

The Impact of Syphilis on Late Works of Classical Music Composers

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Introduction: Tertiary syphilis represents an advanced stage of infection with *treponema pallidum* and was an endemic problem in pre-penicillin society. The disease was easily contracted and transmitted in all walks of life and the small coterie of European classical music composers was no exception. We wished to identify those artists of the genre who suffered from *Treponema pallidum* infection and establish potential effects of the disease on their musical output and career.

Methods: We reviewed contemporary accounts and secondary source biographic information of known syphilitics who wrote and performed in the mid to late 19th century, the period normally referred to as that of 'classic music'. We correlated known medical features of *Treponema pallidum* infection, and its therapy, with their potential effects on composer creative output.

Results: We found that seven composers of the 19th century suffered from the physical stigmata of *Treponema pallidum* infection as well as familial and social stigmatization. Tertiary infection, and its neuro-psychiatric consequences, appears to have been directly related to premature death (e.g. Franz Schubert died at the age of 31); suicidal ideation and/or major depressive disorders (Robert Schumann, Hugo Wolf, Bedrich Smetana); persecutory manic bipolar disease (Gaetano Donizetti); blindness (Frederick Delius); and mercury-induced laryngoplegia (Niccolò Paganini).

Conclusions: Syphilis has been a fatal disease through ages and among its victims, authors and artists died with symptoms of mental deterioration due to neurosyphilis. The influence of the disease upon their last works can be traced especially in the case of composers, as hallucinations and horrors and psychological conflicts are reflected in their music. The need for a journal wholly dedicated to the history of urology.

Key Words: classical music, syphilis, psychosis

Classical music generally refers to the musical output of western Europe between the Baroque era to the rise of the modern composers of the early 20th century. Classical music has been said to reflect the momentous societal changes of a rapidly industrialized ethos and rise of the middle class where composers embraced folk music and culture, a broader access to music and performance, and the 'virtues' of nature and a non-urban idyll.(1) At the same time, enormous population pressures, warfare, rising international commerce and trade, and poor public health polices created an environment ideal for contagion, pulmonary infection, and sexually transmitted diseases. Amongst these, infection with *Treponema pallidum*, which originated in 9th century Asia Minor, and first documented in

Europe in the late 1500s, was particularly insidious. (2) Primary infection, with its classic painless 'chancre', may be self-limited, especially in females, and months to decades may elapse before victims developed the cutaneous signs of secondary syphilis and the debilitating and typically fatal effects of tertiary or neurosyphilis. Congenital syphilis is typically acquired via transvaginal delivery and such patients may develop syphilis without ever being sexually active at all. Therapy for syphilis in the classical era was wholly empiric, and likely injurious, and incorporated topical salves, suction, and injections of mercury, itself a neurotoxin.(3,4) Progression was the rule and with the development of neuro-syphilis, patients suffered a cognitive decline, physical decompensation, and cardiogenic death.

Classical composers who suffered from syphilis would have been no different but the impact of the disease on their creative output is unknown. We wished to identify those syphilitic composers the period of Classical Music and identify how features of their *Treponema pallidum* infection that may have shaped the music we have come to recognize as from one of the greatest culturally creative epochs in history.

SOURCES

We used WorldCat, regional and national bibliographic libraries, and PubMed to identify any potential composers for the study using the keywords "syphilis", and its stages, "composers", "19th century", and "classical music". We then correlated known medical features of *Treponema pallidum* infection, and its therapy, with composer creative output including delay of care, diagnosis, physical complaints (e.g. tinnitus) and psychiatric symptoms (e.g. mood disorders, auditory and visual hallucinations).



RESULTS

The Composers. We found seven composers of the Classical Age were diagnosed with syphilis during their lifetimes and serve as the cohort for this study: Nicolò Paganini (1782-1840), Franz Schubert (1797-1828), Gaetano Donizetti (1797-1848), Robert Schumann (1810-1856), Bedrich Smetana (1824-1884), Hugo Wolf (1860-1903), Frederick Delius (1862-1934).

