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**From:** Barry J. Cohen <[REDACTED]  
**Sent:** Wednesday, December 27, 2017 3:19 PM  
**To:** Jeffrey E.  
**Subject:** RE: Phantom fundamentals

Makes total sense. Normally, the ear hears a fundamental and a complex series of overtones associated with it. If only the fundamental tone is eliminated, you are still left with the complex series of overtone which the brain normally associates with the fundamental, so the brain infers the fundamental.

Same can be true with ostinatos. If you went to the middle of the piece and dropped out a measure of the ostinato underlying Ravel's Bolero, your brain still hears it a little bit, because it's so used to hearing it in dozens of preceding measures.

**From:** Jeffrey E. [mailto:[jeevacation@gmail.com](mailto:jeevacation@gmail.com)]  
**Sent:** Wednesday, December 27, 2017 9:23 AM  
**To:** Barry J. Cohen [REDACTED]  
**Subject:**

[https://en.wikipedia.org/wiki/Missing\\_fundamental](https://en.wikipedia.org/wiki/Missing_fundamental)

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please note

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