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From Sensibility to Pathology: The Origins of the Idea of Nervous Music around 1800

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Abstract

Healing powers have been ascribed to music at least since David's lyre, but a systematic discourse of pathological music emerged only at the end of the eighteenth century. At that time, concerns about the moral threat posed by music were partly replaced by the idea that it could over-stimulate a vulnerable nervous system, leading to illness, immorality, and even death. During the Enlightenment, the relationship between the nerves and music was more often put in terms of refinement and sensibility than pathology. However, around 1800, this view was challenged by a medical critique of modern culture based on a model of the etiology of disease that saw stimulation as the principal cause of sickness. Music's belated incorporation into that critique was made possible by a move away from regarding music as an expression of cosmic and social order toward thinking of it as quasi-electrical stimulation, something that was intensified by the political and cultural changes unleashed by the French Revolution. For the next hundred and fifty years, nervousness caused by musical stimulation was often regarded as a fully fledged *Zivilisationskrankheit*, widely discussed in psychiatry, music criticism, and literature.

Keywords

music; nerves; sensibility; Brunonianism; Peter Lichtenthal; Thomas Beddoes

Healing powers have been ascribed to music at least since Pythagoras and David's lyre, and probably way beyond that, without (*pace* Foucault) a significant gap in the Middle Ages.¹ However, the notion that music can be bad for the health of listeners has a much patchier history. Anxieties about its dangers have been around since Homer wrote about Odysseus being tied to the mast to hear the sirens, but a systematic discourse of pathological music only really developed at the end of the eighteenth century. At that time, Christian and Platonic concerns about the moral threat posed by music were partly replaced by the idea that it could over-stimulate a vulnerable nervous system, leading to illness, immorality, and even death.² For the next hundred and fifty years, nervousness caused by musical stimulation was often regarded as a fully fledged *Zivilisationskrankheit*, widely discussed in psychiatry, music criticism, and literature. The Nazi concept of "degenerate music" was able to draw on decades of warnings about music and sickness in the work of diverse figures such as Richard von Krafft-Ebing, Friedrich Nietzsche, Max Nordau, Eduard Hanslick, and Thomas Mann.³ However, whereas the history of music therapy has been well served by historians, very little has been written on the origins of the discourse of pathological music.⁴

For most of the eighteenth century, the musical stimulation of the nerves that were the conduit for feeling was generally portrayed as a matter of refinement rather than of pathology, a view that combined an understanding of the role of nerves in listening with older traditions of music as a symbol of order and a regimen for the passions. This was challenged on several fronts around 1800: first, by a model of the etiology of disease that

saw stimulation as the principal cause of sickness, whether from drugs, food, or music, and which developed into a medical critique of modern lifestyle and culture as sick. Secondly, a shift in thinking about the nature of the nerves toward a direct quasi-electrical stimulation model allowed music to be incorporated into that critique. Thirdly, the political and cultural changes unleashed by the French Revolution and the start of bourgeois modernization undermined music's associations with order and led to a new suspicion of sensuality. Fourthly, the link between refined nerves and musical sophistication was undermined by a new Romantic aesthetics of music that emphasized the transcendental quasi-disembodied subject rather than the body. The result of this was that whereas the nerves had been a central part of Enlightenment aesthetics of music, by the early nineteenth century, nervous music was largely the province of doctors, many of whom took a dim view of it. By around 1800, most of the characteristics of the later debate on pathogenic music were already apparent: the understanding of music as a form of direct nervous stimulation, the moralizing tone, the link to modern lifestyles and culture, and the focus on female nerves and sexuality.

The first section of this paper will look at how the Enlightenment combined what was still an essentially Pythagorean view of music as a symbol of cosmic and social harmony with a nerve stimulation model of hearing. The second part of the paper will examine the growing medical critique of sensibility in the eighteenth century, and how music was incorporated into it from the 1790s, at a time when the French Revolution had led to an intensification of that critique. It will then analyze the discourse of music that developed (especially in Germany and Britain) as a potentially dangerous direct nerve stimulant akin to electricity or drugs that spread quickly in the early years of the nineteenth century. After that it will consider the broader changes in attitudes toward music, class, and gender that lay behind the emergence of the idea of pathological music, showing how the genteel sensibility that the Enlightenment promoted, so closely linked to both the idea of sensitive nerves and to music, was largely rejected by 1800 as effeminate for men and potentially hystericizing and pathological for women. Finally, the paper will discuss the relationship between this discourse and the radical changes in musical aesthetics during this period, and look ahead to how the idea of nervous music was adapted and used in the following century.

MUSIC, NERVES, AND SENSIBILITY IN THE ENLIGHTENMENT

For much of the last three thousand years, the Pythagorean notion of music as a question of mathematics and the harmony of the spheres has been more influential than any paradigm that focused on the nerves. At least since Damon of Oa, a contemporary of Socrates, many have argued that music is essentially a matter of order and not of pleasure. Pythagorean and Platonic thinking on music that emphasized ratio and *ethos* and radically played down the role of the body and the senses mostly overshadowed the more empirical approach one sees in the writings of philosophers such as Aristotle and Aristoxenus.⁵ In this context, the medical effects of music were generally seen as positive. It was largely portrayed as an aid to regulating the body and its passions, and its potential sensuality was seen in the first instance as a threat to morality and masculine character rather than to the body. Through the work of Boethius, concepts of universal order dominated medieval thinking on music, and the Renaissance saw a wave of speculative works on the subject. As late as the seventeenth century, Robert Fludd, Johannes Kepler, and Athanasius Kircher expounded theories on music based on the relationship between human microcosm and cosmic macrocosm.⁶

