

2012

CLASSIFICATION OF MENTAL ILLNESS IN  
THE 18TH CENTURY: A COMPARISON OF  
THE NOSOLOGIES OF CARL LINNAEUS,  
FRANCOIS BOSSIER DE SAUVAGES,  
RUDOLPHO VOGEL AND WILLIAM  
CULLEN

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A COMPARISON OF THE NOSOLOGIES OF CARL LINNAEUS, FRANCOIS  
BOSSIER DE SAUVAGES, RUDOLPHO VOGEL AND WILLIAM CULLEN

By

Heather Ann Munsche

THESIS

Submitted to  
Northern Michigan University  
In partial fulfillment of the requirements  
For the degree of

MASTER OF SCIENCE

Graduate Studies Office

2012

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**DATE OF BIRTH:**

June 6, 1979

## ABSTRACT

CLASSIFICATION OF MENTAL ILLNESS IN THE 18<sup>TH</sup> CENTURY:  
A COMPARISON OF THE NOSOLOGIES OF CARL LINNAEUS, FRANCOIS  
BOSSIER DE SAUVAGES, RUDOLPHO VOGEL AND WILLIAM CULLEN

By

Heather Ann Munsche

The 18th century was an age of classification. Perhaps the most famous figure in this epoch was Carl Linnaeus, who developed a system which is still used today of separating living things into kingdoms, families, orders and classes. What many do not remember, however, is that Carl Linnaeus was a physician in addition to being a renowned botanist. He endeavored to classify all known human diseases in his 1763 work, *Genera Morborum*. This thesis will focus on his classification of mental disorders, a large subset of the *Genera Morborum*. The Linnean system will be compared to that of François Boissier de Sauvages of France, *Nosologie méthodique* (1763), and Rudolpho Augustin Vogel of Germany, *Generum Morborum* (1764). We discuss where definitions of mental illnesses were consistent across these European cultures and where they diverged. The impact of these nosologies on the system of William Cullen of Scotland, *Nosology* (1769), a popular system of disease classification that persisted well into the nineteenth century, will also be explored. The different approaches to nosology, from the symptom-based lists of Linnaeus and Vogel, the more complete descriptions of de Sauvages, to consideration of both causes and symptoms, as seen in the writings of Cullen, will be illustrated.

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Heather Ann Munsche

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## DEDICATION

This thesis is dedicated to my grandfather, Erwin F. Jasman, and to my parents, Gordon W. and Beverly J. Munsche.

## ACKNOWLEDGMENTS

The author would like to thank Dr. Harry Whitaker, the chair of the thesis committee, for his assistance in formulating this project, his confidence in my abilities, and his guidance. I also appreciate the effort of my readers, Dr. Paul Andronis and Dr. Alan Willis. Without their help, the thesis could not have been completed.

Words cannot express the amount of support my parents have given me, in this endeavor and in all others. I am deeply grateful for their love.

This thesis follows the guidelines in the APA Manual of Style and the Department of Psychology.

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## Introduction

In science and in life in general, classification is of key importance because it allows for the exchange of information and ideas. Throughout time, people have classified plants, animals, and diseases because it helps them to make sense of the world they live in. In the eighteenth century, great technological advances permitted scientists to see aspects of the world they were never able to see before. Suddenly, with the use of microscopes, scientists were able to see the components of organisms that were previously unable to be perceived by the naked eye. This led to a need for new systems of classification, to give people a lexicon with which they could discuss increasingly intricate ideas.

Categorization, according to Henri Cohen, editor of *Handbook of Categorization in Cognitive Science*, is “the mental operation by which the brain classifies objects and events. The operation is the basis for the construction of our knowledge of the world. It is the most basic phenomenon of cognition, and consequently the most fundamental problem of cognitive science” (2005). We will consider four eighteenth century physicians who created nosologies to address this basic need for classification. Our focus will be on the classification of mental illnesses, a part of each of the systems of Francois Bossier de la Croix de Sauvages, Carl Linnaeus, Rudolpho Vogel and William Cullen. First, a survey of mental illness prior to the time of Linnaeus, de Sauvages, Vogel and Cullen will be provided. Then an overview will be given of the system of classification provided by each of these authors. Lastly, a discussion of specific diseases that were found in most eighteenth century classifications will be given, along with an illustration

of the structure of disease classifications as symptomatic or causally based. This will suggest parallels with what is seen in modern nosologies.

## **Evolution of the Need for Disease Classification**

In the eighteenth century, modern medical theory was in its infancy. Humoral medicine, as first developed by Hippocrates, and expanded upon by Galen, asserted that the body was composed of four humors; black bile, yellow bile, blood and phlegm, and that imbalance of the humors lead to disease (Contagion). Melancholia, or an excess of black bile, is often noted and most closely resembles one of our current mental illnesses.

### **Sydenham**

Thomas Sydenham, perhaps the most famous English physician of the seventeenth century, frequently used bloodletting, a treatment from humoral medicine, in his practice. Sydenham once said, "It would be a very good thing if all the diseases were reduced to definite and certain species with as much accuracy as the botanists have done with descriptions of plants." (Egdahl, 1907). In this quote, Sydenham establishes the need for a system of illness classification, without knowledge that an explosion of classification systems was less than a century away. Most of Sydenham's writings describe his views on the treatment of physical illnesses, however, in his epistle to Dr. William Cole in January of 1681, he focused intently on the treatment of hysteria (Sydenham, 1729; Wallis, 1787). Sydenham wrote in Latin and his works were translated into English in 1729 by Pechet and in 1787 by Wallis. Though word choice in the translations differs greatly, a summary of the thoughts in modern terms appears below.

Sydenham began by describing the incidence of hysteria. He said that two-thirds of all diseases can be attributed to fevers and that hysteric disorders make up half of the

remaining third of cases seen. Therefore, in the late 1600s, hysteric complaints comprised approximately one-sixth of the average European medical practice. Sydenham attempted to relate what we see as mental diseases to physical parts of the body. Hysteria was attributed to the womb while hypochondriac complaints were believed to arise from obstructions of the spleen and viscera. Sydenham also characterized those who most often present with hypochondria as men who studied hard and were sedentary.

Sydenham said that the easiest way to identify hysteria in women and hypochondria in men was by examination of their urine. In men especially, after making urine the “color of citron” (Pechet, 1729) or “amber”, in the words of Wallis, they would be seized by a “Perturbation of the Mind” as described in Pechet’s translation (1729) and then they would produce a great quantity of “water as clear as crystal” .

Sydenham then describes the symptoms of hysteric diseases. Included are back pain, tooth pain, kidney pain, dry cough, heart palpitations, epileptic-like seizures, and jaundice. Another symptom he observed was continuous vomiting which he attributed to green humor. Even though Sydenham was writing nearly 1,400 years after Galen, humoral medicine still strongly influenced the way medicine was practiced in the seventeenth century.

The critical piece in diagnosing hypochondria or hysteria was that in addition to the bodily complaints, the mind was disordered and the patient was filled with despair. Sydenham also described frequent mood swings as part of the disease. He theorized that external causes to the illnesses of these ailments were violent motions of the body or great commotion in the mind (Wallis, 1787). Sydenham felt that the internal cause of

hysteria or hypochondria was “irregular motions of the animal spirits” (Wallis, 1787) or “confusion of the Spirits” (Pechet, 1729). Spirit confusion was attributed to a weak constitution, which is why Sydenham said he saw more cases of hysteria than of hypochondria because of the delicacy of women.