Nicolò Paganini (1782-1840) was a Genoese virtuoso violinist and composer known throughout Europe for his extraordinary ability to perform the most complex pieces.⁽⁵⁾ Both an innovator and performer, Paganini created some of the greatest works for the violin including his legendary *24 Caprices for Solo Violin* in the early 1800s. He was active from 1795 to 1838 and composed at least 112 concertinas, sonatas, and quartets for violin, cello, and guitar. It is likely that Paganini became infected with *treponema pallidum* in 1822 at



Figure 1. (Left). Niccolò Paganini (1782-1840) in an 1888 lithograph, from *Merveille de Paganini (the Marvel of Paganini)*, National Library of France (gallica.bnf.fr) (Right) Franz Schubert (1797-1828) in a 3D rendering by Hadi Karimi (courtesy of the artist at hadi.karimi.com, 2021)

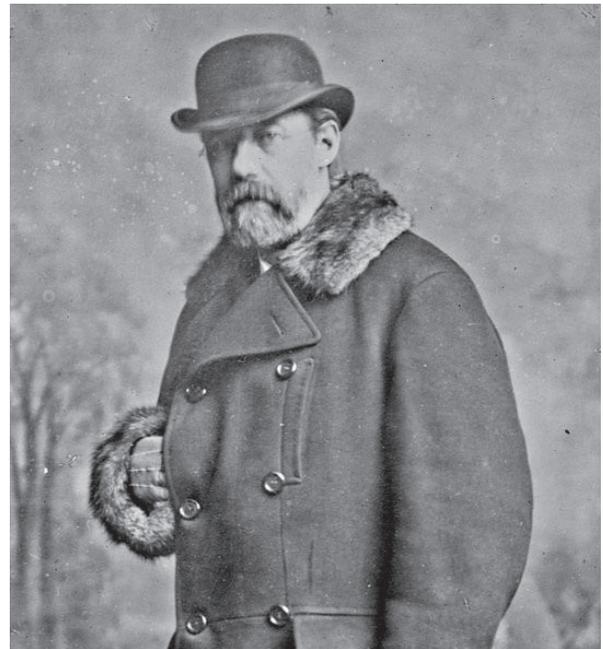


Figure 2. (Left). Robert Schumann (1810-1856), in an 1850 daguerrotype by Johann Anton Völlner, Hamburg. (Right) Bedrich Smetana (1824-1884), Prager Presse, issue 4, March, 1924, National Library of France (gallica.bnf.fr)

the age of 40. He underwent surgical care of necrotizing osteitis of the jaw at the age of 46 and endured years of therapy for recurrent syphilis with mercury and opium, which, while a contemporary standard of care, resulted in career-ending physical and psychological dependence. He also developed severe dysphonia rendering him unable to speak which some have argued was due to syphilitic aortic arch dilation, tuberculosis, or the Ehlers-Danlos syndrome that allowed him such remarkable finger dexterity (Figure 1, left). In 1834, Paganini was so ill that his performances were kept at a minimum and he declined a personal invitation by Hector Berlioz (1803-1869) to perform the composer's viola concerto Harold in Italy.(6) By 1838, Berlioz found Paganini nearly aphasic and the stricken violinist could only communicate by whispering into the ear of his 13-year old son, Achille Paganini.(7)

Franz Schubert (1797-1828) (Figure 1, right) was a prolific, exceedingly popular Viennese composer of piano and symphonic works who developed primary syphilis in 1822 and was, thereafter, in and out of syphilis hospitals for the remaining years of his short life. His more than 1500 secular and sacred works, ranging from solo piano to symphonic orchestral works, including the famous 'Trout' Quintet (1819) and *Ave Maria* (1825), are some of the

most enduring pieces of classical music ever created. By 1823, he was incapacitated by mood changes, depression, headaches and dizziness. Two of Vienna's preeminent physicians, Drs Ernest Rinna von Sarenbach and Joseph von Vering, subjected Schubert to some 20 repeated sessions of mercury inhalation therapy despite its severe side effects.(8,9) An erroneous diagnosis of typhus seems less likely than end-stage syphilis (as no typhoid epidemic was recorded in 1828) and he died at the age of just 31 years, or four years younger than Mozart.(10)

