

THE EVOLUTION OF STELIOS KAZANTZIDIS' VOICE FROM THE 1950s TO THE 1970s

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Stelios Kazantzidis



1956-1963:
Vassilis Tsitsanis period

16 songs

1974 'Stin Anatoli':
Mikis Theodorakis

11 songs



Kazantzidis is one of the most prominent singers of popular Greek music with a career spanning from the 1950s till the end of the 20th century. His collaboration with the iconic Rebetiko composer Vassilis Tsitsanis, shaped the post-war Greek music scene and he later collaborated with most of the prominent Greek composers of popular music. One of his last recordings, before a long 12-year pause, was the album "Stin Anatoli" by Mikis Theodorakis in 1974.

Can the audible differences between Kazantzidis' early and later style be quantified through audio analysis?

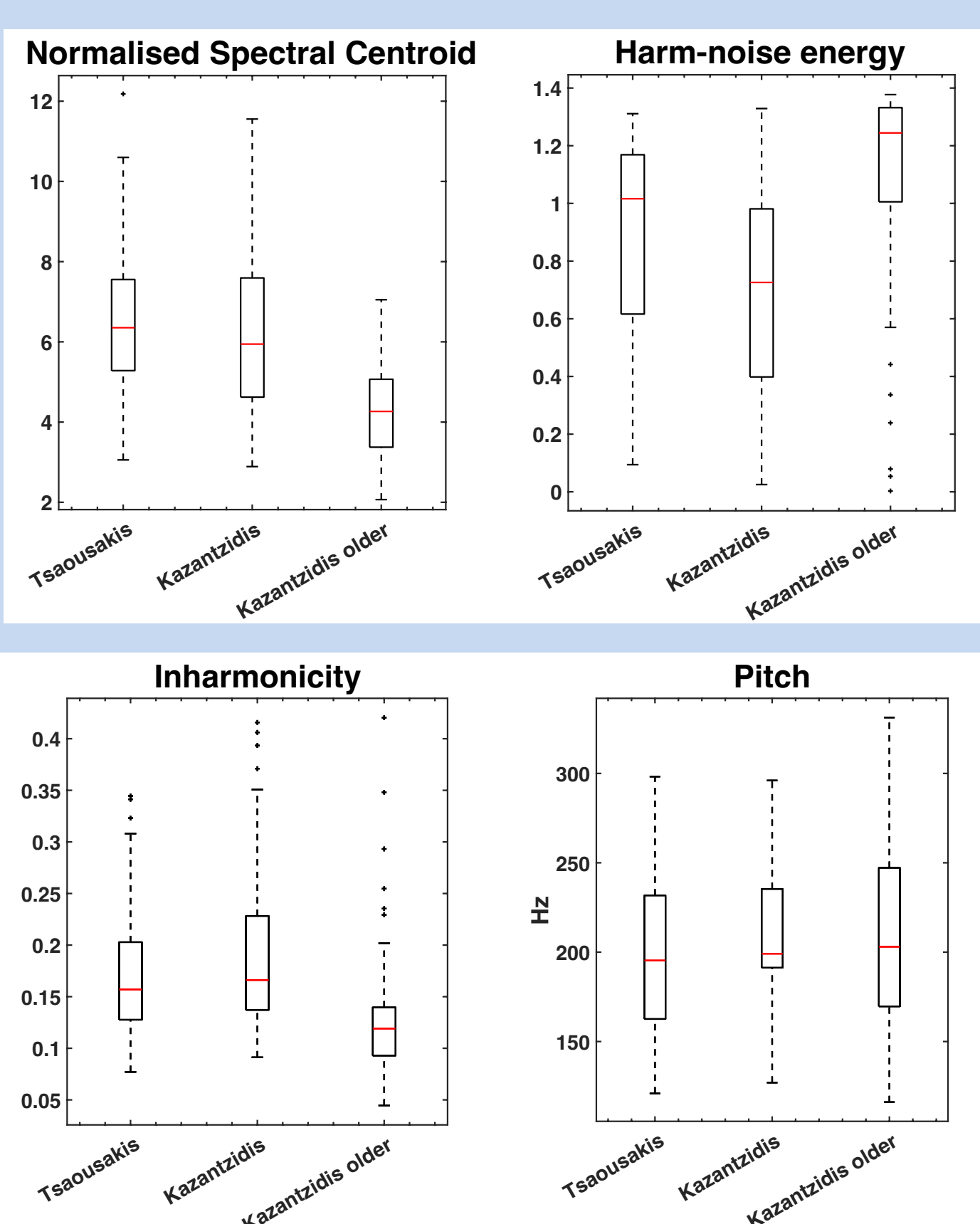
Vocal parts extracted using the Demucs (v4) Music Source Separation

