. . . . . .

According to Pythagoras, "the universe is number."

But the prevalence of those pesky irrational, transcendental and imaginary numbers in post-Hellenic mathematics eroded the cachet of number mysticism, until—by the 16th century—**Zarlino** felt compelled to call the musical intervals "inventions...of nature herself," even though his approach to tuning was still based on pure number mysticism.

To **Zarlino**, nature as a whole consisted of nothing but number: and music was therefore *numerus sonorus*, 'sounding number.' (* 이 문장에서 "numerus"(뉴메루스)는 영어 "numerous"의 에러가 아니고, 영어 "number"를 뜻하는 라틴어로 생각됨. . . 박재성 주)
Alas, though **Zarlino**'s philosophy was based on numbers it was not based on physics, acoustics,or any other consideration involving physical reality.

Zarlino chose the first **6** members of the harmonic series (his **senario**) not for physical or acoustic reasons, but because six was "the perfect number."

"Furthermore, **Zarlino** says, God needed six days for the Creation.
There are six planets: moon, Mercury, Venus, Mars, Jupiter, and Saturn.
There are six 'natural offices': size, color, shape, interval, state, and motion.
There are six directions: up, down forward, backward, to the right, to the left.
Six surfaces delimit the sube (??? cube).

And so on. (...) [But] why just six?

It is clear that **Zarlino**'s arguments are completely arbitrary, and that it is not at all difficult to carry out a similar exercise with, for instance, the number seven: God needed seven days for the Creation (for why not include His day of rest as well?); there are seven heavenly bodies in between the earth and the fixed stars: Moon, Mercury, Venus, Sun, Mars, Jupiter, and Saturn; there are seven wonders of the world.

And so on.

Now why do these counterarguments appear so devastating to us, and how could such a clever and knowledgable man as **Zarlino** be so satified with this naive number mysticism?

The answer is that, obvious as these counterarguments may be to us, they really stem from a mode of thought that hardly existed at the time. **Zarlino**'s thinking represents a characteristic mixture of Aristotelianism and neo-Platonic number mysticism.

As such it was quite typical for Renaissance science..."[Cohen, H.F., Quantifying Music. D. Reidel Publishing Company: Dordrecht/Boston/Lancaster, 1984, pg. 7]