However, other trends were moving thinking about music away from cosmology and toward a more materialist view that placed the nerves, the intersection of body and mind, at its heart. The work of natural philosophers like Vincenzo Galilei, Mersenne, Descartes, and Newton on acoustics and musical temperament marked a shift toward measurement rather than abstract reason,⁷ which Paolo Gozza has described as the 'transition from the "sonorous

number” to the “sonorous body.”⁸ Music was gradually disenchanted and became part of “brute nature” rather than a sign of universal order. World harmony became a mere metaphor, albeit one with continuing influence.⁹ This shift from cosmic harmony to physiology and acoustics was reflected in eighteenth-century music theory. Jean-Philippe Rameau’s 1722 *Traité de l’harmonie* and Johann Mattheson’s *Der vollkommene Capellmeister* of 1739, the most significant works of music theory of the period, both take a sober view of the effect of music that generally eschews metaphysical speculation in favor of an implicit acceptance of a more mechanistic attitude.¹⁰

Especially in the second half of the eighteenth century, the baroque correspondences of Kircher and Descartes were challenged by the more physical and subjective idea of sensibility (*Empfindung*), which was based in important ways on the nerves. With varying admixtures of thinking linked to the Lockean association of ideas, the likes of C. P. E. Bach and Johann Georg Sulzer advocated an aesthetic of feeling, in which music was viewed as a nerve stimulant.¹¹ G. S. Rousseau has demonstrated the importance of neurology in creating the basis for the cult of sensibility, the ideology of sensitivity, politeness, gentility, and feeling that developed in reaction to the violence and bigotry of the previous century.¹² A similar picture can be seen with regard to thinking on the medical use of music. Earlier works on the subject, such as Kircher’s *Musurgia universalis* or later books by people such as Michael Ernst Ettmüller (in 1714) or Friedrich Erhardt Niedten (1717), tend to discuss the medical effects of music in terms of bringing the soul and body into harmony.¹³

However, from the mid-eighteenth century works on the subject such as Richard Brocklesby’s 1749 *Reflections of Antient and Modern Musick*, the 1737 *Memoires* of the French Academy of Sciences,¹⁴ or Ernst Anton Nicolai’s 1745 *Die Verbindung der Musik mit der Arzneygelahrheit*, emphasized the power of music on the nerves. As Penelope Gouk has observed, one of the first to emphasize nerves in an explanation of music’s effects was Richard Browne in his 1729 *Medicina Musica*, which assumed that music’s power over emotions was experimentally verifiable, that the body worked on Newtonian principles, and, crucially, identified nerves as responsible for music’s emotional impact, as the following extract from Browne’s book shows:¹⁵

Sounds then may be supposed to rise from small Vibrations, or tremulous Motions of the Air, and to be propagated in Undulations; and these being collected by the external Ear, are from thence carry’d through the auditory passage to the Drum, on which beating, the four little Bones that are thereby mov’d and they move the internal Air, which, according to Degree of Motion, makes an Impression of the Auditory Nerves in the Labyrinth and Cochlea, so that according to the various Refractions of the external Air, the internal Air makes various Impressions upon the Auditory Nerve, the immediate Organ of Hearing, and these different Impressions represent to the Mind different sorts of Sound.¹⁶

Although the idea of nerve stimulation had become the implicit basis of much late Enlightenment thinking on music, it is striking how much of the Pythagorean tradition was maintained in the context of sensibility.¹⁷ The notion that music “refined” the nerves can be seen as a continuation of the view of music as the alignment of the human microcosm and the social and cosmic macrocosm using the terminology of early modern neurology, something that was reflected in the rhetoric of “sympathy” and order. In the context of the culture of sensibility, feeling was generally considered to be a question of having sensitive nerves.¹⁸ Thus, until the 1790s, writers dealing with music and body may have used the language of nerves, but they still, for the most part, regarded music as a model of order, morality, and health as much as any Neo-Platonist, seeing it as a means of refining the nerves and of calming unhealthy passions, including sexual ones.

Although more hostile voices, such as Jean-Jacques Rousseau and the Scot John Gregory, complained that modern music had lost its moral purpose,¹⁹ Enlightenment aestheticians and physicians often explicitly stated that music refined listeners' nerves and their morals.²⁰ The Edinburgh Professor of Physic Robert Whytt was just one of many physicians to suggest that music was good for the nerves.²¹ Similarly, eighteenth-century dietetic books, such as J. Fothergill's *Rules for the Preservation of Health* of 1762 or J. Mackenzie's 1760 *The History of Health, and the Art of Preserving It* recommended music as a healthy exercise and raised no doubts as to its beneficial effect.²² Browne's *Medicina Musica* provides one example of the argument that sensitive nerves are necessary to appreciate music at all.²³ It is striking that even those eighteenth-century physicians who worried most about the effect of sensibility on the body tended to argue that music was essentially good for the nerves. For instance, S. A. D. Tissot, in his influential *De l'influence de passions de l'ame*, was notably positive about music's impact.²⁴ Also, in sharp contrast to much nineteenth-century medical opinion on the effect of music on the fairer sex, the Italian music theorist Tartini suggested that music should be studied by young ladies in particular because it "appeases the nerves."²⁵

Although nerves were gradually replacing the passions as the focus of music therapy, when the possible dangers of music were raised, it was generally in the context of what might be called "moral physiology," arguing that music could inflame passions that in turn could make listeners ill, not that it was itself a direct stimulant. As Tissot put it, "If music can encourage virtue, still passions and heal moral and physical sicknesses, it is no wonder that it is also able to raise passions to a high level."²⁶ An instance of this moral physiology can be found in Johann Georg Friedrich Franz's 1770 *Abhandlung von dem Einflusse der Musik*, which suggested that, "chromatic music ... is extremely dangerous for people's health" because it makes one drunk and overheated in passion.²⁷ Franz was drawing on a long tradition of medical suspicion of the passions, going back at least to Galenic non-naturals, but on the whole, music was portrayed as a means of calming the passions. In *Twelfth Night*, Shakespeare provided the most famous single example of this attitude, portraying music as a cure for sensuality and love melancholy, with Duke Orsino's lines, "If music be the food of love, play on / Give me excess of it, that sufetting, / The appetite may sicken and so dye."²⁸ As the next section will demonstrate, for many at the turn of the nineteenth century, this view of music as a regimen for the body and soul was turned on its head.