## **Wesley**

Many health care providers in the 18<sup>th</sup> century, like Sydenham, focused primarily on the practice of medicine rather than the classification of illnesses. One example of this is Reverend John Wesley. Wesley is best remembered for founding the Methodist church. As a religious leader, Wesley travelled to many small English towns to preach to their inhabitants. While there, he dispensed medical advice to his parishioners, given the severe shortage of health care providers in rural areas (Donat, 2006). Wesley attempted to empirically test remedies before he suggested them as treatments to the patients he saw. In suggesting remedies, he had to first provide a listing of diseases, as he did in *Primitive Physic*, first published in 1747. Wesley published many editions over the years, with updates in each new edition. By the 23<sup>rd</sup> edition, published in 1791, he had identified 288 disorders and 824 remedies (Donat, 2006). His focus was primarily on physical ailments and their treatments, especially those experienced by many of his parishioners (Donat, 2006), but he did identify three treatments for “Nervous Disorders” and two for “Hypochondriac and Hysterical Disorders” (Donat, 2006). In the ninth edition, Wesley suggested “good air”, dietary suggestions such as weak mother of thyme tea for breakfast and the avoidance of coffee and wine, and tincture of Valerian-root or mistletoe powder as cures for nervous disorders. However, he went on to say, “But I am firmly persuaded, there is no Remedy in Nature, for Nervous Disorders of every Kind,

comparable to the proper and constant Use of the Electrical Machine (Wesley, 1761, p. 87). Wesley's suggestions for Hypochondriac and Hysterical disorders were quite brief – he suggested cold bathing or taking an ounce of quicksilver every morning (1761).

## **Morgagni**

In the eighteenth century, physicians began to investigate the underlying causes of disease. Prior to this time, while detailed studies of human anatomy had been performed, no one had systematically tried to pair the symptoms seen in life to diseased organs that were observed postmortem. Dr. Giovanni Battista Morgagni, an Italian physician, was the first to try to link disease to underlying physical abnormalities. In 1761, he published *De Sedibus et Causis Morborum per Anatomem Indagatis*. The first English translation by Dr. Benjamin Alexander, appeared in 1769 (Morgagni, 1824), and the work's English title was *The Seats and Causes of Diseases: Investigated by Anatomy*. Morgagni's original five-volume work investigated diseases from the entire body, with those related to the head in the first volume. Dr. Alexander condensed Morgagni's writings into three volumes, which were then abridged in 1824 by William Cooke in order to make them more accessible to the public. Cooke also included some of his own observations in the abridgement. Dr. Morgagni reported observations from post-mortem autopsies and tried to identify the physical manifestations of diseases. Few mental illnesses are mentioned by Morgagni, perhaps because finding an observable physical cause of mental illness is something with which scientists still struggle today.

Of the diseases covered in *De Sedibus et Causis Morborum per Anatomem Indagatis*, those related to mental illness were delirium, insanity, and hydrophobia. Delirium was mentioned in conjunction with phrenitis, an inflammation of brain

membranes, because in all the cases Morgagni examined, delirium was a symptom seen in phrenitic patients prior to death. Morgagni described the condition of the body, including the brain, in several autopsies but did not ascribe a causal relationship between inflammation of the meninges and the observed delirium. In his case studies, Morgagni took on the role of objective observer, determined to report all of his physical findings. Therefore, his focus was the pathology that resulted from the disease rather than the cause of the affliction itself.

Morgagni's section on insanity was precise in its anatomical findings but provided a very imprecise definition of what should be classified as insanity. In summarizing his observations, Morgagni remarked that the pineal gland appeared diseased in all cases of insanity. He also noted serum beneath thickened neural membranes and in the ventricles. He then said, "The spleen was probably often affected, and the liver and pancreas have also been found the seat of disorganization." (Morgagni, 1824, p. 124). He qualified that although these findings were found in cases of insanity, they were also observed in cases without insanity, so a causal relationship could not be assumed.

Hydrophobia was described as having many different symptoms and Morgagni said that there were therefore differing findings found in each dissection. He also said that he needed to observe a larger sample of patients in order to adequately decide where the cause of hydrophobia was seated in the body. Morgagni said his intuition and limited observations caused him to suspect that hydrophobia had to do with the brain and the nervous system.

## **Boerhaave**

Hermann Boerhaave (1668-1738) was a Dutch physician and Professor of Physick and Botany at the University of Leyden. He was elected to the Paris Academy of Sciences in 1728 and as a fellow to the Royal Society of London in 1730. Boerhaave had originally trained to be in the clergy, but always had a strong interest in medicine, chemistry, botany, and mathematics (Johnson, 1739). Boerhaave was a very popular medical lecturer and encouraged the application of mathematic principles toward systematic inquiry into the causes of diseases. Boerhaave put great focus on Hippocratic traditions, and was the first to emphasize clinical observation in medical education when he was made physician at St. Augustin's hospital in Leyden in 1714, requiring students to meet with him at the hospital twice-weekly to apply their theoretical knowledge to address the needs of patients.

Boerhaave was known throughout the world for his advances in medical education. Students from all over Europe travelled to Leyden to study under him (Johnson, 1739). He had a personal relationship with Carl Linnaeus (Edgahl, 1907) and engaged in a rich correspondence with people throughout the world, including François de Sauvages (Lindeboom, 1979) and Rudolph Vogel (Baas, 1889).

## **Eighteenth Century Nosologists**

In reading Morgagni's work, it becomes apparent that a better system of distinguishing all diseases, including mental diseases, is necessary for doctors to communicate about the cases they encounter. Sydenham also recognized the need for an organized system (Edgahl, 1907). Many were attempting to provide this framework in the 18<sup>th</sup> century, which we could call the century of classification. We will now consider the nosologies of four eighteenth century physicians, de Sauvages, Linnaeus, Vogel and Cullen.

### **Linnaeus & de Sauvages**

Dr. Carl Linnaeus is known throughout the world for his system of biological classification, into orders, classes and families, still in use today. His classification has been studied extensively in these fields. However, few people know that Linnaeus was a physician in addition a botanist, and he undertook a project of classifying human disease in his 1763 work, *Genera Morborum*.

In *Genera Morborum*, Linnaeus organized diseases into classes, orders, and species, as he did with biology and zoology (Edgahl, 1907). He identified eleven classes, thirty-seven orders and three hundred twenty-five species of human disease. He had taught a course called *Diagnosis Morborum* to medical students as professor at the University of Uppsala for approximately ten years (Hektoen, 1902, Pulteney, 1805) and this likely inspired him to produce the written work. Francois Boissier de la Croix de Sauvages, a professor of medicine at Montpellier and a frequent correspondent of Linnaeus, published a nosology in 1731, when Linnaeus was a medical student. Linnaeus used this work as a basis for his system and when de Sauvages produced an updated and

expanded work in 1763, he incorporated much of Linnaeus' organization as well (Egdahl, 1907). It is difficult to say which of these systems came first, as each man influenced the work of the other.

Linnaeus' system was organized symptomatically and he addressed mental illness in class four, *Mentales*. This class was broken down into three orders and twenty-five species, also called genera. Linnaeus wrote *Genera Morborum* in Latin and, to this author's knowledge, the work has never before been adequately translated into English. In 1805, Richard Pulteney edited *A General View of the Writings of Linnaeus*. While this work provides some insight, the translations are much briefer than the descriptions provided by Linnaeus. Please see Appendix A for a comparison of Linnaeus' original Latin with Pulteney's summation, and my literal English translation and interpretation.

While Linnaeus' system includes a lengthy list of disease types, he provided very few details about each disease. De Sauvages' revised work, published in Latin as *Nosologia Methodica* in 1763, and in French as *Nosologie Methodique* in 1772, which was examined in writing this thesis, reflected Linnaeus' ideas, and provided much more description. Also a symptom-based system, de Sauvages' Seventh Class, *Folies*, is entirely devoted to mental illness. De Sauvages provided complete descriptions of each illness, references to others who had written about the disease, case studies and treatments. This hints at a dissatisfaction with a purely symptom based system, although his system was very similar to the one proposed by Linnaeus, having one class, four orders and twenty-six diseases for mental illness compared with Linnaeus' one class, three orders and twenty-five diseases devoted to mental illness.

## Vogel

Rudolpho Augustin Vogel (1724-1774) was a professor of Medicine at the University of Göttingen in Germany. His *Generum Morborum*, published in 1764, addressed mental illnesses in Class 7, *Hyperaesthises*, and Class 9, *Paranoiae*. He identified thirty-one diseases of the mind between these two classes. Vogel offered brief descriptions of each of the illnesses, much as Linnaeus did. A year earlier, in 1763, Vogel wrote a longer essay, *De Insania Longa Iscountion Solemni*, in which he compared long-standing insanity to the short-lived variations observed when someone was running a fever.

