Medicine and music: the Mozart myth

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Salieri: You are a god, though you may not believe it, but I, I know, I have found a second Haydn, who brings me ecstasy and rapture.

Mozart: Is it true, Salieri, that Beaumarchais once poisoned someone?

(A Pushkin, Mozart And Salieri, 1830)

The illnesses and death of Mozart are reviewed, citing sources from his diary and letters to his family, as well as eyewitness accounts by persons present at his final illness. From these and other documentary evidence given by his personal physician, a reasonable and logical retrospective diagnosis can be made given modern medical knowledge. The long-held popular belief that Mozart died of heavy-metal poisoning is re-assessed in the light of these findings. There is no medical ground for accepting the “poison hypothesis.” I believe that Mozart was a victim of common bacterial infections—notably streptococcal, that were prevalent in 18th-century Europe. The immunological sequelae of repeated streptococcal infections on the kidneys and their complications are the most likely cause of the composer’s death.

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Introduction

This review attempts to explore the little by-ways leading out of the busy highways of everyday concerns into the serene arbours of thought and fancy. The following issues have immediate appeal to medical practitioners because the locus is on human nature and disease, and in particular, that rare breed called genius.

Johannes Chrysostomus Wolfgangus Theophilus Mozart (1756-1791), was one of the greatest and most beloved of all composers that ever lived—a genius, both ingenuous and sophisticated, both trivial and profound, not by turns, but at once. This review attempts to reassess the final illness of his short and tragic life, as made available in the many correspondences, testimonies, and eyewitness accounts that are mankind’s rich heritage.

Genesis of the poison hypothesis

The popular notion that Mozart died of poisoning at the hands of his various enemies, real or imagined, originated with himself in his last year. According to Franz Niemetschek (Mozart’s friend and first biographer, whose account was first published in Prague in 1798), in the summer of 1791, while on a walk through a park in Vienna with his wife, Constanze, Mozart declared that he had been poisoned: “Someone has given me aqua toffana. I feel it too strongly. I won’t last much longer. I cannot free myself from this thought.”21 Aqua toffana was a slow-acting poison concocted by Teofania di Adamo, composed of a mixture of oxides of antimony, lead, and arsenic.

Later in July 1791, a stranger appeared requesting the composition of a requiem for an anonymous patron. This episode has become the most famous event in all of Mozartiana. The already-ill Mozart became obsessed with the idea that he was being asked by the devil to compose his own requiem. Actually, the patron was none other than a wealthy nobleman, Count Wallsegg-Stuppach, who wanted to pass off Mozart’s work as his own, and subsequently had the audacity to
rewrite the work in his own hand under the title “Requiem composto del Conte Wallseege.”

Soon after Mozart’s death, on New Year’s Eve, 1791, an article in a Berlin newspaper, Musikalisches Wochenblatt, recorded: “Mozart is dead. He returned from Prague feeling sickly; it was thought he had contracted dropsy, and he died in Vienna. Because his body swelled up after death, people thought he had been poisoned...” With time, this report was forgotten. Then in the 1820s, the alleged self-confessions of a senile and demented Antonio Salieri, rekindled the poison hypothesis. A report from the Leipzig Allegemeine Musikalische Zeitung for 25 May 1825, stated: “In his distorted fantasies, he [Salieri] actually claims to be partially responsible for Mozart’s death—a bit of lunacy which surely no one but the poor, delirious old man believes.”

In October 1823, Salieri’s pupil, Ignaz Moscheles, visited him in Vienna, and gave the following account: “His appearance already shocked me and he spoke only in broken sentences about his imminent death. But at the end he said: ‘Although this is my last illness, I can assure you on my word of honour that there is no truth in that absurd rumour; you know, that I am supposed to have poisoned Mozart. But no, it’s malice, pure malice, tell the world, dear Moscheles, old Salieri, who will soon die, has told you.’”