MUSIC AND NERVES FROM REFINEMENT TO PATHOLOGY

The (partial) shift in thinking on music and nerves from sensibility to pathology was based on the professionalization of medicine and the establishment of psychiatry as a field in this period, which made doctors' opinions more influential than ever, but also on the effect of the idea of nervous stimulation in medicine and aesthetics. Already in the seventeenth century, Giorgio Baglivi, Thomas Willis, and others had redefined madness, hysteria, and hypochondria as diseases of the imagination and the nerves, not as spiritual ailments, and a wide variety of physical conditions were laid at the door of the nervous system. George Cheyne's *The English Malady* of 1733, an important milestone in this development, took the nerve paradigm of Willis and his student the philosopher John Locke and applied it to mental illness, arguing that the spectacular increase in wealth and luxury among the British elite was making them ill.²⁹ Another important boost to the centrality of nerves to medicine came with Albrecht von Haller's experiments in the 1750s that established a distinction between sensibility (of nerves) and irritability (of other tissue).³⁰ Drawing on this, Edinburgh physicians such as Robert Whytt and William Cullen and others elsewhere in Europe developed what might be called the nerve paradigm of disease, at times asserting that nerves and stimulation were responsible for most sickness, both mental and physical.³¹

As Whytt put it, “There are few disorders which may not in a large sense be called nervous.”³²

This emphasis on the role of stimulation in sickness became the basis for a medical critique of what some saw as modern civilized, over-refined, nervous life—a critique of excessive sensibility, and a form of what one might call “cultural hygiene.” Sensibility was always implicitly, as Anne Vila has put it, “situated somewhere between enlightenment and pathology,”³³ but medical hostility to what was seen as excessive sensibility (*Empindelei* instead of *Empfindsamkeit*) became more marked as the century went on, and was increasingly caught up in a moral and philosophical assault on sensibility.³⁴ In particular, Jean-Jacques Rousseau’s recasting of refinement as the corruption of natural goodness proved highly influential.³⁵ His fellow Swiss, Tissot, combined this hostility to modern culture with the application of the idea of nervous over-stimulation to cultural and social questions, notably in his well-known campaign against masturbation. He was one of many physicians throughout Europe who believed that modern culture over-excited the nerves, much as Cheyne had done, but increasingly saw this stimulation as a source of vice rather than a by-product of refinement.³⁶

The scene was set for music’s inclusion in this critique of over-stimulated lifestyles by the role that nerves played in the sensibility, particularly by the shift to regarding music as a direct stimulant that one sees in the aesthetics of writers such as Sulzer or the Irishman Daniel Webb, who argued that music had a direct effect on the nerves, not necessarily mediated by the listening subject or the passions.³⁷ In his influential *Theorie der schönen Künste* from the 1770s, Sulzer portrays music as “shocks delivered to the nerves of the body.”³⁸ This contrasted with the views of those, such as Johann Joseph Kausch, who argued that music affected the mind via the imagination, using Locke’s theory of the association of ideas.³⁹ This mechanical model was one basis for a shift from seeing music as a source of potentially excessive passions to regarding it as a possibly dangerous stimulant, a shift from moral physiology to *Reiztheorie* (stimulation theory). The idea of music as a powerful stimulant led to both a wave of works of speculative music therapy and a burgeoning medical critique of the art.⁴⁰ Although it was a latecomer to the cultural hygiene discourse compared with many other art forms, music’s character as a direct quasi-electrical stimulant made it one of the most dangerous as far as its many critics were concerned.

Over the eighteenth century, changes in thinking about how the nerves functioned also helped promote the idea of music as stimulation. The century saw a variety of theories on the nature of the nerves co-existing with models of animal spirits, nervous fluid, electrical, vibrating, and oscillating nerves all competing and often being combined, until Emil du Bois-Reymond established their electrical character in the mid-nineteenth century.⁴¹ The idea of “sympathetic vibration” between music and literally vibrating nerves was one model of the impact of sound that proved highly influential. It was especially suited to the rhetoric of sensibility since it combined nerves with harmony and sympathy, which had great resonance with older traditions.⁴² Nerves had been compared with the strings of a musical instrument at least as far back as Galen, and Newton’s explanation of the vibration of musical strings made it a fashionable concept in the following decades. Although many, such as Albrecht von Haller, the physician Alexander Munro of Edinburgh, and the naturalist and writer Benjamin Stillingfleet, pointed out the flaws in the argument, the idea of vibrating nerves persisted.⁴³ David Hartley’s 1749 book *Observations on Man* attempted what might be thought of as early neuropsychology with his Newtonian and Lockean “doctrine of vibration.”⁴⁴ Physicians such as the Italian anatomist Antonio Maria Valsalva also accounted for the effect of sounds by the vibrations of the nerves. In *Die Verbindung der Musik mit der Arzneygelahrtheit*, Nicolai talked about the tone of the body’s fibers (muscles and arteries as well as nerves) as being “like a tightened string on a musical

instrument,” and he did not mean it only metaphorically.⁴⁵ The state of these nerves, the tension in the strings, would determine health.⁴⁶

Although George Cheyne also turned to the language of tightened strings, likening the embodied soul to a “Musician in a finely fram’d and well-tun’d Organ-Case... these nerves are like Keys,”⁴⁷ he preferred the idea of nervous fluid.⁴⁸ Vesalius, Jan Swammerdem, and Giovanni Borelli had argued that there was no cavity in the nerves for a fluid to pass through, but over the eighteenth century the idea of nervous fluid nevertheless proved highly influential, gradually displacing the notion of animal spirits.⁴⁹ The concept of nervous fluids, which was supported in various ways by Robert Whytt, William Cullen, and Haller, might be understood as a transitional idea between the hydraulic model of Harvey and Descartes and the electrophysiology of the nineteenth century. Indeed, the discourse of nervous music offers many examples of the use of terms such as “electric fluid,” particularly in the wake of advances in electrophysiology at the end of the century.⁵⁰