Although Vogel's system named many of the same diseases identified in the nosologies created by de Sauvages and Linnaeus, the overlap is not complete. See Appendix B for a list of all the systems in the order given by the authors and Appendix C for an alphabetical listing of diseases that shows where the systems overlap. Vogel was a known follower of Boerhaave (Baas, 1889), though it is unlikely that Vogel corresponded with or read Boerhaave while Boerhaave was still alive. Linnaeus had a close relationship with Boerhaave, who helped him secure several positions over the years (Edgahl, 1907). De Sauvages was also in contact with Boerhaave via written correspondence (Lindeboom, 1979). Through these relationships to Boerhaave, it is likely that all three physicians knew that the others were working on nosological systems and borrowed from each other to some extent.

## **Cullen**

Dr. William Cullen was a revered physician all over the world. He was eulogized in 1790 by Benjamin Rush, M.D., prominent American physician and signer of the Declaration of independence, for the College of Physicians in Philadelphia. In his speech, Rush said,

“Mr. President and gentlemen, by your unanimous vote, to honour with an Eulogium, the distinguished character of the late Dr. William Cullen, Professor of Medicine in the University of Edinburgh, you have done equal homage to Science and Humanity. This illustrious Physician was the Preceptor of many of us: - He was moreover a distinguished citizen of the republic of Medicine, and a benefactor to Mankind; and although, like the sun, he shone in a distant hemisphere, yet many of the rays of his knowledge have fallen upon this quarter of the globe. I rise, therefore, to mingle your grateful praises of him, with the numerous offerings of public and private respect which have been paid to his memory in his native country. Happy will be the effects of such acts of distant sympathy, if they should serve to unite the influence of science with that of commerce, to lessen the prejudices of nations against each other, and thereby to prepare the way for the operation of that divine system of morals, whose prerogative alone it is, to teach mankind that they are brethren, and to make the name of a fellow-creature, in every region of the world, a signal for brotherly affection....Dr. Cullen possessed a great and original genius....By means of his talent for observation he collected knowledge from everything he heard, saw or read, and from every person with whom he conversed.”

Cullen was greatly influenced by de Sauvages, Linnaeus and Vogel. In the preface to his *Nosology*, first published in Latin in 1769 and translated into English in 1800, he said that most disease descriptions are greatly flawed. Those provided by the ancients described people from a different environment. Many of his contemporaries described all symptoms seen in an individual, but did not attempt to distinguish those that were specific to and diagnostic for the disease from others that occurred concurrently but were not attributable to the disease being studied (Cullen, 1800). As chair of the Practice of Physic at the University of Edinburgh, Cullen felt it was his duty to produce a complete work describing human ailments, which could assist his students and other medical professionals in making accurate diagnoses. While Cullen greatly admired de Sauvages and Linnaeus, he felt that their symptomatic approach to classifying diseases was flawed. He said, “They have gone at once to constitute the principal genera of the classes and orders, without sufficiently attending to the species of diseases.” (Cullen, 1800, p. vii). Cullen clearly illustrates a need to go beyond simply looking at symptoms to a consideration of underlying causes as well. Cullen organized his nosology differently than de Sauvages, Linnaeus, and Vogel, showing that his approach to classification encompassed more than just symptoms.

Cullen structured his systematic nosology to have fewer genera than most others did, especially when past genera included only one species. He did this, in part, to make learning easier for his students – the genera were fewer in number but more easily distinguished. Cullen only identified genera that he felt were idiopathic and primary, while many other nosologists had described genera with symptoms that always occurred concurrently with others, meaning that they were not primary diseases. Cullen also

excluded diseases of deformity because he felt there was nothing that a physician could do to cure them. Cullen said he enumerated fewer species of diseases than de Sauvages because he felt that de Sauvages often described the same disease under two names. Cullen preferred to name multiple varieties of a single illness when they differed by only a few symptoms rather than naming all of them as separate species.

Treatment of illness was an important element in Cullen's system of classification. Cullen considered diseases as the same only when they could be cured by the remedy. In his mind, a common cure meant that the diseases must have had the same cause. Symptoms also played a role in Cullen's method of organization. Cullen characterized diseases by things a physician could observe externally, rather than by "conjectures to the internal state of the body" (Cullen, 1800, p. xvii).

Cullen felt it was important to refer to diseases in commonly used terms. He also tried to include synonyms to the named diseases to allow for their recognition by a greater number of people. He also felt that it was frivolous to make up many new names for diseases, as, in his opinion, was done by Vogel. Cullen admitted that his work might have been flawed but hoped that future nosologists could use it as an accurate base on which to build more sophisticated systems of disease classification.

## **Diseases in Common**

The systems of de Sauvages, Linnaeus, Vogel, and Cullen overlap a great deal. One wonders if cultural differences, as Linnaeus was from Sweden, Vogel was from Germany, de Sauvages from France and Cullen from Scotland, separate what the four nosologists wrote or if they were truly describing the same phenomena. Language also has an impact on what was written. All of these nosologists wrote in Latin and were then translated into other languages. For instance, de Sauvages' *Nosologia Methodica*, written in 1763, was examined in its French translation published in 1772 for this thesis. As different people endeavored to translate the writings of our nosologists, their word choices influence our understanding of what the nosologists were trying to say. We now undertake a comparison of a few of the mental diseases that were described by most or all of these physicians and what their English translations both say and mean. We are using these diseases to illustrate some of the problems faced by nosologists rather than performing an exhaustive comparison of all of these systems.

### **Vertigo**

Today we describe vertigo as “a sensation of motion in which the individual or the individual’s surroundings seem to whirl dizzily or a dizzy confused state of mind” (Merriam-Webster Online). Today, vertigo is no longer considered a mental illness and its only appearance in the fourth edition text revision of the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV-TR), published in 2000, is as a symptom of other primary disorders. The word vertigo originates from the Latin *vertere* which means to

turn (Merriam-Webster). Linnaeus described vertigo a “false perception of circular whirling or dizziness.”<sup>1</sup>

De Sauvages gave us several translations of vertigo. The Greeks identified this illness as *Dinos*, *Scotodinos*, or *Scotoma*, and in French as it was known as *Vertige*, *Tournoiement de tête*. His opening line describes vertigo as “a hallucination that makes objects that are at rest appear to move and swirl around us”.<sup>2</sup> De Sauvages attributed vertigo to a problem in the retina, which is odd considering that his system was based on symptoms rather than causes or locations in physical organs. However, being that vertigo causes objects to appear to move, it is somewhat logical to look at the eye for its cause. De Sauvages identified seven different types of vertigo, including vertigo caused by an abundance of blood, from indigestion, from hysteria or a sensitivity of the nerves, from fear, caused by a blow, caused by poison, caused by excess serum in the brain, or caused by syphilis.

Vogel had a brief description of vertigo that said “imagining that everything he sees revolves around himself.”<sup>3</sup>

De Sauvages further endeavored to provide several treatments for vertigo, but it seems that all three physicians were describing the same sensation that we identify as vertigo today. Cullen does not describe vertigo in his work. Perhaps he did not consider it a primary illness in and of itself, but as a symptom of other illnesses, as we do in the twenty-first century.

## **Hypochondria**

Hypochondria was described by de Sauvages, Linnaeus and Cullen. Linnaeus called this disorder hypochondriasis and said people afflicted with it “Imagine that a bad, lethal fate will quickly occur.”<sup>4</sup> De Sauvages identified other names of *hypochondriasis*, including, *Hypochondriacismus* (d’Huxham), *Ipocondria* (Cocchi), *Hypochondriaca passio* (Latin), *Mirachia* (Arabic), and from the French, *Hypocondrie*, *Les maladies Hypocondriaques*, *vaporeux*, *maladies imaginaires*; and *Melancholia hypochondriaca*. De Sauvages said, “Hypochondria is a chronic disease accompanied by pulsating heart, rumblings and other lightweight ailments that change without any obvious cause but never the less, make the patient fear for his life.” Cullen called hypochondria, “Dyspepsia, with languor, dejection of mind, and fear, arising from inadequate causes, in persons of a melancholic temperament.” (Cullen, 1800). Cullen also said that it was difficult to distinguish dyspepsia, hypochondriasis and hysteria from one another, although he classified dyspepsia and hypochondriasis in the class *Neuroses*, while hysteria is under the *Adynamiae* (weakness) class.