In 1824, Ludwig van Beethoven’s nephew, Karl, entered the following statement in his uncle’s conversation book: “Salieri maintains that he poisoned Mozart.” Anton Schindler, Beethoven’s assistant, also recorded: “Salieri is again in a very bad way. He has fantasies that he was responsible for Mozart’s death and gave poison. This is true—for he wants to confess it...”

Shortly after this, Salieri attempted suicide. Such rumours, speculation, and sensationalism, were a godsend to playwrights, who lost no time in creating works with this conspiracy as their theme. In 1830, the Russian poet, Alexander Pushkin, wrote a play titled “Mozart and Salieri,” based loosely on the poison hypothesis. Later, in 1893, this became the libretto of a one-act opera penned by another Russian, Nikolay Rimsky-Korsakov.

More recently, Peter Shaffer wrote the play “Amadeus” in 1979, which was later made into an Oscar-winning movie directed by Milos Forman. Both Shaffer and Forman stated: “We were not making an objective ‘Life of Mozart’... The play was never intended to be a documentary biography of the composer and the film even less of one.” However, popular opinion was not to be easily altered, as witness the following “mock inquest” reported in the Times on 18 May 1983: “London, May 17, 1983. AFP. WA Mozart was poisoned in Vienna on December 5, 1791, aged 35. This conclusion was reached by a British ‘investigatory committee’ after a ‘court of inquiry’ at the music festival in Brighton. The investigation was carried out on the stage by two professional judges and three lawyers. After the interrogation of the five chief ‘suspects’, including Mozart’s wife, the majority of the ‘jurors’—about 250 spectators—were convinced that the composer was murdered... Judge Michael Hutchinson said that in the Mozart case, a ‘charge of homicide against person or persons unknown should be considered.’ The verdict was: death by natural causes, 49%, murder by Franz Hofdemel [whose wife, Maria Magdalena was a piano pupil of Mozart, with whom Mozart was suspected of having an affair], 22%, murder by Sussmayr, 11%, murder by Salieri, 11%.”

**Mozart’s medical history**

Mozart’s thirty-six years were persistently afflicted with the various infectious diseases that were rampant at the time. The fact that he was constantly on the road, being exhibited as a child prodigy, meant that he was exposed to microorganisms to which he had no resistance.

Jean-Baptiste Suard aptly commented in 1804: “It has constantly been shown that too prompt and too rapid a development of the moral faculties in children only operated at the expense of their physique. Mozart provided new proof of this. His body did not sustain normal growth as he grew older. All his life he remained weak and frail in health.”

Fortunately for posterity, Mozart kept a detailed record in his diary and of his correspondences with family members; these have been admirably and painstakingly translated into English by Emily Anderson. From these, one can obtain a glimpse into the medical history of Mozart as well as the world of 18th-century medicine. Dr Boyd Neel of the Toronto Conservatory of Music, has noted: “Perusal of the letters will only heighten the mystery to a musician. As a documentary commentary on the life in the eighteenth century, and as a contemporary view of the idiosyncrasies and failings of his colleagues, the letters are unsurpassed.”

**Vienna, 21 October 1762:** Mozart complained of pain in his hips and back. His father, Leopold,
noticed a few painful, tender, very red, and slightly raised lumps about the size of a kreutzer corn. These lesions were distributed over his shins, elbows, and buttocks. Over the next week, these spots increased in size but not in number. The boy complained of malaise and fever. Dr von Bernhard of Vienna University diagnosed “a sort of scarlet fever.” This episode lasted until 31 October 1762. The above was more likely to be a description of erythema nodosum, possibly post-streptococcal in origin.

Salzburg, 5 January 1763: Mozart was ill with fever and “rheumatism” in his legs, so that he was unable to stand.

Paris, 16 February 1764: Mozart was stricken by “a violent sore throat and catarrh” and was so ill during the night that he was in danger of suffocating. His sister, Nannerl, was also afflicted to a lesser degree.

Lille, France, 5 August 1765: During a one month stay there, Mozart was taken ill again with “quinsy.”

