

Phonemicization: Modern Greek

This problem is based on data from Modern Greek. The goal is to identify the 18 consonant phonemes of Modern Greek and some of the allophones by analyzing a relatively large data set. In order to do this you should determine the distribution of phonetically similar sounds and decide if these sounds are phonemes or allophones. Examine the Greek data and answer the questions below.

Note: You can assume that the low vowel /a/ is a central vowel in Greek (distinctive features [-front, -back])

1. Make a phonetic chart of all of the consonants and vowel sounds of Modern Greek that occur in the data set below
2. Answer the following questions and provide evidence for your analysis, such as minimal pairs, near minimal pairs or a statement of complementary distribution (e.g. “x” only occurs in “y” environment, “z” occurs elsewhere).
 - a. Just look at the voiced and voiceless stops [b, d, g, p, t, k]. Are these sounds allophones or phonemes?
 - b. Just look at the voiced stops and fricatives [b, d, g, v, ð, γ]. Are these sounds allophones or phonemes?
 - c. Just look at the voiced and voiceless fricatives [v, ð, γ, f, θ, x]. Are these sounds allophones or phonemes?
 - d. Just look at velar and palatal stops [k, g, c, ɟ]. Are these sounds allophones or phonemes?
 - e. Just look at the velar and palatal fricatives [x, γ, ç, ʝ]. Are these sounds allophones or phonemes?
 - f. Just look at the sibilants [s, z]. Are these sounds allophones or phonemes?
 - g. Just look at the nasal stops [m, n]. Are these sounds allophones or phonemes?
 - h. Just look at the approximants [l, r]. Are these sounds allophones or phonemes?
3. How many phonological rules are necessary to account for the allophones that you have identified in this data set? Provide the rule(s), name the rule(s), say what the rule(s) do(es) and provide illustrative derivations.
4. What are the 18 consonant phonemes of Modern Greek?
5. Contextually limited contrast is discussed on pages 65-67 of the reader. Is the [s, z] contrast contextually limited? Define contextually limited contrast and discuss the case of [s] and [z] in Modern Greek. Extra credit: Are there any other cases of contextually limited contrast in this data set?

Modern Greek Data Set

1.	[díno]	‘I dress [someone]’	2.	[gavós]	‘blind’
3.	[yonís]	‘parents’	4.	[simforá]	‘disaster’
5.	[ánθos]	‘flower’	6.	[xará]	‘joy’
7.	[pénde]	‘five’	8.	[fīlos]	‘friend’
9.	[vulí]	‘parliament’	10.	[kápu]	‘somewhere’
11.	[agónas]	‘elbow’	12.	[vrísko]	‘I find’
13.	[polí]	‘much’	14.	[simfonó]	‘I agree’
15.	[éleŋxos]	‘report card’	16.	[sáli]	‘shawl’
17.	[xazós]	‘stupid’	18.	[zília]	‘jealousy’
19.	[bóta]	‘boot’	20.	[sovarós]	‘serious’
21.	[eŋyrafí]	‘enrollment’	22.	[víxas]	‘cough’
23.	[misí]	‘he despises’	24.	[xámo]	‘floor’
25.	[cípos]	‘garden’	26.	[ðíno]	‘I give’
27.	[borí]	‘he can’	28.	[citázo]	‘I look’
29.	[nisí]	‘island’	30.	[gáfa]	‘gaffe’

31.	[tóra]	‘now’	32.	[yámo]	‘wedding’
33.	[kóma]	‘comma’	34.	[θálasa]	‘sea’
35.	[ðío]	‘two’	36.	[peði]	‘child’
37.	[fáros]	‘lighthouse’	38.	[aŋʒinára]	‘artichoke’
39.	[líya]	‘few’	40.	[eŋðiaféron]	‘interesting’
41.	[kóri]	‘girl’	42.	[télos]	‘end’
43.	[karó]	‘check’	44.	[néfos]	‘cloud’
45.	[potó]	‘drink’	46.	[síka]	‘figs’
47.	[város]	‘weight’	48.	[fóros]	‘tax’
49.	[kambána]	‘bell’	50.	[dulápa]	‘wardrobe’
51.	[θíos]	‘uncle’	52.	[póði]	‘foot’
53.	[pacéto]	‘package’	54.	[ayápi]	‘love’
55.	[dóra]	‘Dora’	56.	[éŋyamos]	‘married’
57.	[záli]	‘dizziness’	58.	[simvulí]	‘advice’
59.	[yála]	‘milk’	60.	[ðagóno]	‘I bite’
61.	[çéři]	‘hand’	62.	[láθos]	‘mistake’
63.	[ʒínia]	‘bad luck’	64.	[kaló]	‘good’
65.	[lípi]	‘sorrow’	66.	[ayóri]	‘boy’
67.	[fíli]	‘friends’	68.	[jíyas]	‘giant’
69.	[áŋxos]	‘anxiety’	70.	[flojéra]	‘flute’
71.	[çína]	‘goose’	72.	[gómena]	‘women’
73.	[cína]	‘china’	74.	[bólíko]	‘more’/‘enough’
75.	[píno]	‘I drink’	76.	[tínos]	‘Tinos’ (an island)
77.	[tsám̩ba]	‘free’	78.	[kafés]	‘coffee’
79.	[tsápa]	‘hoe’	80.	[pánda]	‘always’
81.	[bléko]	‘I complicate’	82.	[bebéka]	‘baby girl’
83.	[bizéli]	‘peas’	84.	[bríci]	‘coffee pot’
85.	[vlákas]	‘halfwit’	86.	[buréci]	‘pastry’
87.	[ʒémi]	‘bridle’, ‘rein’	88.	[gamíla]	‘camel’
89.	[kúkla]	‘doll’	90.	[guvernánda]	‘governess’
91.	[vlépo]	‘I see’	92.	[kócino]	‘red’
93.	[vivlío]	‘book’	94.	[cefátos]	‘cheerful’
95.	[vevéos]	‘certainly’	96.	[cefáli]	‘head’
97.	[kumbáros]	‘best man’	98.	[ʒilotína]	‘guillotine’
99.	[çéro]	‘I am happy’	100.	[xuzúris]	‘lazybones’
101.	[çérete]	‘hello’	102.	[xórta]	‘greens’
103.	[çília]	‘thousand’	104.	[xuxuliázo]	‘I blow/breath on’
105.	[jéros]	‘old man’	106.	[jeló]	‘I laugh’
107.	[jí]	‘earth’	108.	[yurúni]	‘pig’
109.	[jemízo]	‘I fill’	110.	[yuryurízo]	‘I gargle’
111.	[káro]	‘cart’	112.	[káló]	‘callous’
113.	[misí]	‘half’	114.	[vroçí]	‘rain’