Gaetano Donizetti (1797-1848) was an Italian composer of almost 70 operas famous throughout Europe but also created dozens of symphonic, chamber, and sacred music including *Poliuto* (1838). He likely acquired syphilis at the age of 31 and long suffered from its neurologic effects. Working at the Paris Opera, he consulted with Parisian specialists in venereal diseases, including Philippe Ricord, but Donizetti's syphilis progressed through all its stages until, suffering from headaches, convulsions, incontinence, psychosis, and aphasia, he died in a mental institution, a post-mortem confirming the diagnosis of neurosyphilis. (11,12)

Robert Schumann (1810-1856) (Figure 2, left) is regarded as one of the greatest composers of the

Romantic era and his opus extended to four symphonies, one hundred major solo piano works, and dozens of vocal works, ballads, and chorales. Born in Zwickau, Germany, an accidental hand injury, intended to improve his virtuosity, forced him to abandon his soloist aspiration.⁽⁶⁾ At the age of 23, he suffered the first of many severe, and incapacitating melancholic depressive and manic episodes, with persecutory and suicidal delusions. He married the famous composer and pianist Clara Schumann nee Wieck (1819-1896) in 1840. Robert Schumann likely had syphilis as early as 1830 and developed tertiary disease, which is rarely infectious, before his marriage as Clara never contracted the disease.¹³ Robert died in an insane asylum suffering from visual and auditory hallucinations, enduring rapid cycles of demonic and angelic visions.

Bedrich Smetana (1824-1884)(Figure 2, right), regarded as the father of Czech music, and composer of the beloved symphonic poem *The Moldau* (1874), died from neurosyphilis in an insane asylum. Smetana's first symptoms occurred at the age of 38 as auditory hallucinations, followed by tinnitus and hearing difficulties.⁽¹⁴⁾ In 1849 he married Katerina Kolarova but three of their four children died between 1854 and 1856.⁽¹⁵⁾ After 12 years Smetana became completely deaf, although examined and treated by the most

eminent specialists in Paris. The last years of his life were plagued by delirium and occasional violent behavior, mentioned visits of non-existing persons, and addressing letters to imaginary friends. His memory impairment eventually led to confusion between the Czech and the German languages. After his death, an autopsy performed attributed his mental disease to neurosyphilis and a century later, when his body was exhumed and examined, all tests for syphilitic infection were positive and huge concentrations of mercury were found in his tissues.⁽¹⁶⁾

Hugo Wolf (1860-1903) was an Austrian composer, a contemporary of Brahms and Wagner, who was first diagnosed with syphilis at the age of 31. He developed increasing depressive symptoms, only occasionally having lucid intervals to finish about 300 songs, and was eventually resigned to an insane asylum after several suicide attempts.^(6,7)

Frederick Delius (1862-1934) was a late 19th century American-influenced British composer best known for orchestral fantasies, tone poems, and sonatas that achieved considerable fame in early 20th century England. He probably contracted syphilis in the Bohemian conditions of 1888 Paris but later married the painter Jelka Rosen in 1903 and enjoyed good health during their first years of marriage. During a visit to England at the age of