The most important change in this regard was Galvani’s work on “animal electricity.” Unlike the sympathetic vibration of nerve-strings, it fitted better with the view of music as energy and (potentially excessive) stimulation rather than a correspondence between microcosm and macrocosm. The idea that nerves were essentially electrical in character was being considered long before Galvani’s famous experiment with frogs’ legs. Already in 1730, the Englishman Stephen Gray had demonstrated that the human body could conduct electricity in his “flying boy” experiment, and in 1748 Jean Jallabert had proved that muscles react to electricity using a Leyden jar.⁵¹ Animal electricity was fashionable enough by 1781 for Abbé Bertholon de St. Lazare to enjoy huge success with his *L’électricité du corps humain*, which argued that illness was due to a lack of animal electricity. However, Galvani’s work did help to put paid to the animal spirits and nervous fluid models of nervous function, and ensured that from the 1790s until the establishment of modern electrophysiology in the 1840s nerves were principally understood in the context of galvanic animal electricity.⁵² The American doctor Edwin Atlee was one of many who compared music to make this comparison, writing that its “effects are like electricity and galvanism, instantaneous and universal.”⁵³

The discussion of music as a potentially pathological stimulant that emerged around 1800 was fundamentally based on this understanding of music as a direct, quasi-electrical stimulant. It is striking that many, although by no means all, of the doctors involved used the terminology of the Edinburgh doctor John Brown, whose ideas seem to fit perfectly with galvanism and the emphasis on stimulation so popular at the time.⁵⁴ Brown started as an assistant to William Cullen at Edinburgh University, but fell out with him under circumstances that are not entirely clear.⁵⁵ Brown left Edinburgh, where mainstream opinion considered his ideas beyond the pale. Indeed, the authorities had to intervene to prevent duels on the subject.⁵⁶ “Brunonianism,” as his school of medicine became known, took the stimulation paradigm of the etiology of disease to its logical conclusion, arguing that nervous under- or over-stimulation was at the root of all illness, “[s]ince all life consists in stimulus, and both over-abundance and deficiency is productive of diseases....”⁵⁷ Whereas Cullen was interested in describing and classifying a wide range of illnesses, Brown suggested that there was in fact really only one illness, and that all health and sickness could be measured on a “barometer.” Each individual had a limited stock of “excitability” (a mixture of Hallerian irritability and sensitivity), which external factors could exhaust, creating either “sthenic” or “asthenic” illness.

Although Brunonianism had limited impact in England and France, it proved highly influential in Germany, where its compatibility with galvanism, Romantic *Naturphilosophie*, and Vitalism ensured an audience among such luminaries as Schelling and Novalis.⁵⁸

Indeed, Jacob Friedrich Ludwig Lentin's *Medizinische Bemerkungen auf ein literarisches Reise durch Deutschland* from 1800 talks about German medicine dominated by the struggles of Brunonians and "anti-Brunonian terrorists."⁵⁹ Brown said little about music, beyond writing that "agreeable entertainments" could lead to sthenic diseases,⁶⁰ but the wave of interest in Brown's theories provided much of the language for the discourse of music as a therapy or as a dangerous stimulant. For instance, the Viennese physician Joseph Frank, who did much to spread the influence of Brunonianism in both Italy and Germany, stated that "It would be easy for me to prove at this juncture that the effect of music can be explained by stimulation theory. Using the stimulation theory, great connoisseurs of music have themselves discovered how to achieve certain effects, especially with theatrical music."⁶¹ Frank, who was an active musician and friend of Beethoven, and who had married a singer and even composed cantatas, has Salieri in mind.⁶² He suggested that "hypersthenic" patients required silence since hypersthenia in the ear causes mania, and advocated proceeding very carefully with music and sound as a stimulant even in cases of direct asthenia.⁶³

Peter Lichtenthal's 1807 book *Der musikalische Arzt* is also explicitly Brunonian in its treatment of the effects of music on the body. Lichtenthal, a musician, composer, and physician with links to the Mozart family, was mostly positive about music, talking of "doses of music," which should be determined by someone who knows the "Brunonian scale."⁶⁴ However, he also believed that musical stimulation could be dangerous, arguing that, "music must necessarily have damaging consequences when the activity of the heart and blood vessels is increased, as is the case with inflammatory (hypersthenic) fever," again using Brunonian terminology. He continued,

This is by no means the only case where music has negative results. ...One must always remember that it is in a position to stimulate the mind to such a degree and is one of the most important stimulating powers, and therefore must be damaging when stimulation is notably increased. People who are recovering from a serious illness cannot stand the smallest noise without suffering noticeable sensitivity... sound is a great stimulant for those with heightened sensibility (irritability).⁶⁵

The influence of Brunonianism extended into music criticism, as two articles of the period in the leading music journal, the *Allgemeine Musikalische Zeitung* demonstrate.⁶⁶ Fr. Guthmann's article from 1806 used overtly Brunonian words, and takes the argument, found in Cheyne's *The English Malady*, that luxury is bad for the nerves, and applies it to the musical luxury that bothered Rousseau and John Gregory:

When I look at the current state of the sciences and the arts, I cannot help thinking that our current era is suffering from weakness due to over-stimulation in intellectual and aesthetic terms, just as doctors say it is in physical terms (from direct asthenia). I want to say a few words about this evil relating to music. It cannot be unexpected and unnatural if we give a cursory look back over the amazing progress in the culture of music—especially the limitless love of music that one sees everywhere and the means of enjoying it, which are leading to excess—in the monstrous number of concerts, operas, small and large musical societies, etc.⁶⁷

