten (1700–1772) founder of the ‘alte Wiener Schule’ or First Viennese school, included it in his Commentaria in Hermanni Boerhaave Aphorismos (1742) which became one of the most popular medical texts in Europe during the second half of the eighteenth century. Joannes Oosterdijk Schacht (1704–1755), Boerhaave’s successor in the Leyden chair, also classified melancholia into ‘hypochondriacal or atraibiliar’ and
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‘nervous or sine materia’ in his Institutiones medicinae practicae (1747). Johannes de Gorter (1689–1762). Professor at Hardervijk and later physician to Elisabeth of Russia wrote at length on the concept of ‘nervous mobility’ in his Praxis (1750). Physicians from other countries also adopted Boerhaave’s dichotomous view but only Anne Charles Lorry (1726–1783), a successful clinician in pre-revolutionary Paris, will be mentioned; in his two-volume ‘De melancholia et de morbis melancholicis’ (1753–1757) he defined ‘nervous melancholia’ as a spasmodic condition with manifold manifestations such as hysteria in the female and hypochondria in the male and believed that ‘humoral melancholia’ resulted from the action of the ‘atrabilis’ upon the nerves.¹⁷

Friedrich Hoffmann (1660–1742) developed a system based on a medical version of rationalistic mechanicism which was more speculative than Boerhaave’s; according to this view all diseases can be reduced to alterations in ‘tone’ of the ‘fibres’ forming the solid parts of the body.²⁸ Hoffmann’s views on hysteria and hypochondria were based upon a sui-generis combination of modern and traditional concepts. In his Dissertatio (1707) he considered these two conditions to be convulsive states that resulted from disorders of the womb and gut respectively, and which spread throughout the body by means of the spinal cord.²⁹

The nosological views of Georg Ernst Stahl (1660–1734) do not live up to the expectations that his adoption of an animistic system may create in the historian. According to his doctrine ‘anima’ constitutes the activity principle of all vital phenomena, both in health and disease.³⁰ In his Theoria medica vera (1708) Stahl suggested that hysteria and hypochondria originated from a ‘plethora’ of blood in the portal vein which would obstruct the movement of ‘animal spirits’ and lead to alteration of the ‘anima’.³¹

In addition to the contribution by the ‘great systematizers’, works on hysteria, hypochondria and the ‘vapours’ were published by other authors during the early eighteenth century. Traditional in conception, these writings followed either Galenic humoral views or iatrochemistry; amongst the latter should be mentioned the work of the British physicians John Purcell (1702) and Bernard de Mandeville (1711) who suggested that the conditions in question originated from ‘imperfect digestion’ or disorders in ‘chyle formation’.³² The terms
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hysteria and hypochondria are still utilized by these authors in their strict literal meaning, that is as referring to the role played by the womb, the hypochondria and the 'vapours'. Other works published during the same period sponsored a nervous pathology for the two conditions: amongst these a tendency can be detected to utilize hysteria and hypochondria synonymously with nervous disease. This explains why subsequent authors made free use of these two terms without feeling committed to a localizationalist hypothesis. By the same token eighteenth century physicians were able to retain the term 'vapours' in spite of the fact that they had already abandoned its speculative Galenic foundations. For example the French physician Dumoulin referred to vapours in his book of 1703 (which includes a free translation of Sydenham’s work on hysteria), but rejected the claim that they reached the head from the lower abdomen, based on the observation that ‘the organs in between are too solid and the blood vessels too full’. Humphrey Ridley, a British neuro-anatomist of equal standing to Willis, also remarked upon the nervous origin of hysteria and hypochondria and provided a curious justification for referring to them as ‘vapours’, namely, that their cause can be dissipated easily in comparison with the aetiology of other affections. Pierre Pomme in his *Traité des affections vapoureuses des deux sexes* (1765) published only two years before Cullen’s work, also employed the term ‘vapours’ but with a meaning unrelated to the old doctrine of humours: ‘‘vaporous disorders’ refer to diseases of nervous origin whether general or particular, that give rise to irritability and spasm. In women these are called hysterical and in men hypochondriacal’. The concept of nervous disease became consolidated in a number of monographs published by British authors during the middle of the eighteenth century. In chronological order these are: Richard Blackmore’s *A Treatise of the Spleen and Vapours: or Hypochondriacal and Hysterical Affections* (1728) and Nicholas Robinson’s *A New System of the Spleen, Vapours and Hypochondriacal Melancholy* (1729). George Cheyne’s *The English Malady: or a Treatise of Nervous Diseases of all Kinds, as Spleen, Vapours, Lowness of Spirits, Hypochondriacal and Hysterical Distempers* appeared in 1733 and Malcolm Flemyng’s *Neuropathia: sive de morbis hypochondriacis et hystericis*, written in verse, was published in 1740. After the publications of some minor
monographs, such as Charles Perry’s *A mechanical account and explication of the Hysteric Passion* (1755), this series culminated with *Observations on the nature, causes and cure of those Disorders which are commonly called Nervous, Hypochondriac or Hysteric* (1765) by Robert Whytt, who preceded Cullen in the Edinburgh chair. The French translation of Whytt’s important book (1767) published two years before Cullen utilized the term ‘neurosis’ for the first time, contained a translator’s appendix entitled ‘Summary of the main works on the nature and causes of nervous, hysterical and hypochondriacal disorders’ which mentioned about thirty-five works. This addendum illustrates well, in spite of the uneven quality of the listed contributions, the level of conceptual organization reached by the notion of ‘nervous disorder’ and shows that at the time there was already awareness of its novelty in relation to more traditional doctrines.39