All of these definitions recognize that the hypochondriac patient experiences unfounded fear. Cullen, however, extended his idea of hypochondria to occurring primarily in people with certain temperaments. This echoes back to the opinions expressed by Sydenham nearly a century earlier. Sydenham felt, and Cullen seemed to agree, that hypochondria was most often experienced by people with a delicate temperament. It is interesting, however, that while Sydenham felt that hypochondria and hysteria shared most features, only Cullen also included hysteria in his nosology, and it was not even in the same class as hypochondria. Sydenham’s main division between the

two diseases was the sex each affected. However, classifying diseases by sex was still in vogue during the eighteenth century, as evidenced by both Linnaeus' and Cullen's distinction between satyriasis and nymphomania.

The DSM-IV-TR defines hypochondriasis as “preoccupation with fears of having, or the idea that one has, a serious disease based on a misinterpretation of one or more bodily signs or symptoms” (2000). This differs slightly from the eighteenth century definitions. The current definition of hypochondria does not focus on death, but rather on the idea of being unwell. With the availability of the internet today, hypochondriacs have a plethora of information and opportunities to find ailments from which they may suffer.

## **Disorders of Eating and Drinking**

### **Pica.**

Nourishing the body is of key importance to survival, yet some people eat things that provide no nutritive value. De Sauvages defined Pica as “Depraved appetite, weird taste. This disease is a common aversion to the food, and in an appetite for those unusual and harmful.”<sup>5</sup> De Sauvages provided us with other names by which this affliction has been identified. For instance, Roderic de Castro called it *Picaceus appetites*. It was called *Picatio* by the Barbares (barbarians), *Cizza*, *pitta*, *malacia*, *chittesis* by the Greeks and in French was known as *Appétit bizarre*. De Sauvages goes on to further describe the symptoms of pica, which are twofold. The first is loss of appetite for ordinary food, accompanied by a desire for “ridiculous” things. Even Hippocrates recorded cases of people eating odd things, for instance a pregnant woman who only ate dark bread, and

another who only ate herring. Hippocrates also saw people who only ate silt, or human excrement (de Sauvages, 1772).

Cullen identified pica in his Fourth Class, *Locales*, and in Order Two, *Dysorexia*, which he defined as false or defective appetite. Cullen calls pica, “A desire of eating that what is not food.” Cullen said that he was not very familiar with pica and referred back to the works of de Sauvages for his categorization of different types of pica.

Vogel’s definition of pica shows up in Class Seven, *Hyperaesthises*, as “the smell of certain food that produces a severe longing of it.”<sup>6</sup> This seems to differ significantly from the definition provided by de Sauvages. De Sauvages and Cullen agreed that in pica, people eat non-nutritive substances. Vogel, however, seems to be describing just a craving for normal food. Further into de Sauvages discussion of pica, he noted that people who are denied the items they desire to eat become extremely anxious, which picks up Vogel’s element of severe longing. De Sauvages cited Zacutus Lusitanus as the source of the story of a person’s daughter who said that when her father could not obtain the human excrement he felt impelled to eat, he acquired shooting pains in his heart.

Although Vogel, de Sauvages, and Cullen are all attempting to categorize diseases, even when they used the same term, they did not always mean the same thing. The difference in culture between de Sauvages and Vogel (French versus German) led to definitions that did not seem to describe entirely the same disorder. Even though they were writing in the same period, their definitions differed either by culture or intention. One wonders if de Sauvages and Vogel are really describing the same illness. The DSM-IV-TR (2000) says that pica can be diagnosed when a person eats nonnutritive substances

on a persistent basis for at least one month. However, in contrast to de Sauvages' definition, the current definition says that there is no aversion to food even though people with pica are eating nonnutritive substances.

Although Linnaeus discusses several disorders related to eating, including citta, bulimus, and polydipsia, he makes no mention of pica in his writings. We can only speculate as to why this was left out of his nosology. Perhaps he had never encountered a case of pica, or felt that it was encompassed in one of his other disorders, although examination of their definitions does not lead to an immediate link.

#### **Pica versus citta.**

While Linnaeus never used the term pica in his system, he did describe a related disorder called citta. If we accept Pulteney's definition (1805) of citta, "Longing for things not esculent," we may believe that this is just another term that could be substituted for pica. However, when we look more closely at the Latin words chosen by Linnaeus<sup>7</sup>, it seems as though an accurate translation is really the "desire to vomit good food." These interpretations are not at all the same and seem to be describing two different disorders. Pulteney interpreted that citta, to Linnaeus, was equivalent to the pica described by de Sauvages and later Cullen. However, a direct translation of Linnaeus seems to be describing a feature of the binge-purge type of bulimia nervosa. While Linnaeus does not make mention of uncontrolled eating, he does describe the purgative behavior seen in binge-purge bulimia nervosa. In the twenty-first century, purging is often used as an ineffectual and dangerous mechanism to control weight. Although appearance is important throughout the ages, was purging also used to control weight in the eighteenth century? Why did Pulteney make no mention of vomiting in his

translation of *citta*? Did he assume that Linnaeus was following the convention of other nosologists of the time, even though his words did not describe the same phenomenon? Perhaps the author is interpreting Linnaeus too literally. While we may never know what Linnaeus intended to describe, this discrepancy calls our attention, once again, to the necessity for a consistent system.

### **Bulimia.**

Linnaeus, de Sauvages and Cullen all named a disorder called bulimia. Pulteney (1805) translates the Linnean definition of bulimia as, “voracious appetite” and the author has translated it to mean, “Insatiable longing for food.”<sup>8</sup> These seem to be consistent but certainly do not describe the behavior we identify as bulimia today. Linnaeus’ definition of bulimia also differs drastically from *citta*, by the interpretation of this author.

De Sauvages called bulimia “canine hunger.”<sup>9</sup> He goes on to describe it as a hunger that leads us to eat beyond what our stomach can digest or eating without consulting one’s appetite. De Sauvages even described what he saw an appropriate amount of food to consume each day, approximately one-twenty-fifth of a person’s body weight.

Cullen defined bulimia as “Appetite for a greater quantity of food than can be digested.” This once again shows the great influence de Sauvages had on other nosologists, as the translations are almost exactly the same.

The DSM-IV-TR defines bulimia nervosa’s essential features as binge eating followed by inappropriate compensatory methods to prevent weight gain. Examples of compensatory behaviors are vomiting, fasting and excessive exercise and the

inappropriate use of laxatives. Individuals who suffer from bulimia evaluate themselves excessively based on body shape and weight (2000). Perhaps our current understanding of the disease is just a combination of bulimia and citta as described by Linnaeus. The title of a disease may remain the same, but time, culture and language can change our interpretation.

### **Polydipsia.**

Polydipsia is one of the illnesses that all four nosologists included as part of their systems of diseases. De Sauvages defined polydipsia as “Excessive thirst. This disease consists of an excessive desire to drink.”<sup>10</sup> He told us that polydipsia often presented in combination with, or as a symptom of, another disease rather than by itself. When he described the types of polydipsia, de Sauvages (1772) mentioned that Boerhaave identified the one that is accompanied by fever. Other presentations are hydroptica polydipsia, in which it accompanied inflammation or diabetes, and fluxuum polydipsia, which occurred when the patient also presented with dysentery, diarrhea and excessive perspiration, and veneno polydipsia, which resulted from the bite of the Lucian snake.

Linnaeus defined polydipsia as “continued longing for drink.”<sup>11</sup> Vogel’s description was “a continuous desire to drink.”<sup>12</sup> Cullen similarly described polydipsia as “preternatural thirst.” He goes on to say that the disease is generally symptomatic and varies according to what other disease it accompanies.