The Hague, 15 November 1765: Mozart suffered an attack of fever. By 1 December 1765 he was in a coma and delirious. Over the next two months he was emaciated, his tongue was dirty and dry, his lips became hard and black, and shed. This prolonged fever, delirium, and exfoliation of oral mucosa make a diagnosis of typhoid likely.

Munich, 9 November 1766: He was ill with a second attack of “acute rheumatic fever.” He could not stand on his feet or move his toes or knees. Leopold wrote that this was similar to the illness the boy had suffered in January 1763.

Olomouc (Olmutz, Austria), 26 October 1767: Wolfgang became ill with smallpox. There was an epidemic in Vienna at the time. He was ill until 10 November. This infection left Mozart’s face scarred for life.

Mantua, (Italy), 10 January 1770: Mozart had a cold and developed frost-bite.

Rome, April 1770: Mozart was afflicted with toothache, which developed into a dental abscess in November 1770.

Salzburg, January, 1771: Mozart developed jaundice, looking “sickly and very yellow.” This was likely due to infection with a type A hepatitis.

Munich, 22 November, 1780: Mozart was ill with a bad cold and cough.

Salzburg, 10 May 1781: After resigning from the service of Prince-Archbishop Colloredo, Mozart became feverish and was trembling in every limb, so that he “staggered along the street like a drunkard.”

Vienna, 23 August 1784: He had “a chill on the kidneys” and was ill with chills and drenching sweats. He wrote to his father: “...I had a fearful attack of colic, which ended each time in violent vomiting. I have therefore to be extremely careful. My doctor is Sigmund Barisani...” Leopold also wrote to Nannerl: “My son has been very ill in Vienna...He perspired so profusely that his clothes were drenched and in the cold night air he had to try to find his servant who had his overcoat... So not only my son, but a number of other people caught rheumatic fever...” Dr Barisani diagnosed “rheumatic fever.” This account of fever and abdominal colic is of significance in the final diagnosis.

Vienna, 8 April 1790: Mozart wrote: “...My head is covered with bandages due to rheumatic pains, which make me feel my situation still more keenly...”

Vienna, 20 November 1791: According to Georg von Nissen (Constanze’s second husband), Mozart’s final illness, which confined him to bed, lasted for fifteen days. It began with swelling on his hands and feet and made him almost completely immobile. After this, followed sudden vomiting, which was diagnosed as “miliary fever.” Up to two hours before his death, Mozart retained complete understanding.11

Sophie Haibel, Mozart’s sister-in-law, in a famous letter to von Nissen dated 7 April 1825, recalled making him a nightgown that could be put on from the front, because of his immobility; his condition fluctuated. Sometimes he would compose and rehearse the Requiem K.626 with his student, Franz Sussmayr, and others, at his bedside.

On 4 December 1791, Constanze told Sophie: “He was so ill last night I thought he would die today. If he becomes so again, he will die tonight.” Mozart told Sophie: “Ah, dear Sophie, how glad I am that you have come. You must stay here tonight and see me die. Why, I have the taste of death on my tongue. And if you do not stay, who will help my dearest Constanze when I am gone?” Sussmayr was also at Mozart’s bedside. The music for the Requiem lay on the quilt and Mozart was explaining to him how to complete it when he
died. Sophie Haibel further recollected: "A long search was made for Dr. Closset, who was found at the opera but who had to wait for the end of the performance. He came over and ordered cold compresses to be placed on Mozart’s burning head, which, however, affected him to such an extent that he became unconscious and remained so until he died. His last movement was an attempt to express with his mouth the drum passage in the Requiem. That I can still hear..."4

Mozart died at five minutes to one on 5 December 1791: no autopsy was performed. A third-class burial, as was common practice at that time, took place the next day in St. Mark’s cemetery outside Vienna. The exact location of the grave remains a mystery.

Recorded in the register of deaths of St. Stephen’s parish, 6 December 1791, is the following3:

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<tr>
<th>Place</th>
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Was Mozart really poisoned?

