

## Circles and Commas

*Scene 1: The music room of a starship cabin. BASIL, an android with a silvery sheen to his skin, is holding his violin. ZOE, a young human woman, is sitting in a chair tuning her cello. She plays each string without stopping them. One sounds faintly dissonant.*

BASIL: Your D-String is still a quarter-tone flat.

ZOE (annoyed): Is it flat-flat, or android flat?

BASIL (perplexed): As we have discussed many times, there is no such thing as 'super android tuning.'

ZOE (still annoyed): No, but there *is* super android hearing, isn't there.

BASIL: It is true that I can discern sounds that humanoid ears would be oblivious to, Zoe, but my audio processors do not alter the sounds themselves.

ZOE (not as annoyed): No, that's not what I meant. I meant... It's like the circle of fifths.

BASIL: I am not certain I comprehend. Please elaborate.

ZOE: Well, they have these posters in music rooms, depicting the circle of fifths. Showing how if you start at C and ascend in perfect fifths, you'll circle back to C. Except you really don't. Because a perfect fifth doesn't really fit inside an octave the right way.

BASIL (stating, not asking): You are referring to the Pythagorean comma.

ZOE: I don't know – maybe? I don't know that term.

BASIL: Your theory is that I perceive your tuning to be flat, not because it is incorrectly tuned, but because I can discern the cents between notes that humans typically cant. Those cents, specifically the twenty-three point four-six cents that represent the difference between a pair of otherwise enharmonic notes, such as D-flat and C.... Those cents – that amount of 'tempering' is often referred to as the Pythagorean comma.

ZOE: Okay, but, back to my point, you hear it, don't you? You can discern down to a lot more than a twenty-three-cent difference.

BASIL (correcting her): Twenty-three point four-six.

ZOE (annoyed again, but also amused): Right, that.

BASIL: Yes, Zoe, I can discern the difference in tones to a much smaller differential, but that is not the point.

ZOE (innocent): What is?

BASIL (smug): Your D-string is still a quarter-tone flat. And we are getting 'later' for our rehearsal session every moment you delay in correcting the error. (softer) Dearest, we may be engaged now, but my affection for you does not alter the laws of mathematics or music.

*ZOE fiddles with the fine tuner on her cello, then plays the note again. This time, it is not dissonant.*

ZOE: Better?

BASIL: Yes. We may now proceed. Shall we take it from the top?

ZOE: Will you take me for dinner and dancing in the officer's lounge after?

BASIL: Of course, if that is how you wish to spend the evening.

ZOE (satisfied): Okay, on my count. One, two, three and...

*The pair begin to play the adagio section of Haydn's "String Duo in D Major," as the lights dim.*

**Scene 2:** *The officer's lounge of the same starship. A view of deep space is visible beyond floor to ceiling windows, and tables encircle the room. At center there is a dance floor, where BASIL and ZOE are in a close embrace, dancing in a slow circle. Other dancers are around them, but they are mainly shadow-figures.*

ZOE: This is nice. Every rehearsal should end with dinner and dancing.

BASIL: You would not become bored if such an activity were repeated with great frequency?

ZOE: I could never be bored with you. (beat) Okay, maybe not *every* rehearsal.

BASIL: Indeed.

*They continue to dance, pausing, at one point, to share a kiss.*

ZOE: The Pythagorean comma was 'discovered' by Euclid, right? And named in Pythagoras's honor?

BASIL: That is correct. (beat) You knew before you brought it up earlier, did you not?

ZOE: I might have, but it's dead sexy when you explain math and music theory and I miss it from when I was taking lessons from you.

BASIL: I see.

ZOE: Some other mathematician didn't invent a Euclidean ellipsis, did they?

BASIL: I am not aware of any such thing.

ZOE (flirtatious): Maybe we could invent one. After all, we do make beautiful music together.

*BASIL lowers ZOE into a dip, leaning forward to kiss her again.*

BASIL: Perhaps, for now, we should simply continue our dance.

*BASIL lifts ZOE back to an upright position.*

ZOE (having to have the last word): Have I mentioned how frustrating it is that you're right all the time? (beat) Don't answer that; just kiss me again.

*BASIL complies and the lights fade to black.*

**END**