Our four nosologists are in agreement as to the definition of polydipsia but it is very interesting that polydipsia is included in a section on mental diseases. Both de Sauvages and Cullen recognized that it usually occurs only in combination with another

pathology, and de Sauvages, at least, defines all the accompanying diseases as physical in origin. Polydipsia is not mentioned in the DSM-IV-TR as either a disorder or a symptom.

## **Amentia**

De Sauvages gave us many synonyms for amentia in *Nosologie Methodique*. In Greek, it would be referred to as *Paranoia*, in Latin, it would be called *Dementia*, *Fatuitas*, or *Vecordia*. In French amentia was referred to as *Imbécillité*, *bêtise*, *niaiserie*, or *démence*. Those afflicted with amentia are called *amentes*, *dementes*, *imbeciles animo*, *fatui*, *Imbécilles*, *niais*, *fous*, and *insensés*. De Sauvages said of amentia “This is a disease that disturbs the reason and judgment.”<sup>13</sup> De Sauvages further differentiates amentia from stupidity, mania and melancholy.

Linnaeus described amentia as “to be chronically of universally unsound mind, but harmless.”<sup>14</sup> Vogel grouped anonia with amentia and defined them both as “Imagination or mind, ruined and in fact removed and unable to hear reason.”<sup>15</sup>

Cullen included amentia as part of order 4, *Vesaniae* in Class 2, *Neuroses*. Rather than providing his own definition of the disorder, he referred to the definitions of Vogel, Linnaeus, and de Sauvages. De Sauvages divided amentia into twelve different subtypes. Cullen agreed with the first three, which were amentia *congenital*, *senilis* and *acquisita* but said that the other types identified by Sauvages did not belong in a systematic nosology because their internal causes could not be ascertained by looking at external symptoms, such as amentia caused by tumors. (Cullen, 1800) Rather than viewing this as a weakness of Sauvages, we must remember that Sauvages took a symptomatic

approach to classifying disease while Cullen chose to look at both symptoms and causes. Amentia receives no mention at all in the DSM-IV-TR (2000).

### **Melancholy & Nostalgia**

De Sauvages introduced melancholia in his Third Order of Class Eight. He said melancholia was also called melaina (black) and chole (bile). In French it was known as mania madness because it was accompanied by sadness rather than delirium.

Hippocrates called this affliction mania. De Sauvages said that we should really refer to patients as melancholic maniacs. He said “Melancholic patients, also known as maniacs, focus continually on the object of their delirium but reason fairly well on other topics.”<sup>16</sup> De Sauvages later went on to say mania was not always accompanied by grief or sorrow, which differentiated it from melancholy.

Linnaeus defined melancholia as “Chronic partial insanity that is sad or sorrowful.”<sup>17</sup> Therefore, Linnaeus subscribed to the more accepted definition for melancholy used today. As defined in Merriam-Webster, laymen today consider melancholia as, “A mental condition and especially a manic-depressive condition characterized by extreme depression, bodily complaints, and often hallucinations and delusions.” The DSM-IV-TR identifies the possibility of melancholic features in some instances of Major Depressive Disorder and Bipolar Disorder. When melancholic features occur with depression, an individual exhibits a loss of interest or pleasure in nearly all activities, and a lack of reactivity to pleasurable stimuli (2000).

Vogel addressed melancholy in section 9, *Paranoiae*. He defined melancholia as “Long-term insanity with sadness, fear or dread.”<sup>18</sup> Vogel considered nostalgia as a sub-type of melancholia.

While Vogel included nostalgia as a type of melancholy, de Sauvages, Linnaeus and Cullen all considered it a separate disorder. Linnaeus even included melancholy and nostalgia in separate orders, with melancholy in Order One, *Ideales*, and nostalgia in Order Three, *Pathetici*. Linnaeus called nostalgia a longing for your homeland and relations when you are away from them, but Pulteney called it simply, “Swiss malady.” Pulteney’s translations of Linnaeus often seem to be either too brief or somewhat off target. Though Pulteney was not focused solely on *Genera Morborum*, it seems as though he was not overly concerned with accuracy. However, it may be that things considered common knowledge during his time have not endured to the present day, making his interpretations seem more flawed now than they were in his time.

Cullen said nostalgia was, “In people absent from their native country, a vehement desire of revisiting it.” De Sauvages called nostalgia an oddity that makes people away from their homeland greatly desire to return and if they cannot, they fall into grief accompanied by insomnia, anorexia and “other untoward symptoms.” De Sauvages defined several different types of melancholy, including those due to love, as with Don Quixote and his Dulcinea, religion, or due to imaginary disease like that experienced by hypochondriacs, among many others. One wonders why longing for country is separated from longing for all other things. Perhaps Vogel was correct to include nostalgia as a type of melancholia. A strictly symptomatic approach to disease, which we are to believe is the basis for the nosologies of de Sauvages and Linnaeus, would observe the longing

or pining in melancholy as the same basic ailment as that in nostalgia, with homeland as the subject of nostalgia while other things may be the subject of other melancholics.

## Summary and Conclusions

While Vogel, de Sauvages and Linnaeus seemed satisfied to keep their nosologies completely symptomatic, Cullen began the movement toward identifying the cause of diseases in addition to the symptoms associated with them. Cullen expressed frustration in his work because of this. He often mentioned that he felt that the other systems had misplaced diseases. Cullen's nosology moved more toward a modern classification system. For instance, anorexia, or the lack of eating, can have very different causes. Today, we consider it a mental illness if it is caused by a desire for control over the body or to keep the body thin because of an unattainable or distorted view of the body. However, if a polyp in a person's esophagus caused them to refuse food, we would not consider this type of anorexia to be a mental illness, but rather the result of a physical ailment. The physical obstruction would put this anorexia fully in the medical, rather than psychological realm. By the systems of Vogel, de Sauvages & Linnaeus, both of the aforementioned cases would fall under anorexia because of their exclusively symptomatic approach. Modern health care providers would come up with entirely different treatment plans in the two cases, one which would most likely involve cognitive-behavioral therapy, and the other which would likely be surgical.

Because of the different approaches, it becomes more difficult to compare Cullen's nosology with the other three under consideration. Cullen mentioned this problem many times throughout his written work. The current widely accepted system of classifying mental illnesses is the DSM-IV-TR. The DSM has adopted a categorical classification system that is separated by defining features of the disorders within a category. However, none of the categories are mutually exclusive, and not all individuals

with a particular disease exhibit all of the same symptoms. The goal of the DSM-IV-TR (2000), as stated in its introduction, is to provide a “helpful guide to clinical practice.” While in the “medical” world, modern health care providers nearly always seek the cause of the disease, the mental health world remains a more symptom- or category-based system. When we can isolate a certain physical part of the body that is not working properly, less frustration is seen on the part of the health care provider, because they can focus their efforts on correcting this physical manifestation, be it by surgical excision, medication to alter functioning, or other treatment. Often, the only times today’s doctors begin to examine possible mental causes is when they have exhausted all possible physical causes for disease. This is can be frustrating to both the physician and the patient. Sadly, patients exhibiting mental disorders often see them as a character flaw and weakness. From a psychologist’s viewpoint, we certainly would not blame our patients for an imbalance of neurotransmitters in their brain. However, because there often is no physical cause for mental diseases, it is easy for many patients to blame themselves for the cause of their illness. As we learn more about brain functioning, perhaps we will be able to move society’s perception away from this blame-based approach. As we do not blame the epileptic for their misfiring neurons, neither should we blame the depressive for the depressions they may experience because of neurotransmitter imbalance. We do not blame illiterates for being unable to read if they never had the opportunity to learn to do so, so why would we blame someone with a cognitive distortion? Perhaps they just need to be trained to think about their problem in the proper way. Both of these cases have the possibility of being resolved with proper teaching.

Though flawed, all four of our nosologists developed systematic, orderly approaches to classifying illnesses. They did not have the same resources available to them as medical professionals do today, and therefore a symptom based approach is a logical way to begin to describe and differentiate the myriad of illnesses, both mental and physical, that people experience. While some aspects of the eighteenth-century nosologies are based on antiquated ideas, they gave physicians a framework on which to build and helped greatly to advance diagnosis and the medical profession as a whole. It is doubtful that the DSM would be where it is today without the contributions of early nosologists.

