

## Deafness shaped Beethoven's music

## December 20 2011

Progressive deafness profoundly influenced Beethoven's compositions, prompting him to choose lower-frequency notes as his condition worsened, scientists said on Tuesday.

Beethoven first mentioned his <u>hearing loss</u> in 1801 at the age of 30, complaining that he was having problems hearing the high notes of instruments and voices.

By 1812, people had to shout to make themselves understood and in 1818, he started to communicate through notebooks. In his last few years before his death in 1827, his <u>deafness</u> was apparently total.

Writing in the latest issue of the <u>British Medical Journal</u> (*BMJ*), a trio of scientists in the Netherlands dissected Beethoven's string quartets.

They grouped these works into four ages, ranging from early (1798-1800) to late (1824-26).

The experts looked at the first violin part in the first movement of each quartet, counting the number of notes above G6, which corresponds to 1,568 Hertz.

Use of higher notes decreased as the deafness progressed, they found.

To compensate, Beethoven used more middle- and low-frequency notes, which he could hear better when music was performed.



But in the late quartets -- written by the time he was totally deaf -- the higher notes returned.

"When he came to rely completely on his <u>inner ear</u>, he was no longer compelled to produce music he could actually hear when performed, and slowly returned to his inner musical world and early composing experiences," says the paper.

The study is authored by Edoardo Saccenti, Age Smilde and Wim Saris of the Netherlands Metabolomics Centre in Leiden.

## (c) 2011 AFP

Citation: Deafness shaped Beethoven's music (2011, December 20) retrieved 5 May 2024 from <a href="https://medicalxpress.com/news/2011-12-deafness-beethoven-music.html">https://medicalxpress.com/news/2011-12-deafness-beethoven-music.html</a>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.