This kind of combination of a moralizing critique of luxury with the medical language of nerves and an implicit critical approach to a modern music would prove highly influential. Brunonianism was a relatively short-lived fashion in German medicine, and did not last long after the cholera epidemic of 1832, but as late as 1835 Peter Schneider's *System einer medizinischen Musik* was still using Brunonian terminology to argue for the positive and negative effects of music on the body.⁶⁸

Brunonian terminology may suffuse much of this early nineteenth-century discourse on nervous music, but it was not necessarily the driving force behind it. Indeed, the regularity with which it appears was not principally because of any innovations in his system (many of which are ignored or substantially modified by his supposed followers), but because it was an influential version of the stimulation paradigm of the etiology of sickness at the time. Others, such as the West Country clergyman Richard Eastcott in his 1793 *Sketches of the Origin, Progress and Effects of Music*, often far removed from John Brown's ideas, nonetheless expressed similar views on the danger of music to the nerves. Eastcott gave several examples of music (Handel, Arne, and Lampugnani) causing fits,⁶⁹ and one year later Michael Wagner in his *Beyträge zur philosophischen Anthropologie* gave an account of a sick music lover who dies from playing the triangle.⁷⁰ The idea of music as a direct physical stimulant provided the medical rationale for the emergence of a discourse of pathological music, but an analysis of why it happened must also look more deeply at broader shifts in thinking on music, class, and sexuality.

NERVOUS MUSIC, SOCIAL ORDER, AND CLASS

The development of a discourse of pathological nervous music around 1800 marked a failure of the sensibility model that had combined neurology and the metaphysics of order under the rubric of refined and sensitive nerves. The vicissitudes of the French Revolution and the economic and cultural changes of the period proved to be a watershed in the decline of the association between music and natural order. Conceptions of music as a commodity and a social vice or virtue, rather than a sign of hierarchy, took the materialist assumptions of Enlightenment music aesthetics to their logical conclusion, dramatically undermining the combination of nerve stimulation and genteel order that was evoked in the culture of sensibility. This more radical disenchantment of music made a discourse of pathological music possible in a way that would not have made sense in the *ancien regime*. Music, therefore, was losing many of its associations with order at a time when anti-Jacobinism made threats to hierarchy and order unfashionable. The violent challenge to the status quo of the 1790s, the decade in which the discourse of pathological music emerged, led to a general moral panic that questioned the culture of sensibility and music's role in it.⁷¹

As an artificial social stimulant, music became entangled in a range of discourses on class and gender, as sensitive nerves and an excessive ability to feel came to be seen more as a sign of pathology and less as a sign of leisured class refinement. Cheyne's *English Malady* had explicitly stated that the upper classes suffered most from nerves, and the social cachet of nerves remained high for many years. To give a musical example, Robert Lloyd's *The Capricious Lovers: A Comic Opera* from 1764 contains the following lines, which give a clear indication of the modishness of nervous illness at the time:

Phoebe: Vapors, and weak nerves, why can it be a fashion to be sick?

Lisetta: O Lord as I told you before, it's downright ungentle to be otherwise. Your ruddy complexion and active limbs, may do very well for a dairy maid in the country; but here they are perfectly unnecessary, nay absolutely improper.⁷²

However, the elite associations of sensibility were becoming diluted, and the physicians and writers that fretted about its medical consequences noticed the phenomenon spreading. The Scottish physician David Uwins, for instance, explained how social mobility and modern lifestyles, including music, were leading to sickness. "Pianos, parasols, Edinburgh Reviews, and Paris-going desires, are now found among a class of persons who formerly thought these things belonged to a different race; these are the true sources of nervousness and mental ailments," he suggested.⁷³ Similar concerns occur in the work of Thomas Beddoes, a radical Bristol physician (and friend of Coleridge) who studied in Edinburgh in the 1780s and

edited Brown's works in the following decade, and who was much influenced by Brown, although he was highly skeptical of the man himself and of the implications of his system.⁷⁴ In Beddoes' *Hygeia* of 1802, one sees the view of music as a potential cause of neuropathological conditions. At one point, he implies that a young man's death was brought on in part by the strain of music.⁷⁵ Elsewhere in the book, he outlines his ideas on the effect of music in more detail:

Even when it charms, it co-operates with weights, already suspended with too little consideration upon the nervous system, and all pulling in the same direction... . The SAVOYARD [*sic*] rustic, who carols as she trudges, is, I can well conceive, all the better for her elegant accomplishment. But the English Miss, with whom already almost every occupation is sedentary, and every pleasure passive, must, I fear, be the worse—the worse for the acquirement of the art, and for the delight it yields, when acquired.... I will not suppress my suspicion, that the largest pack of hounds we have, turned out *mad* upon the country, might possibly have committed less ravage, than that rage for excelling in music, which, of late years, we have seen invading families, and imposing the necessity of such strictness of application upon the girls.⁷⁶

This extract brings out many of the themes that would dominate discourse over the following few decades on the medical evils of music. First, it is a problem associated with modern education of girls, made sick by sedentary, artificial, civilized habits. "Savoyard" girls (uncorrupted children of nature in the manner of Rousseau) are not, it seems, at risk in the way that English women of the leisured class are. Secondly, the nervous system is the means by which music's ill effects are transmitted.

It is striking that the increase in anxiety about the pathological consequences of sensibility occurred at the same time as this shift in its meaning in terms of class semiotics. This marked change from regarding music's effect on the nerves as principally a question of refinement to one of pathology must be seen in the context of the French Revolution. The Terror and chaos of the 1790s made making sensibility's defense of individual feeling against social convention much less palatable to mainstream opinion. As Frank Baasner has put it, the Enlightenment concept of sensibility was shipwrecked by the Revolution.⁷⁷ In its wake, the growing influence of the cultural values of the bourgeoisie was making itself felt. Volker Roelcke and others have shown the ways that middle-class attitudes on psychiatric categories were making medicine in some ways less sympathetic to irrational, artificial pleasures like music. Similarly, the bourgeois ideal of rational self-control, also reflected in the moral management school of psychiatry, seemed at odds with a physical, sensual nerve-based conception of music.

