

25<sup>th</sup> June 2020

## Dissonance

**"The wonted roar was up amidst the Woods,  
And fill'd the Air with barbarous dissonance."**

*John Milton, Comus*

Do you remember Pythagoras? He was a 5<sup>th</sup> century BC Greek philosopher, astronomer and mathematician who gave his name to "Pythagoras' Theorem": *The square on the hypotenuse is equal to the sum of the squares on the other two sides.* Do you remember now?

Pythagoras, it appeared, also had a musical ear. According to legend, he discovered the foundations of musical tuning by listening to the sounds of four blacksmith's hammers. He noticed that the ringing of one hammer when it struck the anvil sounded perfect when another hammer did the same. A third hammer sounded right when it was struck at the same time as the first one. But when a fourth hammer hit the anvil, it sounded wrong, no matter which of the others was being struck at the same time. So, according to Nicomachus in his 2<sup>nd</sup> century treatise on harmonics, Pythagoras worked it out mathematically. It was to do with weight ratios. If the ratios of two hammers was 2:1, it rang as an octave; 4:3 was a "perfect fourth"; 3:2 gave a "perfect fifth". But when the ratio *wasn't* right, the ringing of the two hammers sounded "off". It's what musicians know as dissonance. Pythagoras trusted his ear.

I know when sounds ring true and fall comfortably on the ear. And I also know when something is hard to listen to and creates a dissonance for me. And that's not just in music either. Pythagoras would have made an excellent political pundit. With an ear so well attuned, he could offer us a much-needed, fool-proof "dissonance" detector. Mind you, we shouldn't need Pythagoras to tell us when someone's talking rubbish, or deflecting, or obfuscating. Why? Because we know if things don't ring true.

So let's be excited when voices ring in harmony, when the sounds of the decision-makers resonate with something deep and important within us. Let's trust *our* ear and believe in what we know sounds right.

### **A prayer for today**

*May the sounds of my life create a harmony with others. And if I create any dissonance, make me stop and re-tune my life, so that it can sound better. Amen.*

*An original reflection by © Tom Gordon*

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