

**From:** MARK TRAMO <[REDACTED]>  
**To:** J <jeevacation@gmail.com>  
**Cc:** Robert Lawrence Kuhn <[REDACTED]>  
**Subject:** Re:  
**Date:** Mon, 25 Mar 2019 16:01:24 +0000

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Thank you for your email and insights, Jeffrey -

I believe no other cognitive domain challenges the traditional separation of motor vs. sensory processing more than music. This is especially true with rhythm, where the line between perception and production is blurred, if not obliterated - e.g., rhythm perception tasks activate motor association cortex as well as auditory cortex. And neurophysiologists who work on neural coding in primary motor cortex (precentral gyrus) and primary somatosensory cortex (postcentral gyrus) conceive of the two as one system, "sensorimotor cortex," because they are often co-activated at the single-cell level in awake-behaving monkeys. Hence my union of "Kinetics and Kinesthetics" in posterior frontal and anterior parietal cortex in the model published in *Science* (expanded here: <http://www.brainmusic.org/AuditoryNeuroscience/Fig1.gif> ).

Indeed, of the three principal subcomponents of music - Melody, Harmony, and Rhythm - Rhythm is far and away the least studied. - M

On Mon, Mar 25, 2019 at 5:06 AM J <jeevacation@gmail.com> wrote:

I dont think the perception of music is important . sorry I think the production of it , has been overlooked. i think the production reflects the underlying brain architecture. african beats chinese complex. western , rigourous melodies. . . i think it givces a window into the maker. it is not the eyes are a window on the soul. its the music is a window to the brain that created it

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please note

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