NERVOUS MUSIC, SEXUALITY, GENDER, AND THE BODY

The disputed class character of sensibility was matched by, and mixed up with, changes in its gender associations.⁷⁸ Class had played a vital role in the creation of the model of femininity found in the Cult of Sensibility since the idleness and conspicuous consumption synonymous with the Enlightenment conception of sensitive, genteel femininity had a solid socioeconomic basis. Indeed, Matthew Head has suggested that *empfindsame* music was a subtle form of physical coercion for women, a technology of restraint that both articulated and inculcated genteel values.⁷⁹ Women had long been viewed as closer to nature than men, more driven by passions that they could not control, but by the eighteenth century they were turned into domestic angels, more artificial and socially defined than men, beautiful rather than sublime.⁸⁰ Ludmilla Jordanova and Claudia Honegger have argued that Haller's distinction between irritability and sensibility was marked as gendered, with irritability (of muscles) being seen as manly, and sensibility (of nerves) seen as female.⁸¹ The supposed

sensitivity and vulnerability of female nerves was central both to the refinement ascribed to ladies in the Cult of Sensibility and to the pathology, hysteria, and enervation that critics associated with it.

Robert Martensen has argued that the shift to a two-sex model of sexuality proposed by Thomas Laqueur in fact happened earlier, and he suggests that supposed differences in nervous systems between men and women were the principal distinction between the sexes.⁸² The weakness of female nerves was a certainly a commonplace. Robert Whytt, for example, wrote that, “[w]omen, in whom the nervous system is generally more moveable than in men, are more subject to nervous complaints, and have them in a higher degree.”⁸³ In his 1729 book on music therapy, Richard Browne stated that it was “the Fair Sex” that he had most in mind, since their “tender and delicate Constitutions render them most liable to the disease I have enquired into [spleen and vapors].”⁸⁴ The danger to female nerves is a constant theme in the debate on nervous music. Over a century later, Peter Schneider concurred, describing case of women fainting, being unable to breathe and having giggling fits caused by the sound of certain instruments and certain chords.⁸⁵

The Irish doctor James Johnson, physician to William IV and man of letters, was one who argued that music could damage the female nervous system in particular. In the section on how to raise girls between seven and fourteen in his 1837 book *The Economy of Health*, Johnson wrote that,

The mania for music injures the health and even curtails the life of thousands and tens of thousands annually, of the fair sex, by the sedentary habits which it enjoins, and the morbid sympathies which it engenders. ... The consequence is, that the corporeal functions languish and become impaired,—a condition which is fearfully augmented by the peculiar effect which music has on the nervous system.... No art or science, that ever was invented by human ingenuity exerts so powerful an influence on mind and body as music. It is the galvanic fluid of harmony, which vibrates the ear—electrifies the soul—and thrills through every nerve in the body. Is it probable that so potent an excitant can be daily applied, for many hours, to the sensitive system of female youth, without producing extraordinary effects? It is impossible.... Music, like wine, exhilarates, in small quantities, but intoxicates in large. The indulgence of either, beyond the limits of moderation, is deleterious.⁸⁶

Johnson is very clear that the threat of music to the health is essentially an issue for the leisured classes. “Factory Girls,” with their more robust nerves, are not at serious risk.⁸⁷ Where Johnson frets about the dangers of the sedentary life that music involves, he was part of a tradition that stretches from the humors to modern medicine, but the language of nerves and electricity shows the influence of the idea of music as a direct stimulant, and the medical hostility to music’s feminine physicality is in marked contrast to many Enlightenment commentators.

The dangers of music were present in the booming genre of etiquette guides as well as in dietetic books of advice. At a time in which a vast middle class was coming into being in England, books explaining the *habitus* of feminine gentility were more in demand than ever. Domestic music making continued to boom in the early decades of the nineteenth century, fuelled by the availability of pianos and by the genteel role accorded to music in sensibility, but by the 1820s, a consensus had emerged in these books that it could be a danger to women’s health, as one sees in A. F. Crell’s *The Family Oracle of Health* of 1824, for instance.⁸⁸ He starts by asserting that reading music makes you blind before going on to explain “the bad effects of music on the nerves.”⁸⁹ He goes on to note an incident mentioned by Stendhal in his biography of Rossini in which Rossini’s opera *Moïse* caused “more than forty cases of brain fever, or violent convulsions, with which young females, doatingly [*sic*]

fond of music, were seized, chiefly from the superb change of tone in the prayer of the Hebrews, in the third act.”⁹⁰

The emphasis on the position of women in the discourse of pathological music was closely related to questions of sexuality. The dangers of sensual music for female modesty had been a theme in Puritan and indeed Neo-Platonic thinking for centuries, but in this period the shift to an ostensibly neuropathological rather than moral context is striking. Sensuality and sexual “excess” were seen as genuine medical threats, and this extended to their expression in music. The evangelical revival of the early nineteenth century, with its hostility to the frivolity and lax morals of the age of sensibility, was quick to use the language of nervous strain to attack the moral threat of sensual music. For example, Mrs. William Parkes, in her 1829 *Domestic Duties, Or, Instructions to Young Married Ladies*, offered a stark warning that music can even cause miscarriages and make a woman infertile.⁹¹ Moreover, Thomas Clarkson *Portraiture of Quakerism*, published in 1807, implicitly links music’s injurious effects to female sexuality, arguing that the nervous strain of music gives women “a weak and languid constitution,” and is likely prevent them from becoming “healthy wives, or healthy mothers, or the parents of a healthy progeny.”⁹²