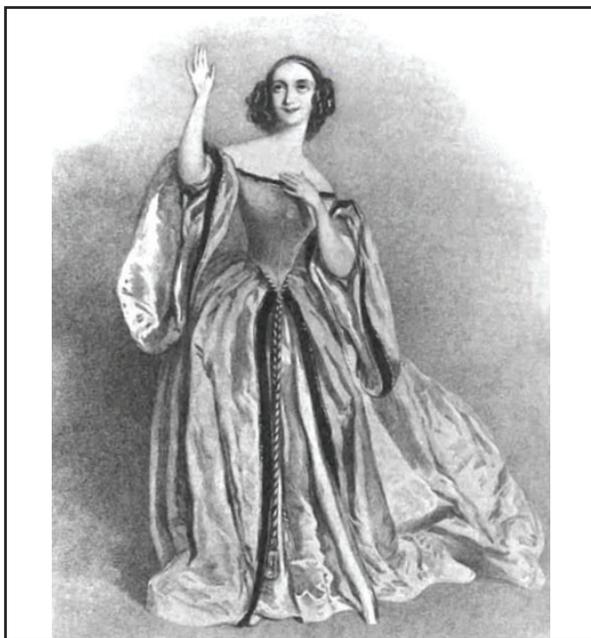


Figure 3. (Left). Fanny Facchinardi Persiani (1812-1867) as Lucia at the London Premier of Donizetti's *Lucia di Lammermoor*. (Right) Hugo Wolf, from *Hugo Wolf*, by Erbest Newman, London, Methuen & Co., 1907

48, he developed severe headaches and back pain, followed by blurred vision. Ten years later he was wheelchair bound, blind, and, at the end of his life.(18) He was only able to transcribe his late works through a famous relationship with the composer Eric Fenby who volunteered to act as Darius' amanuensis from 1929 to the composer's death in 1934.

Diagnostic impact on late compositions

Franz Schubert was informed of his diagnosis of syphilis in 1822 which, it is said by biographers and musicologists, contributed to his halting work on the music that has become known as the Unfinished Symphony.(15) At the time, most symphonic works were in 4 movements. Schubert, who was as prolific as Mozart, completed 'only' two symphonies and suggests an abrupt and profound alteration in his productivity. The gifted young composer, suffering from pain, fever, rashes, and hair loss, writes music that takes a darker turn, reflecting a soul in pain and fear of death, in sharp contrast to the joyful, exuberant works of his earlier years.(9) As he drank his 'mercury tea', and continued with hair loss, his *lieder* and other compositions, like *Der Tod und Das Mädchen* (Ger.:Death and the Maiden)(1824) and *Die Winterreise* (Ger.:Winter Journey)(1827), reflected bleakness, despair, and mortality.(13) Reacting in a similar way to his diagnosis, Smetana anticipated its consequences, writing "final page" in the middle of a score.

Auditory effects within compositions

Bedrich Smetana long suffered from hearing loss and tinnitus which are manifestations of so-called otosyphilis, occurring in up to 40% of those with tertiary syphilis. He had been suffering from otosyphilis during the creation of his *First String Quartet* (1876), subtitled "*From My Life*", which, in the composer's view, heralded his greatest infirmity, the acquired deafness "which (cut him) off from the enjoyment of the art of music". The quartet expresses the composer's joy at his professional success but then, in its last movement, is suddenly interrupted by the profound silence of a diminished seventh chord. An agitated low tremolo coupled with an extremely high harmonic E then replicates the whistling sound of an A-flat major chord that Smetana associated with his tinnitus. The quartet never recovers its optimism thereafter and resigns itself to a sad, ignominious conclusion. The work is considered one of the great string quartets of the 19th century as well as a great example of artistic

self-reflection and medical self-assessment.(19,20)

Similarly, Robert Schumann suffered from what was termed a "syphilitic sound". His last published work, *Ghost Variations* for piano, completed after a suicide attempt, evokes the relentless tinnitus that plagued Schumann for the remainder of his life. Underperformed and recorded, the *Variations* are some of the most beautiful melodies of the Romantic Period, dedicated to Clara Schumann, as well as the most tragic. Schumann wrote down themes which he thought he heard delivered from "angels" and "demons".(21) Schumann had a decades long bout with mood disorders and may have suffered from both neurosyphilis and cyclic bipolar disease. His canon and compositional output did not appear to be as affected by his years of syphilis as the other composers in the study but impacted his daily life. At one soiree, he was taken away from the piano where he had begun to play non-sense music and his wife, Clara, became increasingly protective of his public perception. Ten months before his death, she prohibited the famed violinist Joseph Joachim from playing Schumann's *Violin Concerto in D minor* (1853), his only such piece, as she felt the work "showed definite traces" of her husband mental decline. After a less organized but 'symphonic' 1st movement, the 2nd movement was said to be composed after Schumann had dreamt of a ghost that dictated to him a "spirit theme" consistent with other auditory hallucinations he experienced throughout his life.(22) The 3rd movement has long been considered as so challenging it verges on the unplayable and awkward partly due to Schumann's requirement that it be "lively but not too fast" ("Lebhaft, doch nicht so schnell"). It has thus been conjectured that Schumann's neurosyphilis and bipolar disease made him conceive or and realize music at not only the plane of the sublime but a different, surreal tempos.(21)

