

Homework: Vowel Sequences in a Japanese Dialect

Due Tues. 1/25 in class

1. Introduction

In a regional dialect of Japanese, there are extensive phonological alternations which are found in the Accusative case of nouns. For purposes of this problem, assume that the underlying representation of the accusative suffix is /-o/. In other words, the dialect has a rule of inflectional morphology that informally looks like this:

$$X \rightarrow Xo \text{ when } [+accusative]$$

For the underlying representation of the stems, you may use the isolation form.

Write up in standard prose form an OT analysis of these data. I would like you to check your answer with OTSoft¹—please include suitable bits of program output to justify your answer (simple text clips are ok; use Courier font so they're legible). In your write-up, include tableaux for these forms: 1. [sora^a], 19. [saruu], 26. [nagainoo], 32. [kirjoo], 36. [meʃuu]

Here are the inputs and candidates from my own OTSoft file, which only depicts the essential part of each form:

| | |
|--------|---------------------------------------|
| /e-o/ | ☞ joo, oo, eo, ee, juu |
| /i-o/ | ☞ juu, joo, io, uu, oo, ii, ee |
| /a-o/ | ☞ aa, ao, oo, woo |
| /u-o/ | ☞ uu, uo, woo, oo |
| /o-o/ | ☞ oo |
| /Si-o/ | ☞ Suu, Sjuu, Sjoo, Sio, Soo, Sii, See |

[S] is ASCII-ese for [ʃ]. Be sure your analysis can handle the candidates just given, but also feel free to add more candidates.

2. Remarks and hints

2.1 Source

This problem is taken from the research of a celebrated phonologist but I would like you to invent your own answer rather than Googling his/hers...

¹ OTSoft, a Windows program, currently runs on machine #1 in the department lab; I'll work today on getting the other two up and running.

2.2 Hints

The answer I made up² assumed a massively autosegmental representation in which all feature values can be spread, deleted, and moved, with Faithfulness constraints varying on three parameters:

- MAX vs. IDENT. MAX is violated if you lose the value entirely. IDENT is violated if you either lose the value or dock it onto some other docking site. Docking sites are assumed to be little X's, one per segment.
- DEP is violated when there is a new docking site added.
- MAX and IDENT for just one value is allowed—penalizing just the + to – change, or just the – to + change, or you can also use the classical version that penalizes both directions.
- MAX and IDENT can be limited to stem segments (often, stem segments or features survive where affix segments or features do not).

2.3 Writeup

Please do use the ranking argument facility for OTSoft—it will produce nice tiny tableaux that will serve to illustrate your analysis. Paste these into your text in Courier font.

At the *end* of your writeup, please place an appendix pasting in every single tableau. I doubt I will read this but I may consult it if I'm unsure about your analysis.

2.4 Help

This is a totally new problem set and my experience indicates that all sorts of messy issues will arise as a result and that some of them will be interesting. My office hours are T Th 2-3 and by appointment.

2.5 Remark

We will return to this problem later, once when we have covered theories of exceptionality and free variation—so for now, all of the exceptional forms are suppressed.³

3. Main set of data—regular forms

3.1 Stems ending in [e]

| | <i>Stem</i> | <i>Accusative</i> | <i>gloss</i> |
|----|-------------|-------------------|--------------|
| 1. | [kane] | [kanjoo] | 'money' |
| 2. | [ume] | [umjoo] | 'plum' |

² To replicate your experience I refrained from reexamining the famous phonologist's answer, which I have forgotten...

³ Trust me, it's not the first time ...

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|----|----------|------------|---------|
| 3. | [hatake] | [hatakjoo] | ‘field’ |
| 4. | [kire] | [kirjoo] | ‘slice’ |
| 5. | [mae] | [majoo] | ‘front’ |

3.2 Stems ending in [i]

| | <i>Stem</i> | <i>Accusative</i> | <i>gloss</i> |
|-----|-------------|-------------------|-----------------------|
| 6. | [kaki] | [kakjuu] | ‘persimmon’ |
| 7. | [kari] | [karjuu] | ‘debt’ |
| 8. | [nani] | [nanjuu] | ‘what’ |
| 9. | [dehairi] | [dehairjuu] | ‘in and out’ |
| 10. | [hanabi] | [hanabjuu] | ‘firework’ |
| 11. | [taaramomi] | [taaramomjuu] | ‘packaged rice seeds’ |
| 12. | [toji] | [tojuu] | ‘age’ |
| 13. | [hari] | [harjuu] | ‘needle’ |
| 14. | [tori] | [torjuu] | ‘bird’ |
| 15. | [meji] | [mejuu] | ‘meal’ |
| 16. | [dottji] | [dottjuu] | ‘which’ |
| 17. | [mikoji] | [mikofjuu] | ‘portable shrine’ |
| 18. | [uji] | [ujuu] | ‘cow’ |

3.3 Stems ending in /a/

| | <i>Stem</i> | <i>Accusative</i> | <i>gloss</i> |
|-----|-------------|-------------------|-------------------|
| 19. | [sora] | [sora] | ‘sky’ |
| 20. | [tama] | [tamaa] | ‘ball’ |
| 21. | [hadaka] | [hadakaa] | ‘naked body’ |
| 22. | [makekata] | [makekataa] | ‘way of losing’ |
| 23. | [hana] | [hanaa] | ‘flower’ |
| 24. | [nawa] | [nawaa] | ‘rope’ |
| 25. | [taba] | [tabaa] | ‘bundle’ |
| 26. | [wara] | [waraa] | ‘straw’ |
| 27. | [naginata] | [naginataa] | ‘long sword’ |
| 28. | [arahira] | [arahiraa] | ‘a kind of dance’ |
| 29. | [budoodana] | [budoodanaa] | ‘vine stands’ |
| 30. | [mekata] | [mekataa] | ‘weight’ |
| 31. | [abura] | [aburaa] | ‘oil’ |

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|-----|------------|-------------|----------------|
| 32. | [kega] | [kegae] | ‘wound’ |
| 33. | [kagura] | [kaguraa] | ‘divine dance’ |
| 34. | [tawara] | [tawaraa] | ‘rice package’ |
| 35. | [sandaara] | [sandaaraa] | ‘rice package’ |
| 36. | [ʃita] | [ʃitaa] | ‘tongue’ |

3.4 Stems ending in [u]

| | <i>Stem</i> | <i>Accusative</i> | <i>gloss</i> |
|-----|-------------|-------------------|---------------|
| 37. | [saru] | [saruu] | ‘monkey’ |
| 38. | [maku] | [makuu] | ‘screen’ |
| 39. | [mizu] | [mizuu] | ‘water’ |
| 40. | [roosoku] | [roosokuu] | ‘candle’ |
| 41. | [waragutsu] | [waragutsuu] | ‘straw shoes’ |
| 42. | [retasu] | [retasuu] | ‘lettuce’ |
| 43. | [haiku] | [haikuu] | ‘haiku’ |

3.5 Stems ending in [o]

| | <i>Stem</i> | <i>Accusative</i> | <i>gloss</i> |
|-----|-------------|-------------------|----------------|
| 44. | [nagaino] | [nagainoo] | ‘long one’ |
| 45. | [ohuro] | [ohuroo] | ‘bath’ |
| 46. | [ifiko] | [ifikoo] | ‘stone powder’ |