One instrument more than any other became the focus of anxieties about music’s medical and moral effects on women around 1800—the glass harmonica, something that was closely related to the instrument’s status as primarily a female instrument. As Heather Hadlock has shown, attitudes toward it were marked by a paradoxical combination of an almost automatic disembodied quality and a specifically female sensual physicality.⁹³ The instrument’s novelty, feminine character, and unusual sound made it a key battleground in discourse about women’s nerves.⁹⁴ Even before Benjamin Franklin invented his version in the 1760s,⁹⁵ musical glasses had already been seen as having strange medical effects, for good or ill, and by the late eighteenth century such were the dangers of playing the glass harmonica that the leading players in Europe were believed all to have succumbed to the strain. The sisters Cecily and Marianne Davies gave it up in 1784 because of the nervous strain, and Marianne Kirchgässner’s death in 1808 was widely understood to be the result of nervousness. The German writer and critic J. L. Röllig suggested that it could “make women faint; send a dog into convulsions, make a sleeping girl wake screaming through a chord of the diminished seventh, and even cause the death of one very young.”⁹⁶

The way that music had become domesticated during the Enlightenment, that is, the way it lost its grand symbolic position and was made part of the polite, worldly, and feminine realm of sensibility, left it very vulnerable when femininity, sensuality, and nerves in music went out of fashion. Both music and female sexuality were losing their traditional status as symbols of the natural and being redefined as artificial, social products. The emerging ideology of “two spheres” with regard to the sexes, with its bourgeois values of self-control and anti-sensuality, was reflected in a new division within musical aesthetics. However, deeper continuities can also be seen. The discourse of pathological music was a medicalized continuation of the debate on the role of the passions, the body and the feminine in music that has been going on since Plato. Those hostile to the sheer physical pleasure of musical stimulation and its feminine associations could focus their anxieties about (female) sensuality and imagination in a debate on music, in terms of nerves rather than of *ethos*. As Thomas Anz has observed, by the late eighteenth century, “The health movement ... went as far as to regard immoral behavior as an illness. Illness was interpreted morally and immorality was pathologized.”⁹⁷

NERVES AND ROMANTIC MUSICAL AESTHETICS

Romanticism was profoundly ambivalent about the feminine, worshipping it as a creative principle, but also keen to assert its own essentially masculine character, and the development of the discourse of pathological music was directly connected to the new aesthetics of music the movement propagated. German Romanticism, which emphasized the *Wahlverwandschaft* between music, creativity, and madness, provided the background for the emergence of “nervous music” and the ambivalence with which it was often viewed. Romanticism’s sense of music as a sublime and sometimes thrillingly dangerous subjective phenomenon undermined music’s traditional position as a means of controlling the passions.⁹⁸ Losing one’s sense of self in the sublime was both tempting and dangerous, and literary discussions of “mad music” reflected that. The power of music, whether sublime or pathological, was a recurring theme in the German literature of the period, such as in Heinrich von Kleist’s *Die heilige Caecilie oder die Gewalt der Musik* (Saint Cecilia or the Power of Music), Friedrich Rochlitz’s *Der Besuch im Irrenhause* (The Visit to the Asylum), and E. T. A. Hoffmann’s *Kapellmeister Kreisler*.⁹⁹ One notable example is the story by Clemens Brentano (an editor of *Des Knaben Wunderhorn*) and Joseph von Görres’ with *Fantastic Tale of BOGS*, which tells of the adventures of BOGS, which in the end lead to the protagonist literally dying of music.¹⁰⁰

One crucial aspect of Absolute Music, the new ideology of autonomous music, was the way it turned its back on the physiology of nerves that played such a role in the aesthetics of the likes of David Hartley, Sulzer, Edmund Burke, or Daniel Webb. As Terry Eagleton has pointed out, aesthetics started as a “discourse of the body.”¹⁰¹ For Baumgarten, who coined the term, aesthetics was as much about sensory perception as much as art theory, and in a sense, in much late Enlightenment aesthetics *all* music had been a matter of the nerves. However, the aesthetics of Immanuel Kant in particular put the quasi-disembodied transcendental subject rather than the nerves at the heart of thinking on music. Kant himself viewed music as stimulation in terms very similar to many of his Enlightenment contemporaries. For him it was primarily physical, as he says, it “merely plays with sensations.”¹⁰² However, the next generation of aestheticians, grappling with Kant’s ideas, laid the foundation for the denial of sensuality in Idealist music aesthetics that one sees, for instance, in E. T. A. Hoffmann’s suggestion that music has “nothing in common with the *external* world of the senses,” and that reached its apogee with Arthur Schopenhauer’s assertion that music is quite apart from the phenomenal world.¹⁰³

In the wake of Kant, German writers on music created an aesthetic of Absolute Music that implied a division between serious, masculine music relating to the transcendental subject and supposedly feminine, sensual music that merely stimulated the nerves. Musical forms associated with women had long been regarded as second rate. On the whole that had been linked to issues of physical size, gentility, and morality, but in Absolute Music, as Daniel Chua has put it, “sublime music was not only masculine, it was morally superior.”¹⁰⁴ The physical and feminine elements of Enlightenment aesthetics were rejected. In this context, Christine Battersby has demonstrated that the Kantian aesthetic denied women access to the sublime, and limited them to the merely sensual, and that the exclusion of the feminine was a vital part of asserting music’s radical improved status.¹⁰⁵ After 1800, the idea of pathological music was incorporated into this dichotomy between feminine and potentially pathological physical sound and masculine metaphysical form—between *Geist* and the body—and became part of a developing ideology of German, absolute, masculine music in the music criticism and aesthetics of the likes of A. B. Marx and Ludwig Rellstab.¹⁰⁶ Marx’s statements about Beethoven’s task as the “*Vergeistigung*” (making spiritual) and “*Vermännlichung*” (making masculine) of music are quite explicit.¹⁰⁷ Similarly, Eduard Hanslick’s 1854 *Vom Musikalisch-Schönen*, the most influential nineteenth-century work

on musical aesthetics, overtly privileged “aesthetic” appreciation of form over “pathological” listening that merely stimulates the nerves.¹⁰⁸