## APPENDIX A

Latin Text of Linnaeus' *Genera Morborum* with Interpretation by Richard Pulteney (RP)  
and Translation and Interpretation by the Author (HM)

Linnaeus	Translation
IV. MENTALES.	IV. Mentales (Mental)
<i>RP: Disturbance in the mental functions.</i>	
I. IDEALES.	I. Ideales (existing in idea, ideal)
<i>RP: Of the judgement principally.</i>	
40. DELIRIUM Insania acuta, transitoria, symptomatica cum febre	40. DELIRIUM (Madness, Delirium) Insania (to be of unsound mind) acuta (sharply, keenly, acutely), transitoria (in passing), symptomatica (symptoms) cum febre (with fever)
<i>RP: DELIRIUM – Symptomatic or febrile insanity.</i>	<i>HM: DELIRIUM – to temporarily be of acutely unsound mind, while having a fever</i>
41. PARAPHROSYNE Insania acuta, peroidica, sine febre.	41. PARAPHROSYNE (delirium or alienation of the mind) Insania (to be of unsound mind) acuta (sharply), periodica (that returns at state times, periodical) sine (without) febre (fever)
<i>RP: PARAPHROSYNE – Without fever.</i>	<i>HM: PARAPHROSYNE (delirium or alienation of the mind) – to periodically be of acutely unsound mind without a fever</i>
42. AMENTIA Insania chronica, universalis, innocua.	42. AMENTIA (the being out of one's senses, beside one's self, madness, insanity) Insania (to be of unsound mind) chronica (chronic, lingering), universalis (belonging to all, the whole, universal), innocua (harmlessly)
<i>RP: AMENTIA – Idiotic insanity.</i>	

43. MANIA Insania chronica,  
universalis, furibunda.

*RP: MANIA –Madness.*

44. DÆMONIA Insania chronica,  
partialis, furibunda, meticulosa,  
de Dæmonibus.

*RP: DAEMONIA – Idea of being  
possessed by daemons.*

45. VESANIA Insania chronica,  
partialis, tranquilla.

*RP: VESANIA – Tranquil,  
partial insanity.*

46. MELANCHOLIA Insania  
chronica, partialis, moesta,  
meditabunda.

*RP: MELANCHOLIA –  
Sorrowful, partial insanity.*

*HM: AMENTIA – to  
chronically be of universally  
unsound mind, but harmless*

43. MANIA (madness) Insania  
(to be of unsound mind) chronica  
(chronic, lingering) universalis  
(universal) furibunda (furiously)

*HM: MANIA – to chronically  
be of universally unsound  
mind, in a furious manner*

44. DÆMONIA (devilish) Insania  
(to be of unsound mind) chronica  
(chronic, lingering) partialis  
(partial) , furibunda (furiously),  
meticulosa (frightful, terrible) de  
Dæmonibus (of demonic,  
devilish)

*HM: DÆMONIA – To  
chronically be of partially  
unsound mind in a demonic,  
devilish, furious, frightful and  
terrible manner*

45. VESANIA (madness, insanity  
(very rare)) Insania (to be of  
unsound mind) chronica (chronic,  
lingering) partialis (partial)  
moesta (full of sadness, sad,  
sorrowful, afflicted, dejected,  
melancholy) tranquilla (calm,  
quiet, tranquil)

*HM: VESANIA – To  
chronically be of partially  
unsound mind in a sad &  
calm manner*

45. MELANCHOLIA  
(melancholy) Insania (to be of  
unsound mind) chronica (chronic,  
lingering) partialis (partial)  
moesta (full of sadness, sad,  
sorrowful, afflicted, dejected,  
melancholy) meditabunda  
(earnestly, meditating, designing)

*HM: MELANCHOLIA – to  
chronically be of partially  
unsound mind in an earnestly  
sad or sorrowful manner*

## II. IMAGINARII.

*RP: Of the imagination chiefly.*

### 47. SYRINGMOS Perceptio Soni tinnitantis falsi.

*RP: SYRINGMOS – Imaginary  
sound.*

### 48. PHANTASMA Perceptio Visibilis objecti falsi.

*RP: PHANTASMA – Ocular  
spectra.*

### 49. VERTIGO Perceptio circumgyrationis falsæ.

*RP: VERTIGO – Giddiness.*

### 50. PANOPHOBIA Imaginatio mali præsentis in solitudine.

*RP: PANOPHOBIA –Fear of  
being alone.*

## II. IMAGINARII

(That exists only in imagination  
or appearance, fancied, seeming,  
fancied, imaginary)

### 47. SYRINGMOS (hollow) Perceptio (perceived, observed) Soni (sound) tinnitantis (ringing, jingling, tingling) falsi (fraud, untrue, erroneously, unfaithfully, wrongly, falsely)

*HM: SYRINGMOS – to  
perceive a false, hollow  
ringing sound*

### 48. PHANTASMA (An apparition, spectre, phantom, or an image of an object) Perceptio (perceived, observed) visibilis (that can be seen, visible) objecti (oppose or throw away) falsi (fraud, untrue, erroneously, unfaithfully, wrongly, falsely)

*HM: PHANTASMA – to  
perceive visible objects that  
are not there, in today's  
vernacular, visual  
hallucination*

### 49. VERTIGO (a whirling of the head, giddiness, dizziness, vertigo) – Perceptio (perceived, observed) circumgyrationis (around circular) falsæ (fraud, untrue, erroneously, unfaithfully, wrongly, falsely)

*HM: VERTIGO – to falsely  
perceive a circular whirling  
of the head or dizziness*

### 50. PANOPHOBIA (non-specific fear, fear of everything)

Imaginatio (a mental image,  
fancy, imagination) mali (badly,  
ill, wrongly, wickedly,  
unfortunately, erroneously,  
improperly) præsentis (to feel or  
perceive beforehand, to have a  
presentiment of to presage,  
divine) in solitudine (alone,

51. HYPOCHONDRIASIS

Imaginatio fati lethalis e levi malo; Borborygmi (99), Ructus (200) acidi, Palpitationes (108) Præcordia tremula, Persuasio.

*RP: HYPOCHONDRIASIS – Apprehension of dying, without adequate causes.*

52. SOMNAMBULISMUS

Imaginatio somniantis fortior, qua motus voluntarii excitantur.

*RP: SOMNAMBULISMUS – Sleep-walking.*

III. PATHETICI

*RP: Irregular desires.*

53. CITTA Appetitus Esculenti ingerendi.

*RP: CITTA – Longing for things not esculent.*

54. BULIMUS Appetitus Cibi inexplebilis.

*RP: BULIMUS – Voracious*

solitary, loneliness, being left alone, deserted, state of want, destitution, deprivation)

*HM: PANOPHOBIA – to imagine a bad feeling of impending loneliness & desertion.*

51. HYPOCHONDRIASIS

Imaginatio (a mental image, fancy, imagination) fati (destiny, fate) lethalis (deadly, fatal, mortal) e (and) levi (light, swift, small, fickle) malo (bad, ill, wrong, wicked)

*HM: HYPOCHONDRIASIS – to imagine a swift, lethal, bad or fatal destiny*

52. SOMNAMBULISMUS

(sleep, dreams) Imaginatio (a mental image, fancy, imagination) somniantis (sleepy, drowsy) fortior (strong, powerful), qua (as well, with) motus (a moving, motion) voluntarii (willing, free will, voluntary) excitantur (to call out or forth, to bring out, to raise up, wake)

*HM: SOMNAMBULISMUS – to have strong, powerful dreams with voluntary motion that wakes you (nightmares or night terrors?)*

III. PATHETICI

(Full of pathos, affecting, pathetic)

53. CITTA Appetitus (passionate, eager longing or desire for a thing) Esculenti (fit for eating, good to eat, edible) ingerendi (to vomit)

