Can the data problem be solved with musical notes?

It's Saturday morning. I'm driving south from Claremont to San Diego and listening to NPR. Sort of. I've been thinking on and off whether the previous two and half days will make a difference in my science. A story on Beethoven's anniversary comes on. The music transitions my vague listening to tuned in. It's beautiful. It makes me look around. I stop ruminating on wasting my time.

The conductor being interviewed explains how the music is evoking human emotions. She reminds the listener that when Beethoven wrote the Ninth Symphony he was completely deaf, but he knew how placement of notes, across a scale, in time and space could evoke joy, sorrow, and contentment. This makes me think that music also describes and evokes movement, interactions, cycles. It describes nature, flights of bumble bees, the seen and unseen. It can be combined with images and words. It can create more images and words.

Music has been around much longer than written notes. Notes, musical symbols preserve and transmit information about time and space and scale. They describe interactions between nodes. Denote discrete and continuous movements, harmonious and discordant in nature. Someone came up with this universal way to describe quality and quantity of sound. Sound that was put together and created by diverse and distinct silos of instruments and cultures. Once created, it allowed testing and formulation of distinct sounds, simple and complex. Sharing across genres. Appreciation and use of other genres and silos. It also made music accessible to those not musically inclined.

The task my group decided to tackle was data compilation and integration across the diverse and distinct silos of biology. It is a basic, foundational task--a moon-shot, that will enable Mars and Jupiter landings and understandings. Our pragmatic leader methodically laid out the challenges with input from others. We discussed what this would enable, and proposed potential solutions, but never made a leap. Can the answer be as simple as creating a system like musical symbols to describe and generalize existing data, that can then be used to synthesize understandings?

I know nothing of music. My exposure to classical music is primarily limited to Saturday morning *Looney Tunes*. I love to dance and sing, but never have the lyrics right, and can't keep a beat. So, in some ways this analogy is coming out of left field—and the calling is likely not unique. But I thought I'd share, as I believe that among the groups of scientists at the Reintegrating Biology meetings, there may have been similar thoughts, and you needed someone to say, hey that's a good idea—good question.

For now, I will imagine middle C as a single cell. Describing missing data with the crescendo of the kettle drum being beaten with soft headed sticks. Giving way to a moment of silence. When the unraveling of chromatin, expression of genes, folding of proteins and movement of energy through the system is revealed; and know, I did not waste my time.

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