

A Genius Finds Inspiration in the Music of Another

By ARTHUR I. MILLER JAN. 31, 2006

Last year, the 100th anniversary of $E=mc^2$ inspired an outburst of symposiums, concerts, essays and merchandise featuring Albert Einstein. This year, the same treatment is being given to another genius, Wolfgang Amadeus Mozart, born on Jan. 27, 250 years ago.

There is more to the dovetailing of these anniversaries than one might think.

Einstein once said that while Beethoven created his music, Mozart's "was so pure that it seemed to have been ever-present in the universe, waiting to be discovered by the master." Einstein believed much the same of physics, that beyond observations and theory lay the music of the spheres -- which, he wrote, revealed a "pre-established harmony" exhibiting stunning symmetries. The laws of nature, such as those of relativity theory, were waiting to be plucked out of the cosmos by someone with a sympathetic ear.

Thus it was less laborious calculation, but "pure thought" to which Einstein attributed his theories.

Einstein was fascinated by Mozart and sensed an affinity between their creative processes, as well as their histories.

As a boy Einstein did poorly in school. Music was an outlet for his emotions. At 5, he began violin lessons but soon found the drills so trying that he threw a chair at his teacher, who ran out of the house in tears. At 13, he discovered Mozart's sonatas. The result was an almost mystical connection, said Hans Byland, a friend of Einstein's from high school. "When his violin began to sing," Mr. Byland told the biographer Carl Seelig, "the walls of the room seemed to recede -- for the first time, Mozart in all his purity appeared before me, bathed in Hellenic beauty with its pure lines, roguishly playful, mightily sublime."

From 1902 to 1909, Einstein was working six days a week at a Swiss patent office and doing physics research -- his "mischief" -- in his spare time. But he was also nourished by music, particularly Mozart. It was at the core of his creative life.

And just as Mozart's antics shocked his contemporaries, Einstein pursued a notably Bohemian life in his youth. His studied indifference to dress and mane of dark hair, along with his love of music and philosophy, made him seem more poet than scientist.

He also empathized with Mozart's ability to continue to compose magnificent music even in very difficult and impoverished conditions. In 1905, the year he discovered relativity, Einstein was living in a cramped apartment and dealing with a difficult marriage and money troubles.

That spring he wrote four papers that were destined to change the course of science and nations. His ideas on space and time grew in part from aesthetic discontent. It seemed to him that asymmetries in physics concealed essential beauties of nature; existing theories lacked the "architecture" and "inner unity" he found in the music of Bach and Mozart.

In his struggles with extremely complicated mathematics that led to the general theory of relativity of 1915, Einstein often turned for inspiration to the simple beauty of Mozart's music.

"Whenever he felt that he had come to the end of the road or into a difficult situation in his work, he would take refuge in music," recalled his older son, Hans Albert. "That would usually resolve all his difficulties."

In the end, Einstein felt that in his own field he had, like Mozart, succeeded in unraveling the complexity of the universe.

Scientists often describe general relativity as the most beautiful theory ever formulated. Einstein himself always emphasized the theory's beauty. "Hardly anyone who has truly understood it will be able to escape the charm of this theory," he once said.

The theory is essentially one man's view of how the universe ought to be. And amazingly, the universe turned out to be pretty much as Einstein imagined. Its daunting mathematics revealed spectacular and unexpected phenomena like black holes.

Though a Classical giant, Mozart helped lay groundwork for the Romantic with its less precise structures. Similarly, Einstein's theories of relativity completed the era of classical physics and paved the way for atomic physics and its ambiguities. Like Mozart's music, Einstein's work is a turning point.

At a 1979 concert for the centenary of Einstein's birth, the Juilliard Quartet recalled having played for Einstein at his home in Princeton, N.J. They had taken quartets by Beethoven and Bartok and two Mozart quintets, said the first violinist, Robert Mann, whose remarks were recorded by the scholar Harry Woolf.

After playing the Bartok, Mann turned to Einstein. "It would give us great joy," he said, "to make music with you." Einstein in 1952 no longer had a violin, but the musicians had taken an extra. Einstein chose Mozart's brooding Quintet in G minor.

"Dr. Einstein hardly referred to the notes on the musical score," Mr. Mann recalled, adding, "while his out-of-practice hands were fragile, his coordination, sense of pitch, and concentration were awesome."

He seemed to pluck Mozart's melodies out of the air.

ESSAY Arthur I. Miller, professor of the history and philosophy of science at University College London, wrote "Empire of the Stars."

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“Genius is one per cent inspiration, ninety- nine per cent perspiration.” This famous saying by Thomas Alva Edison is very relevant in our present day. Abraham Lincoln was a political genius who worked hard and fought against slavery. He lost two times in the presidential elections but he did not give up. He persevered and then he won the elections. Lincoln strongly admired Henry Clay. Now a question comes to the mind that if geniuses are made by hard work then why are there so few of them. Please join StudyMode to read the full document. You May Also Find These Documents Helpful. 99 Syllabus 1 Essay. Einstein once said that while Beethoven created his music, Mozart’s “was so pure that it seemed to have been ever-present in the universe, waiting to be discovered by the master.” Einstein believed much the same of physics, that beyond observations and theory lay the music of the spheres “ which, he wrote, revealed a “pre-established harmony” exhibiting stunning symmetries. The laws of nature, such as those of relativity theory, were waiting to be plucked out of the cosmos by someone with a sympathetic ear. Thus it was less laborious calculation, but “pure thought” to which Einstein attributed his theories. Einstein was fascinated by Mozart and sensed an affinity between their creative processes, as well as their histories. As a boy Einstein did poorly in school. Choose music and clothing that evoke a sense of personal power. For me this ranges. You can replay a song over and over or you can prepare a playlist. When you experience a drop in inspiration, simply step away and put into practice one or more of the exercises you’ve discovered work for you. Inspiration is not dead, it just needs to be aroused. Another source of inspiration might be reading stories that elaborate on the habits of figures you admire, but don’t paralyze yourself in concern if your methods differ from what you learn worked for them. Recognize that each writer, artist, musician, inventor, physicist, fighter, etc., has their own method of madness which allows them to tap into their own river of inspiration and excel. A Genius Finds Inspiration in the Music of Another. Richard Wagner: "The most tremendous genius raised Mozart above all masters, in all centuries and in all the arts." Tchaikovsky: "Mozart is the highest, the culminating point that beauty has attained in the sphere of music." Robert Schumann: "Does it not seem as if Mozart's works become. Continue Reading. Albert Einstein: Mozart's music "was so pure that it seemed to have been ever-present in the universe, waiting to be discovered by the master." A Genius Finds Inspiration in the Music of Another. Richard Wagner: "The most tremendous genius raised Mozart above all masters, in all centuries and in all the arts."