The major biographers of Mozart (Niemetschek, von Nissen, Novello, and Jahn) have either discounted the poison hypotheses, or dismissed them as gossip. The most enthusiastic advocates of this hypothesis come from Germany and Russia.

In 1861, a German antiques dealer named Daumer, put the blame for Mozart’s death on the Freemasons, to which Mozart belonged. He purported that Mozart was poisoned by his Freemason brethren because he had divulged their secrets in his opera Die Zaubernacht K.620. In reality, the librettist of this opera—Emanuel Schikaneder—borrowed material from various popular oriental fairy tales, including Oberon. During the Nazi regime, this view was further elaborated on by a General Ludendorff and his wife Mathilde, who blamed the Jews. In so doing, Nazi members confused facts in their anti-Semitic propaganda, as Jews were excluded from Freemason societies in Mozart’s time.12

His death has been used to justify nationalism, fascism, and racism.

In 1958, the German camp of Dr Dieter Duda and Dr Gunther Kerner made light of Mozart’s childhood illnesses, claiming these had been greatly exaggerated.12 They concluded that Mozart’s final illness was caused by the side-effects of mercury poisoning, and alleged that mercury was a popular agent employed in conspiracies in 18th-century Europe, before the advent of firearms. Mercury was a common component of drugs in use at the time, being the main ingredient in the treatment of syphilis, hence the saying: "A night with Venus and a life with Mercury." However, there was no medical evidence that either Mozart or his two sons had ever had syphilis.13

The Soviet musicologist, Boelza, in a brochure in 1953, claimed to have written evidence of a confession written by Salieri to his priest, in which he admitted poisoning Mozart. However, he never provided documentary proof of his sources.12

In the search for a suspect for this alleged crime, the unfortunate Salieri was selected because Mozart had incriminated him in a plot to obstruct the premiere of Le Nozze di Figaro K.492; and of also trying, albeit unsuccessfully, to do the the same to the premiere of Cosi Fan Tutte K.588.

The death blow to the poison hypothesis is the absence, from eyewitness accounts, of the various cardinal signs of heavy metal intoxication, such as tremor of the extremities, increased salivation, mental irritability (mercury), a blue line in the gums, peripheral nerve palsies (lead), dermatitis, a yellow-brown discolouration of the skin, and peripheral neuropathies (arsenic), metallic taste in the mouth, and vesicular eruptions of the skin (antimony).

The only extant medical report of Mozart’s final illness came via Dr Guldener von Lobes’ account as related to him by Dr Thomas Closset. Mozart’s physician, and is worth quoting in full: “It is with pleasure that I communicate to your most excellent Sir, all that is known to me of the illness and death of Mozart. He fell sick in the late autumn of a rheumatic and inflammatory fever, which being fairly general among us at that time, and attacked many people. I did not know about it until a few days later, when his condition had already grown much worse. I did not visit him for some reason but informed myself of his condition through Dr. Closset, with whom I came in contact everyday. Dr. Closset considered Mozart’s illness to be danger-
ous, and from the very beginning feared a fatal conclusion, namely a deposit on the brain. One day he met Dr. Sallaba and he said positively, ‘Mozart is lost, it is no longer possible to restrain the deposit.’ Sallaba communicated this information to me at once, and in fact Mozart died a few days later with the usual symptoms of a deposit on the brain. His death aroused general interest, but the very slightest suspicion of his having been poisoned entered no one’s mind. So many persons saw him during his illness, so many enquired after him, his family treated him with so much care, his doctor, highly regarded by all, the industrious and experienced Closset, treated him with all the attention of a scrupulous physician, and with the interest of a friend of many years’ standing, in such a way that certainly it could not have escaped their notice then if the slightest trace of poisoning had manifested itself. The disease took its accustomed course and had its usual duration: Closset had observed it and recognised it with such accuracy that he had forecast its outcome almost to the hour. This malady attacked at this time a great many of the inhabitants of Vienna, and for not a few of them it had the same fatal conclusion and the same symptoms as in the case of Mozart. The statutory examination of the corpse did not reveal anything at all unusual.”