A number of sustained vowels were manually extracted creating a group of **80 vowels** from the Tsitsanis collection and another group of **60 vowels** from 'Stin Anatoli' containing the phonemes /a/, /i/, /ε/, /u/ and /ɔ/.

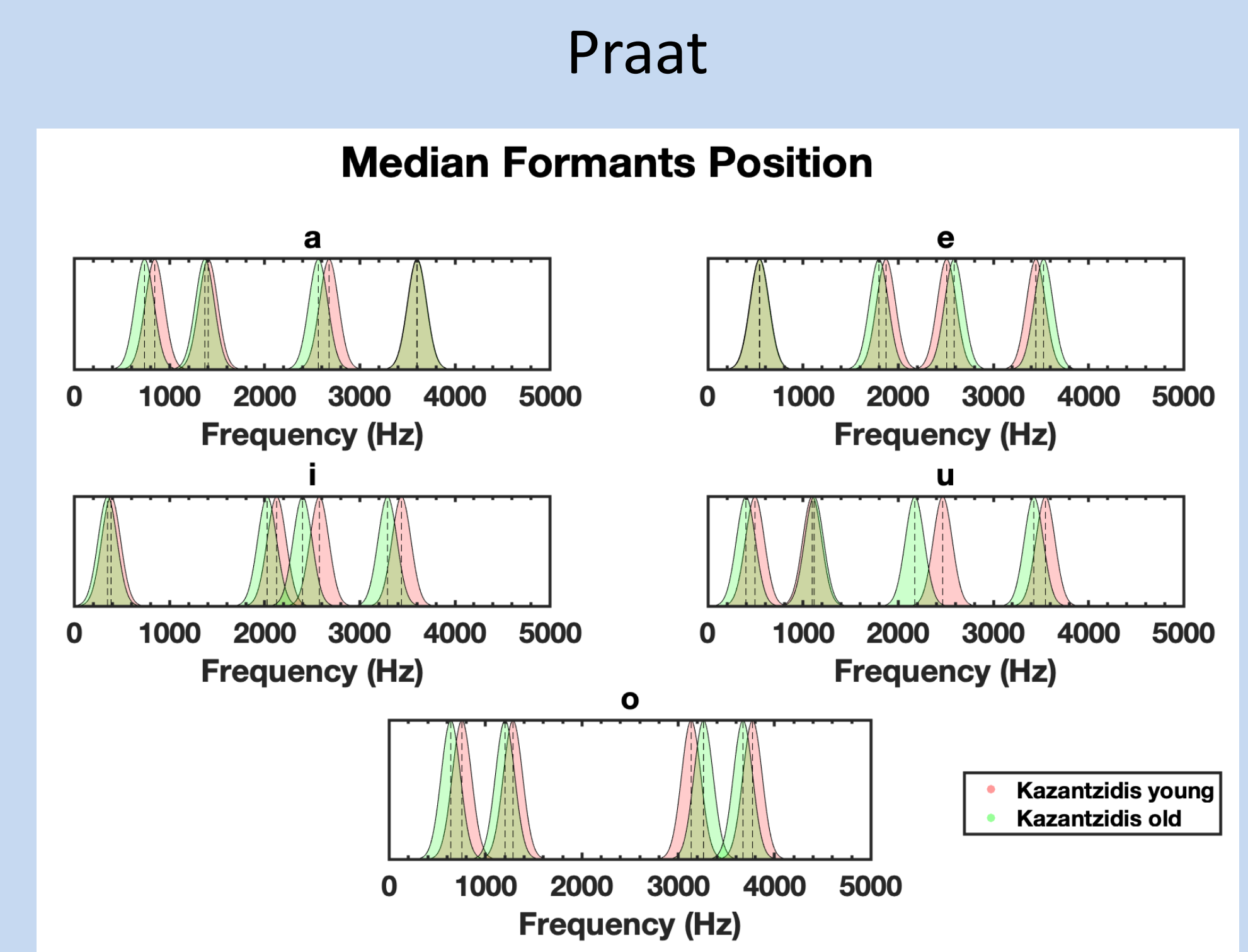
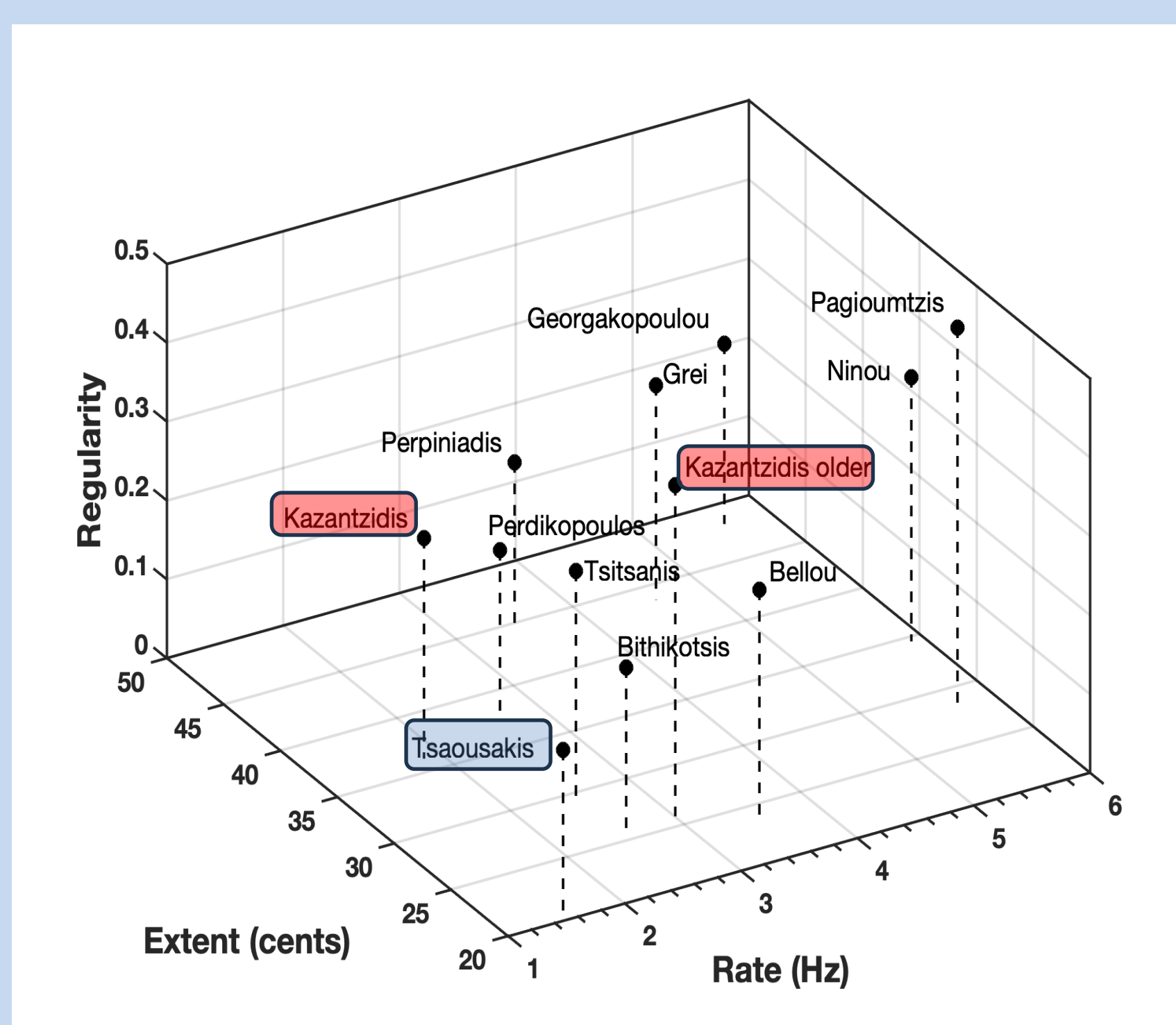
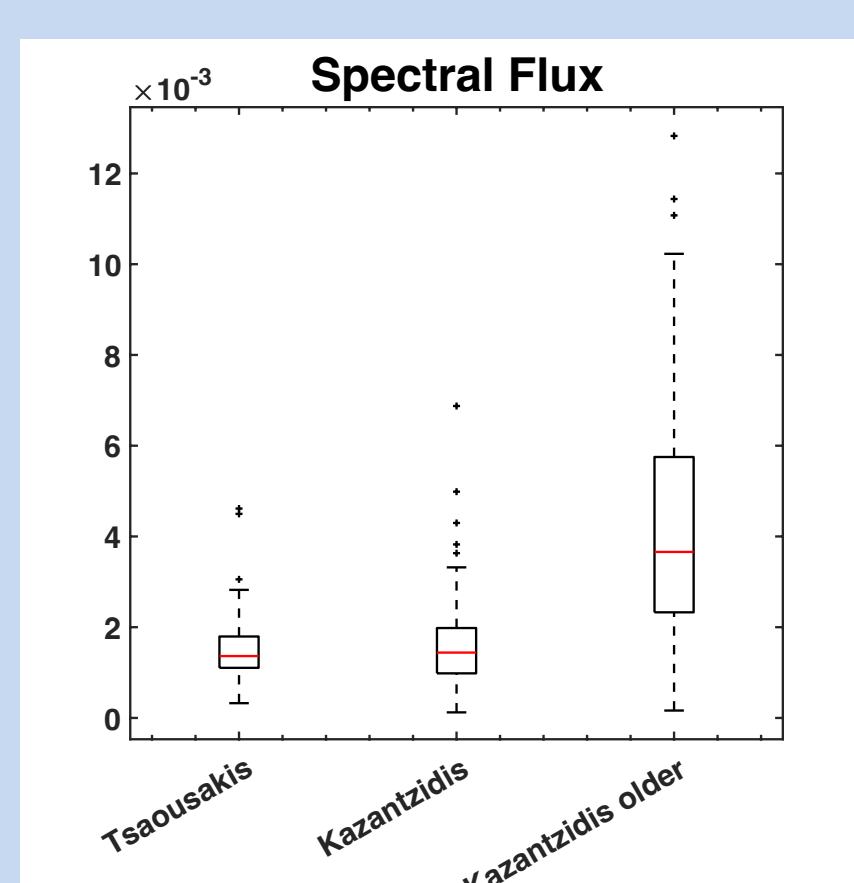
Timbral features