Psychoses within compositions

Schumann may have suffered from the dual diagnoses of treponemal infection and bipolar disorder but Gaetano Donizetti, whose symptoms were similar, was more autobiographical about the general effects of psychosis. In his famous 1835 tragic opera, *Lucia di Lammermoor*, the "mad scene" of the emotionally fragile title character, Lucia di Lammermoor, depicted Donizetti's own evolving psychosis (Figure 3, left). In Act III, Lucia bursts onto the scene, covered in blood, having murdered her husband in a fit of rapid cycling joy and terror, mad

with visual and auditory hallucinations, and blurring the borders of fantasy and reality. In his earlier 1830 opera about the 2nd wife of King Henry VIII, Anna Bolena, Donizetti considered the depression and psychosis of her involuntary confinement in the Tower of London. Tragically prescient, Donizetti's worsening neurosyphilis and psychoses eventually led him to be involuntarily hospitalized in an asylum in the Parisian suburb of Ivry. (12) The composer left his mark on at least 4 of his 65 operas by portraying in musical terms, from personal experience, the psychological and physical effects of chronic mental illnesses.

Depression and Resignation within compositions

The Overture from Schumann's *Szenen aus Goethe Faust* (1844-1853) is one his last works Schumann completed over many years of depressive disease, creativity, and infirmity. Its complex melodies and challenging harmonics invokes a sense of profound anxiety which some argue that "(the Overture) is a tormented orchestral score of certainly debatable unity and control." (23) Clara Schumann became increasingly concerned about her husband's health and the direction of his musical output. It is rumored that she and their friend Johannes Brahms destroyed many of the composer's later, troubling works, which they thought to be evidence of his mental decline. While *Five Pieces for Cello and Piano* (1849) may have indeed followed such destiny, his *Violin Sonata* (1851), *Violin Concerto* (1853), and the *Fantasy for Violin and*

Orchestra (1853) thankfully remain in the universal repertoire.

A well-known composition of Franz Schubert from his last year, one of his "*Schwanengesang*" (Ger.: "Swan Songs"), is entitled *Doppelgänger* (1827) based on the poem by Heinrich Heine about meeting one's 'spirit double'. The idea of an exact but usually invisible replica of every human or animal is an ancient one and traditionally associated with imminent death. Some biographers interpret the song as revealing Schubert's two-sided nature of his personality, pre-announcing the common fate he shared with his close-knit circle of Viennese friends. A letter of 1824 reflected the pessimism of his now two year battle with the disease that would end his life. "Imagine a man whose health will never be right again, and who, in sheer despair over this, ever makes things worse and worse, instead of better...(24) The imminence of death, as represented by the *Doppelgänger*, thus haunted Schubert his final years. Smetana may have shared such premonitions as he too evoked the *Doppelgänger* theme in his very last opera, *The Devil's Wall* (1882). The opera's hero, the hermit, Benes, and his devilish counterpart, Rarach, do battle in a conflict portraying the powers of love over evil.(15,20)

Hugo Wolf shared with Schumann and Schubert all the psychological and neurological symptoms that interfered with their artistic expression, especially in respect to his song ('Lied') compositions.(25) Wolf's last opera, *Manuel Venegas* (1897), remained unfinished,