*HM: CITTA – desire to vomit good food*

54. BULIMUS (great hunger, weakness of the stomach, fainting) Appetitus (passionate, eager longing or desire for a

- appetite.*
55. POLYDIPSIA Appetitus Potus continuus.  
*RP: POLYDIPSIA – Unquenchable thirst.*
56. SATYRIASIS Appetitus Veneris enormis.  
*RP: SATYRIASIS – Uncontrollable lust.*
57. EROTOMANIA Desiderium Amantium pudicum.  
*RP: EROTOMANIA – Sentimental love.*
58. NOSTALGIA Desiderium Patriæ Affiniumve.  
*RP: NOSTALGIA – Swiss malady.*
59. TARANTISMUS Desiderium Choreæ (sæpe a morsu Insecti).  
*RP: TARANTISMUS – Madness occasioned by the bite of an insect.*
60. RABIES Desiderium Mordendi lacerandique innocuus (sæpe a thing) Cibi (food) inexplebilis (insatiable)  
*HM: BULIMUS – Insatiable longing for food*
55. POLYDIPSIA (Excessive or abnormal thirst) Appetitus (passionate, eager longing or desire for a thing) Potus (drinking) continuus (successive, continus)  
*HM: POLYDIPSIA – continued longing for drink, constant thirst*
56. SATYRIASIS (excessive sexual excitement, lascivious madness, priapism) Appetitus (passionate, eager longing or desire for a thing) Veneris (love) enormis (immoderate, immense, irregular, enormous)  
*HM: SATYRIASIS – Enormous desire for love or sex*
57. EROTOMANIA Desiderium (longing, ardent desire) Amantium (lovers) pudicum (shamefaced, modest, chaste, virtuous)  
*HM: EROTOMANIA – Longing for chaste lovers*
58. NOSTALGIA Desiderium (longing, ardent desire) Patriæ (homeland) Affiniumve (relations)  
*HM: NOSTALGIA – longing for your relatives and homeland*
59. TARANTISMUS Desiderium (longing, ardent desire) coreæ (dance) (sæpe [hedge, fence] a morsu (biting) insecti (insect)  
*HM: TARANTISMUS – desire to dance from a biting insect*
60. RABIES (rage, madness, frenzy) Desiderium (longing,

*morsu Mammalis).*

*RP: Canine madness.*

61. HYDROPHOBIA Aversatio Potulentorum cum Rigore (117), & Sardiasi (101) (*sæpius præcedenti maritata*).

*RP: Horror of drinking.*

62. CACOSITIA Aversatio Cibi cum horrore.

*RP: Aversion from food.*

63. ANTIPATHIA Aversatio objecti particularis.

*RP: Unconquerable aversion from particular objects.*

64. ANXIETAS Aversatio rerum mundanarum (*Cordis dolor*).

*RP: Wearisomeness of life.*

ardent desire) Mordendi (biting) lacerandique (tear, pull off) innocuous (harmless) (*sæpe* (hedge, fence) a morsu (biting) Mammalis (of or for the breasts)

*HM: RABIES – Harmless longing to bite (the breast)*

61. HYDROPHOBIA (dread of water) Aversatio (a turning of oneself away, aversion) Potulentorum (drinkable) cum (with) Rigore (stiffness, rigidity) 117 & Sardiasi 101 (*sæpius* (often) *præcedenti* (the preceding) *maritata* (married to a))

*HM: HYDROPHOBIA – Rigid aversion to drink or water*

62. CACOSITIA (go to stool, defile) Aversatio (a turning of oneself away, aversion) cibi (food) cum (with) horrore (horror)

*HM: CACOSITIA – horrified aversion to food*

63. ANTIPATHIA (Counteraction) Aversatio (a turning of oneself away, aversion) objecti (oppose or throw away) particularis (particular)

*HM: ANTIPATHIA – aversion to a particular thing*

64. ANXIETAS (care, anxiety) Aversatio (a turning of oneself away, aversion) rerum (of things) mundanarum (worldly) (*cordis* (of the heart) *dolor* (pain, grief)

*HM: ANXIETAS – aversion of worldly things (especially those that cause grief or a broken heart)*

## APPENDIX B

### Original Language Text of English Translations

<sup>1</sup> *Perceptio circumgyrationis falsi.*

<sup>2</sup> *C'est une hallucination qui fait que les objets qui sont en repos paroissent se mouvoir & tourner autour de nous*

<sup>3</sup> *Imagination, qua omnia homini cum semetipso circumagi videntur*

<sup>4</sup> *Imaginatio fati lethalis e levi malo*

<sup>5</sup> *Appétit iscount, isc bizarre. Cette maladie consiste dans une aversion pour les alimens ordinaires, and dans un appétit pour ceux qui sont inusités & nuisibles.*

<sup>6</sup> *Certi cibi assumendi, aut rei olfaciendae vehemens desiderium.*

<sup>7</sup> *Appetitus Esculenti ingerendi.*

<sup>8</sup> *Appetitus Cibi inexplebilis.*

<sup>9</sup> *Faim canine*

<sup>10</sup> *Soif excessive. Cette maladie consiste dans un désir excessif de la boiffon.*

<sup>11</sup> *Appetitus Potus continuus*

<sup>12</sup> *Continuum potus desiderium*

<sup>13</sup> *C'est une maladie qui trouble la raison & le jugement.*

<sup>14</sup> *Insania chronica, universalis, innocua.*

<sup>15</sup> *Imaginationis vel mentis occasus atque priuatio, qua iam ab ipso ortu affecti vix mentis inopia loqui iscount.*

<sup>16</sup> *Les melancolique, ou plutoto les maniaques, sont ceux qui revent continuellement a l'objet de leur delire, & raisonnent assez bien sur tous les autre.*

<sup>17</sup> *Insania chronica, partialis, moesta, meditabunda.*

<sup>18</sup> *Insania longa cum moestitia ac timore, Nostalgia eius species est.*

APPENDIX C

The Nosologies of Mental Illness of de Sauvages, Linnaeus, Vogel and Cullen in the order given by their authors

De Sauvages	Linnaeus	Vogel	Cullen
<b><u>Class 8</u></b>	<b><u>Class IV – Mentales</u></b>	<b><u>Class 7 – Hyperaesthises</u></b>	<b><u>Class 2 – Neuroses</u></b>
<b>1<sup>st</sup> Order</b>	<b>Order 1 – Ideales</b>	V-7-285-Antipathia	<b>Order 1 – Comata</b>
S-8-1-Hallucinations	L-5-1-Delirium	V-7-286-Agrypnia (Insomnia)	C-2-1-41-Apoplexia
S-8-1-Vertigo	L-5-1-Paraphrosyne	V-7-287-Phantasma	C-2-1-42-Paralysis
S-8-1-Suffusio	L-5-1-Amentia	V-7-288-Caligo	<b>Order 2 – Adynamiae</b>
S-8-1-Diplopia	L-5-1-Mania	V-7-289-Haemalopia	C-2-2-43-Syncope
S-8-1-Syrigmus	L-5-1-Daemonia	V-7-290-Marmaryge	C-2-2-44-Dyspepsia
S-8-1-Hypochondriasis	L-5-1-Vesania	V-7-291-Dysopia	C-2-2-45-Hypochondriasis
S-8-1-Somnambulismus	L-5-1-Melancholia	V-7-292-Susurrus	C-2-2-46-Chlorosis
<b>2<sup>nd</sup> Order</b>	<b>Order 2 – Imaginari</b>	V-7-293-Vertigo	<b>Order 3 – Spasmi</b>
S-8-2-Morositates	L-5-2-Syringmos	V-7-294-Apogeusia	C-2-3-47-Tetanus
S-8-2-Pica	L-5-2-Phantasma	V-7-295-Polydipsia	C-2-3-48-Trismus
S-8-2-Bulimia	L-5-2-Vertigo	V-7-296-Vulimus	C-2-3-49-Convulsio
S-8-2-Polydipsia	L-5-2-Panophobia	V-7-297-Addephatia	C-2-3-50-Chorea
S-8-2-Antipathia	L-5-2-Hypochondriasis	V-7-298-Cynorexia	C-2-3-51-Raphania
S-8-2-Nostalgia	L-5-2-Somnambulismus	V-7-299-Allotriophagia	C-2-3-52-Epilepsia
S-8-2-Panophobia	<b>Order 3 – Pathetici</b>	V-7-300-Malacia	C-2-3-53-Palpitiatio
S-8-2-Satyriasis	L-5-3-Citta	V-7-301-Pica	C-2-3-54-Asthma
S-8-2-Nymphomania	L-5-3-Bulimus	V-7-302-Bombus	C-2-3-55-Dyspnoea
S-8-2-Tarantismus	L-5-3-Polydipsia	V-7-303-Celsa	C-2-3-56-Pertussis
S-8-2-Hydrophobia	L-5-3-Satyriasis	<b><u>Class IX. Paranoiae</u></b>	C-2-62-Hysteria
<b>3<sup>rd</sup> Order</b>	L-5-3-Erotomania	V-9-329-Athymia	C-2-3-63-Hydrophobia
S-8-3-Deliria	L-5-3-Nostalgia	V-9-330-Delirium, PARAPHROSYNE	<b>Order 4-Vesaniae</b>
S-8-3-Paraphrosine	L-5-3-Tarantismus	V-9-331-Mania	C-2-4-64-Amentia
S-8-3-Amentia	L-5-3-Rabies	V-9-332-Melancholia	C-2-4-65-Melancholia
S-8-3-Melancholia	L-5-3-Hydrophobia	V-9-333-Ecstasis	C-2-4-66-Mania
S-8-3-Daemonomania	L-5-3-Cacositia	V-9-334-Ecplexis	C-2-4-67-Oneirodynia
S-8-3-Mania	L-5-3-Antipathia	V-9-335-Enthusiasmus	<b><u>Class 4-Locales</u></b>

