

A further discussion with Max took place six months later at the end of this period during the recording session for the Holst carol. By this time, a new voice had appeared that was almost certainly falsetto, and the lowest singing note had dropped to F4, rendering a true alto possible.

MA: There's plenty of choirs where you'd sing it like that

MM: Aaaaah! That hurt. I need a drink.

MA: Come here, come here, we haven't finished. It wasn't that bad!

MM: It felt bad.

MA: Why did it feel bad?

MM: Euh, because it was a strain a lot to get the top notes, and the middle, actually that sort of range is harder to sing than the higher range, 'cos, it's lower down

MA: Yeh

MM: I don't know why but

MA: No well exactly why, because err, ih, ih, you're going down to the passagio

MM: Yeh

MA: whereas, well, up in the top of your falsetto you're well clear of it. That's why.

Come here and talk to me. Last time you said you preferred the falsetto because it was easier. That was last month.

MM: I disagree with myself!

MA: Do you!?! Explain to the ladies and gentlemen listening to this why you disagree with yourself.

MM: By the ladies and gentlemen you mean you, me and you

MA: Well, I might transcribe it and put it in the research paper. So, what are you going to say?

MM: Em, last, last um time I don't know why but I just didn't find it as strenuous on my larynx to sing, to sing in a falsetto whereas this, I mean the bottom range hasn't changed for me

MA: Mm hm

MM: but the top range has gotten a lot harder to sing

MA: And possibly, we'll look at this

MM: More the middle range than falsetto

MA: We'll look at this when I analyse the recordings, but what we think might be happening there, Max, is because you're singing it in the key that Holst wrote, which is the key a congregation would sing it in, you're actually singing in the region we found where your passagio from the falsetto is, 'cos it was this note here wasn't it (plays A4)

MM: (sings "in" to A4 in the "falsetto" voice),

MA: of course, that's exactly the note it starts on

MM: (sings "in" to A4 again in the strained modal voice)

MA: Sing that note in both voices

MM: (sings A4 "in" in "falsetto")

MA: And the other voice?

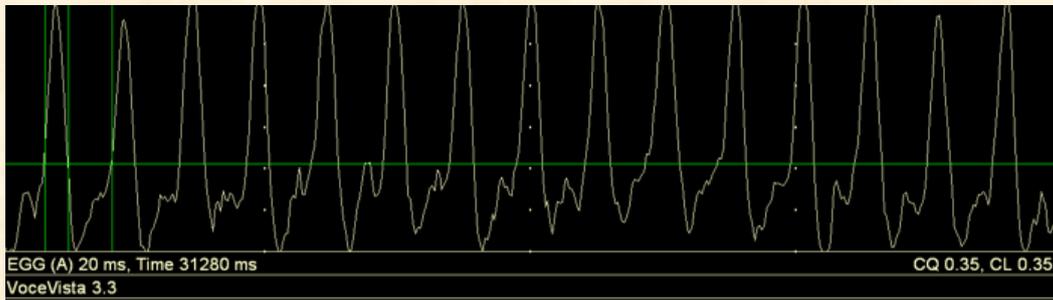
MM: (sings A4 "in" in modal voice which breaks up. He laughs)

MA: So, so you're struggling with, the voice wants to change on that note, which is why you're finding it difficult.

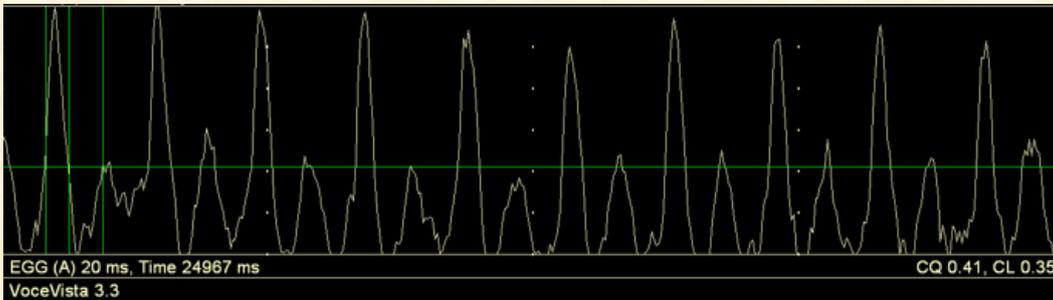
EKG measurements were made the following month (age 13:00). (See figures overleaf)

## EGG Recording of key parts of vocal range at age 13:00

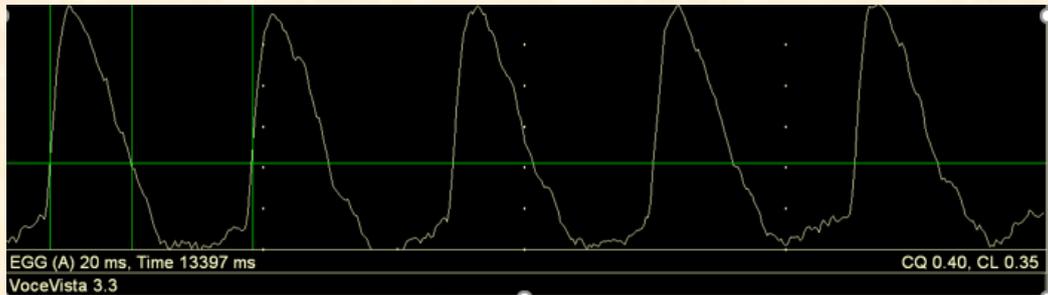
G5 (range top: quasi=sinusoidal falsetto pattern)



C5 (upper passagio: note false or shadow opening indicative of diplophonia)



C4 (stable modal voice)



F3 (range bottom; adult-like phonation with "knee" on opening slope)