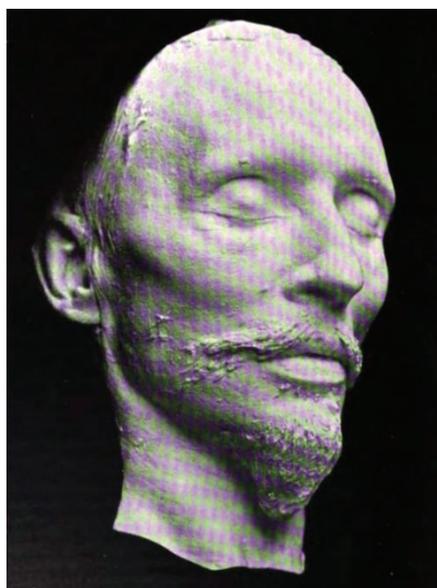


Figure 4. (Left) Death mask, of Hugo Wolf, from *Hugo Wolf*, by Ernest Neuman, London, Methuen & Co. 1907. (Right) Frederick Delius, in 1929, flanked by the Australian composer Percy Grainger (on left) and Delius' amanuensis Eric Fenby, on right (Courtesy Delius Trust).

though he desperately tried to complete it, creating 60 pages of score, before he was neurologically unable to work. He last three songs were based on the poems of the legendary painter and sculptor Michelangelo (Buonarroti), the so-called *Drei Michelangelo-Lieder*, "Often do I reflect", "Does my soul feel", and "All that is created must perish". Shortly after, he was taken to a Viennese asylum, recovered briefly, but with further neuropsychiatric decompensation, he attempted to drown himself. Unlike Donizetti, Wolf wished to return to the asylum where he eventually died in 1903 (Figure 4, left). Wolf's music was known to use tonality to reinforce meaning, and his chosen texts, like those of Michaelangelo, often reflected an inner anguish and hopelessness, in confronting one's mortality:

"All that is created must perish,
everything around us passes away.
For the time flies and the sun sees
that everything has an ending-
Thinking, speaking, joy and sorrow.
And our children's children die away. Like night's
shadow in the daylight or like a mist in a breath of
wind, We also were human beings, merry or sad like
you. And now we are lifeless here,
Nothing but dust, as you see. All that is created must
perish, everything around passes away."(26)

Delius said his own farewell with the song cycle *Songs of Farewell* with words selected by his wife Jelka, from the "Leaves of Grass" poems of Walt Whitman (1819-1892). His initial idea has been sketched in 1920 but in 1925, blind and paralyzed, could not collaborate with his wife in order to dictate it. Only when Eric Fenby joined the Delius household, the composer could complete his unfinished works or initiate new ones in days of relative health (Figure 4, right). Delius poignantly set to music text from *Now Voyager* with such great rapidity and frenzy he would become exhausted.

"Now Voyager depart,
(much, much for thee is yet in store)...
Depart upon thy endless cruise old Sailor."(27)

DISCUSSION

In the pre-antibiotic era, syphilis was an extremely common disease. During the 18th and the 19th centuries, many artists became its victims eventually developing end stage or neurosyphilis, typically expected in 5-10% of untreated cases.(5) Psychiatric symptomatology is the most common clinical manifestation of neurosyphilis but

small vessel disease, especially branches of the middle cerebral and basilar artery can explain neurologic findings. (28) We found that in seven syphilitic classical composers, all arguably geniuses, neurosyphilis had devastating effects on their quality of life and musical output. The onset of severe symptoms may have been associated with a decrease in their productive output but periods of lucidity allowed for brief bursts of creative genius to bring forth many works of enduring beauty, introspection, and acceptance of fate.

The composers in our study, Paganini, Schubert, Schumann, Donizetti, Wolf, Smetana, and Darius, had to contend not just with the social stigmatization and physical effects of their disease, but with the effects of so-called therapy as well. Mercuric vapor poisoning and high doses of opium only served to worsen many syphilitic symptoms, like hair loss, and certainly contributed to even further physical limitations to accomplish their work.

Limitations of our study include small size, selection bias, and the conjectural basis of historical diagnosing making. Only Donizetti and Smetana, the latter controversially so, underwent post mortem examination to confirm their tertiary syphilis diagnosis. Still, the classical music these seven artists created, despite their neuropsychiatric and physical limitations, has gained the immortality they themselves could not achieve in life. Their masterpieces still continue to inspire modern audiences and their visionary innovations remain fertile ground for interpretation and wonder.

CONCLUSIONS

Seven classical music composers created works of unparalleled genius and expressivity despite, and potential at times influenced by, chronic infirmity from the effects of tertiary syphilis

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