

A Phonetic Investigation of Greek Palatals

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Introduction

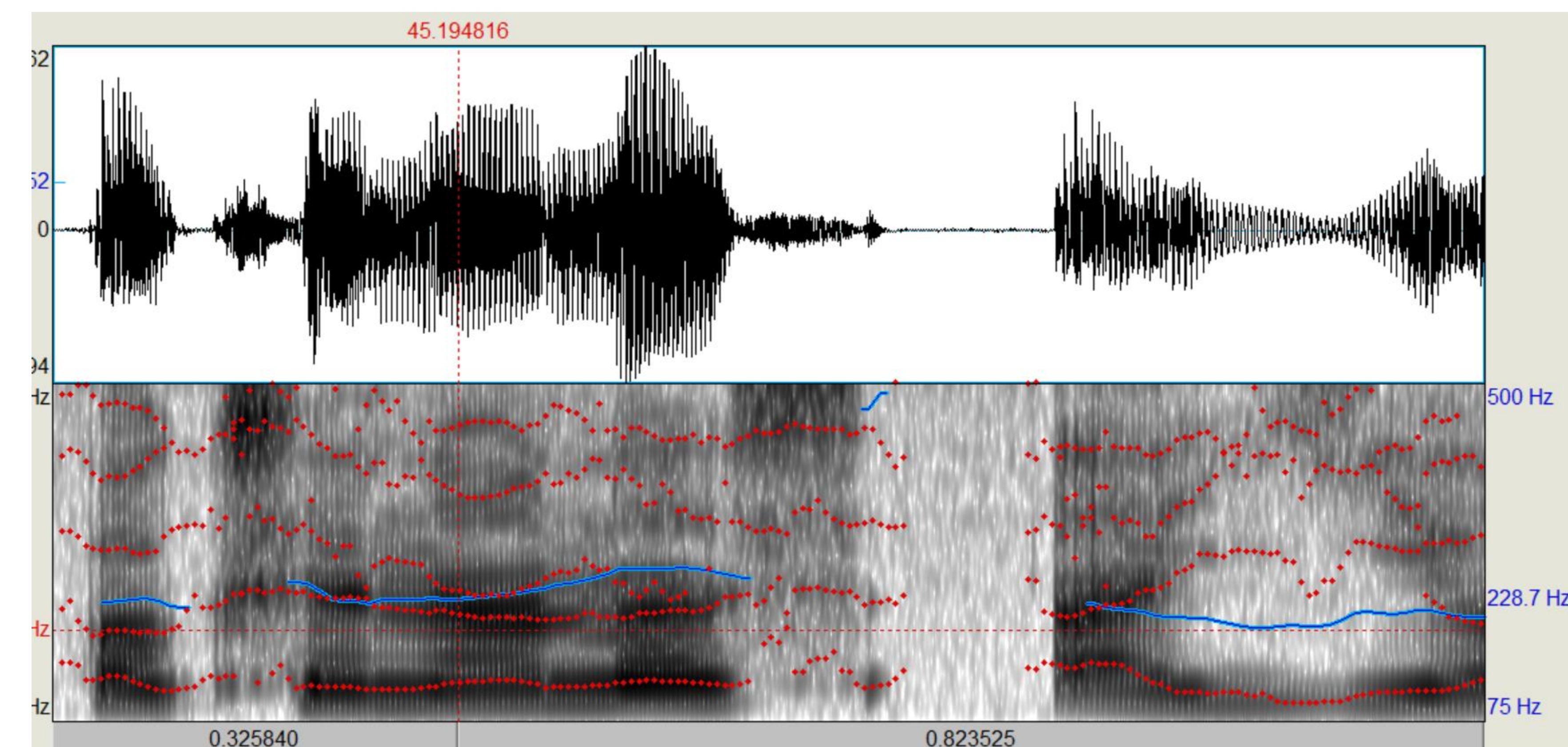
Nicolaidis (2003a), an articulatory study, found that not all Greek palatalized consonants have the same place of articulation (Arvaniti 2007). My goal is to determine whether acoustic analysis of Greek palatals will yield similar results.

Materials and methods

In order to conduct my analysis, I recorded native speakers producing the relevant sounds and analyzed the recordings to see if the different types of palatals had different effects on the formants of the vowels that surrounded them.

Results

All of the palatalized consonants exhibited the same effect on surrounding vowels: they lowered F1 and raised F2 and F3, which indicates that they all share a palatal place of articulation. Although it is true that some of the increases and decreases were not statistically significant according to the statistical analysis that I ran, the vast majority were statistically significant, so it seems reasonable to conclude that this pattern was not an accident. It is true that the palatalized sonorants failed to be statistically significant more frequently than the obstruents (sonorants: 3 fails; obstruents: 1 fail). However, I do not think that this observation provides evidence of a significant difference between these two groups.



Conclusions

After conducting statistical analysis on my results, I found no significant difference in the effects that the different palatals had on surrounding vowels. Therefore, I concluded that the Greek palatalized consonants do all share the same place of articulation, in contrast with the conclusion of the Nicolaidis article.

Literature cited

Arvaniti, A. (2007). "Greek phonetics: the state of the art." *Journal of Greek Linguistics*, vol. 8, no. 1, pp. 97–208., doi:10.1075/jgl.8.08arv

Acknowledgments

I would like to thank Jennifer Smith, who advised me on this project, and Jeff Milke, Georgios Tserdanelis, Panayiotis Pappas, Andrianna Dallis, and Mary Margaroni, who helped me find participants.

Further information

If you have any questions, you can send me an email at evanc@live.unc.edu.