The above-mentioned monographs have as common denominator the view that a class of diseases can be identified which have ‘nervous’ origin; beyond this individual authors differed markedly as they described the putative mechanisms in terms of their own theoretical systems. For example Blackmore continued referring to changes in ‘animal spirits’; Robinson, Flemyng and Perry resorted to iatromechanical hypotheses; Cheyne propounded an eclectic integration of iatrochemistry, iatromechanics and Stahlian views; Whytt supported the doctrine of ‘sympathy’.

It would not be wrong to say that the various terms included in the titles of the monographs represent each the conceptual vestige of an old pathogenic theory and in the case of terms such as ‘vapours’ or ‘spleen’ their origin is not difficult to identify. The development of new theories rendered some of these terms unsuitable or obsolete (as is the case with hysteria in the present century) and more adequate replacements were required. This historical mechanism might explain the popularity achieved by the term ‘nervous disease’, included by both Cheyne and Whytt in the title of their books. The same concept was occasionally referred to by means of neologisms; one such was ‘neuropathia’, coined by Flemyng twenty-five years before Cullen’s main publication. In countries, such as France, however, the term ‘vapours’ was maintained for example in the work of Raulin and Pomme; this was
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also the case with Whytt’s book which was translated as Les vapeurs et les maladies nerveuses, hypochondriques et hystériques.\textsuperscript{40}

British authors called some of these ‘nervous distempers’ ‘English’, probably on account of an assumed high local prevalence. Thus when writing on ‘English spleen’ Blackmore stated:

If a phthisis is justly called by foreigners Tabes Anglica, or the English consumption, because it is most predominant, and in a manner peculiar to this country; I am well assured there is no less reason to give to the distemper I have chosen for the subject of this treatise, the appellation of the English spleen; since it is here gained such a universal and tyrannical dominion over both sexes, as incomparably exceeds its power in other nations\textsuperscript{41}

(T.N.: in English in the original). In his English Malady Cheyne wrote: ‘These nervous disorders being computed to make almost one third of the complaints of the people of condition in England.’\textsuperscript{42}

The series of monographs mentioned above culminated with the publication of a book by Robert Whytt (1714–1766). This important figure of the European Enlightenment trained in Edinburgh, London and later in Paris and Leyden, and became Professor of Medicine at Edinburgh in 1746. With Haller he crossed swords on the topic of irritability and sensibility, was accused of following Stahl but soon disowned by the Stahlians. Whytt’s experimental work is impressive: he showed that the spinal cord is necessary to reflex function; described the pupillary light reflex and demonstrated that it is interrupted by damage to the anterior quadrigemina; he also contributed to the clinical description of ‘dropsy of the brain’ or hydrocephalus.\textsuperscript{43}

In his Observations (1765) Whytt wrote:
the disorders which are the subject of the following observations have been treated of by authors, under the name of flatulent, spasmodic, hypochondriac or hysteric. Of late, they have also got the name of nervous, which appellation having been commonly given to many symptoms seemingly different, and very obscure in their nature, has often made it be said that physicians have bestowed the character of nervous on all those disorders whose nature and
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causes they were ignorant of. To wipe off this reproach, and, at the same time to throw some light on nervous, hypochondriac and hysterical complaints, is the design of the following observations. 

(T.N.: in English in the original).

Whytt's view is that 'nervous diseases' result from a pathological alteration of the mechanism of 'sympathy'. 'Sympathy' refers to the type of relationship that organs hold with one another and describes a type of sensibility conveyed by the nerves:

All diseases may, in some sense, be called affections of the nervous system, because, in almost every disease, the nerves are more or less hurt; and, in consequence of this, various sensations, motions, and changes, are produced in the body. However, those disorders may, peculiarly, deserve the name of nervous, which, on account of an unusual delicacy, or unnatural states of the nerves, are produced by causes, which, in people of a sound constitution, would either have no such effects, or at least in a much less degree.

(T.N.: in English in the original).

'Nervous disease' became a fashionable diagnosis because of Whytt's reputation. James Makittrick Adair in his Medical Cautions (1786) bore witness to this twenty years later:

Upward of thirty years ago, a treatise on nervous diseases was published by my quondam learned and ingenious preceptor, Dr. Whytt, Professor of Physick, at Edinburgh. Before the publication of this book people of fashion had not the least idea that they had nerves; but a fashionable apothecary of my acquaintance, having cast his eyes over the book, and having been often puzzled by the enquiries of his patients concerning the nature and causes of their complaints, derived from thence a hint, by which he readily cut the gordian knot - 'Madam, you are nervous'; the solution was quite satisfactory. the term became fashionable, and spleen, vapours and hyp were forgotten.

(T.N.: in English in the original).

The influence of Whytt was felt not only locally or by those belonging to social classes which were 'à la mode', it rapidly spread to continental physicians as is attested by the French translation of Whytt's Observations in 1767.