After this, the idea of music as over-stimulating the nerves became a weapon in controversies in music criticism, especially with regard to Richard Wagner, and was often mixed up with new developments in medicine. The theory of degeneration was used by some critics and physicians to portray the music of certain composers as not only a potential cause of nervousness but also a symptom of hereditary weakness and vice.¹⁰⁹ Max Nordau’s *Entartung* from the 1890s provides page after page of examples of this, and was only the tip of an iceberg. Similarly, George Beard’s neurasthenia diagnosis of the 1860s became part of the rhetoric of nervous music.¹¹⁰ For Nietzsche and Thomas Mann, pathological music came to be a way of discussing a broader cultural malaise.¹¹¹ However, the mainstream discourse of sick music in the press became increasingly philistine, populist, and anti-Semitic during the late nineteenth century, providing much of the basis for the Nazi institutionalization of the idea of degenerate music. As Susan Sontag wrote in her book *Illness as Metaphor*, comparisons between culture and disease are almost always reactionary: “Nothing is more punitive than to give a disease a meaning—that meaning is invariably a moralistic one.”¹¹² If some thing is diseased, it becomes a question of hygiene to destroy or silence it. It is not only music discourse that has shown that such “hygiene” is far more dangerous than any supposed sickness.

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61. “Es würde mir leicht fallen, bei dieser Gelegenheit zu beweisen, dass sich die Wirkung der Musik nach der Reiztheorie bestimmen lasse. Grosse Musikkennner haben selbst in der Erregungstheorie die Grundsätze entdeckt, nach welchen man den Effekt, besonders der Theatralmusik, voraus bestimmen kann.” Frank, Joseph. *Erläuterungen der Erregungstheorie*. Johann Daneil Class; Heilbronn: 1803. p. 341
62. Müller, Richard. *Joseph Frank und die Brownsche Lehre*. Juris Druck; Zurich: 1970. p. 10 Salieri is also mentioned in this context by Reil. Reil, Johann Christian. *Entwurf zu einer allgemeinen Therapie*. Curt'sche Buchhandlung; Halle: 1816. p. 404–5.
63. Frank. *Erläuterungen der Erregungstheorie*. 343:344.

64. "Ein Iatromusiker, welcher die Brown'sche Skala kennt." Lichtenthal, Peter. Der musikalische Arzt, oder: Abhandlung von dem Einflusse der Musik auf den Körper, und von ihrer Anwendung in gewissen Krankheiten. Nebst einigen Winken, zur Anhörung einer guten Musik. Christian Friedrich Wappler und Beck; Vienna: 1807. p. 172
65. "so muß nothwendig die Musik da von schädlichen Folgen seyn, wo ohnehin die Thätigkeit des Herzens und Blutgefäßsystems vermehrt sind, was im inflammatorischen (hypersthenischen) Fieber der Fall ist. Allein dieß sind bey weitem noch nicht alle Fälle, wo die Musik von nachtheiligen Folgen seyn muß. Man erinnere sich nur stets, daß sie, da sie das Gehirn so sehr zu reizen im Stande ist, unter die beträchtlichsten inzitierenden Potenzen gehört, und folglich wo die Sensibilität (Erregbarkeit) durch beträchtlichen Abgang gewöhnter Reize sehr angehäuft ist, von schädlicher Wirkung seyn muß. Menschen die eben sich von einer großen Krankheit erholen, könnten das mindeste Geräusch nicht ohne merkliche Empfindlichkeit ertragen. Nach großen Blutflüssen, überstandenen Geburtsarbeiten, u. dgl. Empfehlen die Ärzte die größte Stille, das Gerassel eines Wagens, das Hämmern eines Schmiedes in der Nachbarschaft u. s. m. verursacht bey diesen Patienten Kopfschmerz, Unruhe, Angst, ja sogar Ohnmachten; woher diese Erscheinungen? Weil der Schall hier ein zu großes Inzitant für die erhöhte Sensibilität (Erregbarkeit), ist." Lichtenthal. Musikalische Arzt. p. 161-62.
66. Guthmann, Fr. Andeutungen und zufällige Gedanken. Allgemeine musikalische Zeitung. Jul 4. 1806 36:561-65. (especially 561-62). , and Weber FA. Von dem Einflusse der Musik auf den menschlichen Körper und ihrer medicinischen Anwendung. Allgemeine Musikalische Zeitung. 26 May 1802, 35, pp. 561-69, 2 June 1802, 36, pp. 577-89, 9 June 1802, 37, pp. 609-17. See also: Weber FA. Doktor F. A. Weber in Heilbronn über den Einfluss des Singens auf die Gesundheit. Allgemeine musikalische Zeitung. Sep 5. 1804 49:813-22. Weber refers to Brown himself and to the leading German Brunonian Weikard.
67. "Wenn ich den jetzigen Zustand der Wissenschaften und Künste betrachte, so drängt sich mir unwillkürlich der Gedanke auf, dass unsere jetzige Zeitperiode in intellektueller und ästhetischer Hinsicht, eben so, wie nach der Aussage der Ärzte in physischer vornämlich an Schwäche aus Überreiz (an direkter Asthenie) leide. Jetzt von diesem Übel nur einige Worte in Bezug auf Musik. Es kann und dasselbe keineswegs unerwartet und unnatürlich scheinen, wenn wir nur einen flüchtigen Blick werfen auf die seit 20 oder 30 Jahren riesenmässig fortschreitende Kultur der Musik—vor allen Dingen auf sie sich überall ohne Grenzen verbreitende Liebhaberey und auf die bis zum Übermaasse führenden Mittel zum Genuss derselben—auf die ungeheure Anzahl von Konzerten, Opern, musikalischen grossen und kleinen Vereinigungen etc." Guthmann. Andeutungen; p. 561-62.
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