Vibrato

Formants



Timbre Toolbox



Discussion

Differences in the vocal quality between two separate phases of Kazantzidis' career have been quantified through the extraction of timbral and vibrato features. At the same time, differences in **formant** frequencies, which are important for vocal identity [1], appear to be small. Thus, without losing its distinct identity, the mature Kazantzidis' voice is characterised by statistically significant **timbral changes**: *weaker high-frequency context, less inharmonicity and stronger harmonic to noise energy*. At the same time, his **vibrato**, which also constitutes an important element of vocal identity [2], is significantly different at maturity: *faster, more regular but less deep*. Out of the above, only the loss of spectral richness could be justified by ageing [3].

Although it is not impossible that some of the spectral differences might be the result of poorer recording equipment during the 1950s and early 1960s, it is more likely that Kazantzidis has gradually developed higher control over his voice by eliminating noisy and inharmonic components in favour of a smoother delivery. As a result, his voice drifted away from his role model, Prodromos Tsousakis, with whom he initially shared strong timbral similarities. The potential influence of the different composers (Tsitsanis vs Theodorakis) on his singing style may also warrant further investigation from a musicological perspective.

References

- [1] Baumann, O., & Belin, P. (2010). Perceptual scaling of voice identity: common dimensions for different vowels and speakers. *Psychological Research PRPF*, 74, 110-120.
- [2] Herbst, C. T., Hertegard, S., Zangger-Borch, D., & Lindestad, P. Å. (2016). Freddie Mercury—acoustic analysis of speaking fundamental frequency, vibrato, and subharmonics. *Logopedics Phoniatics Vocology*, 42, 29-38.
- [3] Johnson, A. M., & Brunssen, K. (2018). The Senescent Singer, in Karen Brunssen *The Evolving Singing Voice: Changes Across the Lifespan*, (San Diego, CA: Plural, 2018), 228-229.