This document, dated 10 June 1824, is of utmost importance because it refutes the poisoning theory, and points to the occurrence of a concurrent epidemic in Vienna. It is also significant that Dr von Sallaba was an expert in forensic science.

Mozart’s son, Franz Xaver, told the Novello’s that, in his view, Salieri’s intrigues and plots against his late father had effectively poisoned his life and thoughts. At best, Salieri could be responsible only for the “psychological murder” of Mozart and not his physical murder. But such professional jealousies, conflicts, and court intrigues were commonplace in 18th-century, imperial Vienna.

Possible diagnoses

Having refuted the poison hypothesis, one can now examine the 18th-century medical diagnoses of Mozart’s death.

‘HITZIGES FRIESELFIEBER’
This was the official diagnosis as entered on the death register by Dr von Sallaba, and translates as “heated or acute miliary fever,” which in 18th-century medical jargon means merely “a fever associated with a skin rash.”

‘UNO FEBBRE REUMATICO INFLAMMATORIA’
Rheumatic inflammatory fever—this was the medical diagnosis from Dr Guldener’s testimony. It implies a febrile illness with joint inflammation.

‘UNO DEPOSITO ALLA TESTA’
Because of the terminal paralysis (possibly hemiplegia) of Mozart, Dr Cloquet rightly suspected “a deposit in the head,” which could be due to a brain tumour, meningitis, cerebral ischaemia, hypertensive encephalopathy, or vasculitis.

‘DROPSY’
This was the cause of death as announced in the obituary. It simply means swelling of the body due to terminal congestive heart failure, renal, or liver failure.

According to Niemetschek: “Mozart fell ill in Prague in the summer of 1791 and dosed himself ceaselessly. His colour was pale and his countenance sad. A foreboding sense of his approaching death seemed to have produced this melancholy mood, for at that time he already had the seed of the disease which was so soon to carry him off.”

During the composition of Die Zauberflote, Mozart suffered from recurrent headaches and blackouts. Edward Holmes, the first English biographer, wrote: “He sunk over his composition into frequent swoons, in which he remained for several minutes, before consciousness returned.” Otto Jahn wrote: “Even before the completion of Zauberflote he had become subject to fainting fits which exhausted his strength and increased his depression.”

In 1905, Dr J Barault wrote: “Two factors hastened Mozart’s death. The first was a chronic cause dating from his earliest years and increasing every day. This was simply excessive work, continual fatigue and profound misery. It was at that moment that the disease which carried him off laid hold of him. If we considered his rapid emaciation, his difficulty in breathing, his faintings, the swelling of his legs and hands, paresis, and if we remember that when young he had scarlatina, we are indeed led to the conclusion ‘nephritis.’ Mozart in our opinion died of Bright’s disease...”

Dr Carl Bar, a Swiss dentist, was in favour of heart failure as a result of recurrent attacks of acute rheumatic fever, blaming further aggravation by repeated venesections to control fever. The symptoms may be summarised as follows: an acute febrile condition with
inflammatory swelling in the upper extremities, impaired mobility resulting from severe pain, rash, vomiting, sweating, and headache.  

After a detailed discussion of the official cause of death, "acute miliary fever," and how it should be interpreted in the light of 18th-century medical knowledge, Dr Bar reached the following conclusion: "On the strength of the criteria based on Jones, with two primary symptoms and at least two secondary symptoms, and taking all contemporary sources into consideration, it has been possible to substantiate the diagnosis of Mozart’s mortal illness as 'rheumatic fever,' with the proof of early rheumatic illness being a deciding factor."  

Dr Bar further implicated the practice of venesection, a common therapeutic procedure at the time. "Even a conservative estimate indicates that Mozart in all probability lost roughly two litres of blood."  

Given modern medical knowledge, an attack of acute rheumatic fever resulting in death, after an interval of twenty-five years, is unlikely; such cases are hardly known.

