

## Alveolar/alveopalatal obstruents in Japanese, part (I)

- If we consider *only* the data in this data set, what would we conclude about the distribution of the alveolar and alveopalatal obstruents (stops, fricatives, and affricates) in Japanese? How many distinct phonemes would we want to set up, and how many allophones does each have?
- There is another alveolar or alveopalatal obstruent in Japanese that is not exemplified (much) in this data set. What is it? It might be interesting to make predictions about the behavior of this additional sound on the basis of the patterns seen here.

### (1) [ç] vs. [s]

[ sakura ]	‘cherry blossom’	[ kesa ]	‘this morning’
[ açita ]	‘tomorrow’	[ osoi ]	‘late, slow’
[ çimasu ]	‘do-FORMAL’	[ muuçi ]	‘insect’
[ kuusaru ]	‘spoils’	[ keçiki ]	‘scenery’
[ ase ]	‘sweat’	[ içi ]	‘stone’
[ miso ]	‘miso, soybean paste’	[ toçi ]	‘year’

### (2) [t] vs. [tç] vs. [ts]

[ atami ]	(place name)	[ tsukau ]	‘uses’
[ tokei ]	‘clock’	[ uta ]	‘song’
[ tatsu ]	‘stands’	[ heta ]	‘unskillful’
[ tetsudau ]	‘helps’	[ koto ]	‘thing’
[ katsu ]	‘wins’	[ utsusu ]	‘reflects’
[ tateru ]	‘builds’	[ setomono ]	‘pottery’
[ itsu ]	‘when’	[ utsu ]	‘hits’
[ kita ]	‘came’	[ oto ]	‘sound’
[ çikaku ]	‘near’	[ oçiru ]	‘falls’
[ tatari ]	‘spell’	[ ita ]	‘board’
[ keççi ]	‘stingy’	[ satori ]	‘realization’
[ utçi ]	‘house’	[ otoko ]	‘man’
[ tabete ]	‘eating’	[ akitçi ]	‘empty land’
[ moççi ]	‘rice cake’	[ kaççi ]	‘value’

(continued)

(3) **[z] vs. [d͡z] vs. [(d)z]**      (‘[(d)z]’ means *variable* pronunciation, either [d͡z] or [z])

[ (d)zembu ]	‘all’	[ izen ]	‘before’
[ ka <sup>h</sup> d͡zi ]	‘fire’	[ ku <sup>h</sup> d͡zira ]	‘whale’
[ kazoku ]	‘family’	[ (d)zannen ]	‘regrettable’
[ ku <sup>h</sup> zu ]	‘kudzu, J. arrowroot’	[ i <sup>h</sup> d͡zi ]	‘maintenance’
[ tozan ]	‘mountain climbing’	[ kezuru ]	‘sharpen, scrape’
[ me <sup>h</sup> d͡ziro ]	(place name)		

- Note also: [ san<sup>h</sup>d͡zen ]      ‘three thousand’ — not variable