<b>4<sup>th</sup> Order</b>	L-5-3-Anxietas	V-9-336-Stupiditas, Morosis, Fatuitas	<b>Order 1- Dysaesthesiae</b>
S-8-4-Amnesia		V-9-337-Amentia, Anoia	4-1-94-Pseudoblepsis
S-8-4-Agrypnia		V-9-338-Obliuio	4-1-96-Paracusis
		V-9-339-Somnium	<b>Order 2-Dysorexiae</b>
		V-9-340-Hypnobatasis	C-4-2-100-Bulimia
			C-4-2-101-Polydipsia
			C-4-2-102-Pica
			C-4-2-103-Satyriasis
			C-4-2-104- Nymphomania
			C-4-2-105-Nostalgia
			C-4-2-106-Anorexia
			C-4-2-107-Adipsia
			C-4-2-108- Anaphrodisia

APPENDIX D

Mental Diseases Listed Alphabetically allowing for comparison of the systems of de Sauvages, Linnaeus, Vogel and Cullen

<b>Disorder</b>	<b>de Sauvages</b>	<b>Linnaeus</b>	<b>Vogel</b>	<b>Cullen</b>
Addephatia			Class 7, #297	
Adipsia				Class 4, Order 2, #107
Agrypnia	Class 8, Order 4		Class 7, #286	
Allotriophagia			Class 7, #299	
Amentia	Class 8, Order 3	Class 5, Order 1	Class 9, #337	Class 2, Order 4, #64
Amnesia	Class 8, Order 1			
Anaphrodisia				Class 4, Order 2, #108
Anorexia				Class 4, Order 2, #106
Antipathy	Class 8, Order 2	Class 5, Order 4	Class 7, #285	
Anxietas		Class 5, Order 3		
Apogeusia			Class 7, #294	
<i>Apoplexia</i>				<i>Class 2, Order 1, #41</i>
<i>Asthma</i>				<i>Class 2, Order 3, #54</i>
Athymia			Class 9, #329	
Bombus			Class 7, #302	
Bulimia	Class 8, Order 2	Class 5, Order 3		Class 4, Order 2, #100
Cacositia		Class 5, Order 3		
Caligo			Class 7, #288	
Celsa			Class 7, #303	
Chlorosis				Class 2, Order 2, #46
<i>Chorea</i>				<i>Class 2, Order 3, #50</i>
Citta		Class 5, Order 3		
<i>Convulsio</i>				<i>Class 2, Order 3, #49</i>
Cynorexia			Class 7, #298	
Delirium	Class 8, Order 3	Class 5, Order 1	Class 9, #330 - a.k.a. Paraphrosyne	
Demonism	Class 8, Order 3	Class 5, Order 1		
Diplopia	Class 8, Order 1			
Dysopia			Class 7, #291	
Dyspepsia				Class 2, Order 2, #44
<i>Dyspnoea</i>				<i>Class 2, Order 3, #55</i>

<b>Disorder</b>	<b>de Sauvages</b>	<b>Linnaeus</b>	<b>Vogel</b>	<b>Cullen</b>
Ecplexis			Class 9, #334	
Ectasis			Class 9, #333	
Enthusiasmus			Class 9, #335	
<i>Epilepsia</i>				<i>Class 2, Order 3, #52</i>
Erotomania		Class 5, Order 3		
Haemalopia			Class 7, #289	
Hallucinations	Class 8, Order 1			
Hydrophobia	Class 8, Order 2	Class 5, Order 3		Class 2, Order 3, #63
Hypnobatasis			Class 9, #340	
Hypochondria	Class 8, Order 1	Class 5, Order 2		Class 2, Order 2, #45
Malacia			Class 7, #300	
Mania	Class 8, Order 3	Class 5, Order 1	Class 9, #331	Class 2, Order 4, #66
Marmaryge			Class 7, #290	
Melancholy	Class 8, Order 3	Class 5, Order 1	Class 9, #332	Class 2, Order 4, #65
Morosis	Class 8, Order 2		Class 9, #336	
Nostalgia	Class 8, Order 2	Class 5, Order 3		Class 4, Order 2, #105
Nymphomania	Class 8, Order 2			Class 4, Order 2, #104
Obliuio			Class 9, #336	
Oneirodynia				Class 2, Order 4, #67
<i>Palpitatio</i>				<i>Class 2, Order 3, #53</i>
Panophobia	Class 8, Order 2	Class 5, Order 2		
Paracusis				Class 4, Order 1, #96
<i>Paralysis</i>				<i>Class 2, Order 1, #42</i>
Paraphrosine	Class 8, Order 3	Class 5, Order 1	Class 9, #330 - a.k.a. Delirium	
<i>Pertussis</i>				<i>Class 2, Order 3, #56</i>
Phantasma		Class 5, Order 2	Class 7, #287	
Pica	Class 8, Order 2		Class 7, #301	Class 4, Order 2, #102
Polydipsia	Class 8, Order 2	Class 5, Order 3	Class 7, #295	Class 4, Order 2, #101
Pseudoblepsis				Class 4, Order 1, #94
<i>Raphania</i>				<i>Class 2, Order 3, #51</i>
Satyriasis	Class 8, Order 2	Class 5, Order 3		Class 4, Order 2, #103
Somnambulismus	Class 8, Order 1	Class 5, Order 2		
Somnium			Class 9, #339	
Suffusio	Class 8, Order 1			
Susurrus			Class 7, #292	
<i>Syncope</i>				<i>Class 2, Order 2, #43</i>
Syrigmus	Class 8, Order 1			
Syringmos		Class 5, Order 2		

<b>Disorder</b>	<b>de Sauvages</b>	<b>Linnaeus</b>	<b>Vogel</b>	<b>Cullen</b>
Tarantismus	Class 8, Order 2	Class 5, Order 3		
Tetanus				Class 2, Order 3, #47
<i>Trismus</i>				<i>Class 2, Order 2, #48</i>
Vertigo	Class 8, Order 1	Class 5, Order 2	Class 7, #293	
Vesania		Class 5, Order 1		Order 4
Vulimus			Class 7, #296	

Disorders in italics are not considered mental illnesses by this researcher.

De Sauvages: Class 8 – Folies

Linnaeus: Class 4 – Mentales. Order 1 – Ideales, Order 2 – Imaginari, Order 3 – Pathetici

Vogel: Class 7 – Hyperaesthises. Class 9 – Paranoiae

Cullen: Class 2 – Neuroses.

Order 1 – Comata, Order 2 – Adynamiae, Order 3 – Spasmi, Order 4 – Vesaniae

Class 4 – Locales.

Order 1 – Dysaesthesia, Order 2 – Dysorexiae.

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