Dr Peter Davies in 1983, emphasised the concurrent symptoms of skin rash (possibly purpuric eruption), polyarthritis, and oedema, postulating renal failure as the ultimate cause of death. According to Davies, the symptoms of depression, headache, blackouts, pallor, and weight loss, as described by Niemetschek, Holmes and Jahn, are compatible with a diagnosis of renal impairment. In an attempt to tie all the symptoms together, he argued logically and convincingly in favour of Henoch-Schönlein syndrome (anaphylactoid purpura), the result of repeated assaults on Mozart’s immune system by β-haemolytic streptococci in various epidemics, starting from 1784, with the final attack in November of 1791.

Dr Davies concluded that Mozart’s immune system had been constantly bombarded by a host of infections. Hence, he was prone to develop immune-complex diseases, including possibly IgA nephropathy. In Henoch-Schönlein syndrome, the target organs affected include the skin, joints, gastrointestinal tract, kidneys, and the cerebral vessels. Eventual renal involvement in untreated cases may be as high as 60% and approximately 10% of nephropathy patients develop chronic renal failure.

Possible causes of Mozart’s death in modern nomenclature

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<td>Barault (1905)</td>
<td>Post-scarlet fever nephritis</td>
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<td>Boelza (1953)</td>
<td>Heavy metal poisoning</td>
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<td>Duda &amp; Kern (1958)</td>
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<td>Bar (1966)</td>
<td>Rheumatic fever</td>
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<td>Davies (1983)</td>
<td>Henoch-Schönlein syndrome</td>
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Conclusion

Mozart’s true character continues to be elusive. Any student of Mozartiana has to wade through two centuries of contradictory evidence, rumour, gossip, and testimonies given long after the event, in order to arrive at any reasonable conclusion. The following restrictions apply: firstly, the inadequacies of 18th-century medical practice; medical terms in use then can have an entirely different meaning to those in current use. Examples include “rheumatism” and “rheumatic fever,” which as already stressed, merely denote the symptoms of fever with joint pain and swelling. Even today, these terms have different meanings in different cultures and disciplines. Secondly, the letters and diaries of the Mozart family, taken for what they are worth, may tend to exaggerate certain events and undermine others. Lastly, the so-called eyewitness accounts may not be reliable, as memory can be faulty. An example is Sophie Haibel’s narrative of Mozart’s final illness, communicated thirty-four years after the event.

Notwithstanding these deficiencies, the common denominator in medical archives is the likelihood of a recurrent β-haemolytic streptococcal infection, with resultant immunological complications in the kidneys, causing eventual renal failure. Myocardial and valvular affections are also possible as a result of repeated rheumatic fever. However, the letters of Mozart towards the end of his life did not contain any clear evidence of chronic ailments (shortness of breath, cough with bloody sputum, decreased exercise tolerance) that would suggest the presence of rheumatic valvular disease. Lastly, the possible contribution of iatrogenic measures such as repeated venesections and sub-lethal doses of drugs containing mercury (a popular ingredient of many 18th-century over-the-counter prescriptions) should also be recognised.

Recent reports have surfaced of the discovery of a skull fragment that is possibly Mozart’s. X-rays have
revealed the presence of a healed left temporoparietal fracture with the imprint of a haematoma, raising the exciting possibility of further DNA and toxicological studies on tissues that could at least settle the questions of heavy metal poisoning and renal osteodystrophy.7

The current situation was well-summarised by the late Dr Bar: “The investigation of Mozart’s death must end here. Any further attempts to reach a more precise explanation would go beyond the demands that—even for a hypothesis—we can make on the sources.”19

If Mozart’s mortal remains were scattered to the winds, his music has found a safer haven in the hearts and minds of countless generations of music lovers. Mankind should be thankful for the gift of Mozart to humanity.

Acknowledgement

This presentation has been in truth a bouquet of other people’s posies, of which nought but the thread that binds them is mine. I have supped liberally from the following sources.

References