

Prosodic conditioning in derived environment effects

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INTRODUCTION

Derived environment effects

- Some processes apply only or never in derived environments (DEEs)
- Common argument for phonological strata and/or cyclicity

Main claim

- These processes are not actually sensitive to morphological derivedness but to **prosodic structure**

Sources of evidence

- Apparent over-/underapplication
- Dialectal variation
- Better empirical predictions

CASE #1: FINNISH

Finnish assibilation

- /t-i/ → [si] in **morphologically derived** environments

1. DEs feeds assibilation

- /halut-i/ halusi 'want-PAST'
- /pyytä-i/ pyysi 'ask-PAST'

2. Assibilation blocked in non-DEs

- /koti/ koti 'home.NOM.SG'
- /äiti/ äiti 'mother.NOM.SG'

- Word-final /e/ → [i] raising feeds assibilation (Skousen 1973)

3. Vowel raising

- /kiele/ kieli 'tongue.NOM.SG'
- /lapse/ lapsi 'child.NOM.SG'

4. Vowel raising feeds assibilation

- /kuute/ kuusi 'six.NOM.SG'
- /hirte/ hirsi 'log.NOM.SG'

Counterexamples

- Variation by stem length (Anttila 2006) and lexical frequency (Skousen 1989)

5. Variable (under)application

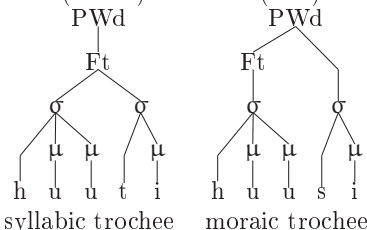
- veti *vesi 'pull-PAST'
- huuti ~ huusi 'shout-PAST'
- *tilati tilasi 'order-PAST'

Prosodic analysis

- Assibilation applies in extrametrical syllables (Anttila 2006)
- Footing varies by dialect

6. Variable footing for /huut-i/

- a. (húu.ti) b. (húu).si



CASE #2: TURKISH

Turkish velar deletion

- /k-V/ → [V] in **morphologically-derived** environments

1. DEs trigger velar deletion

- /bebek-e/ bebe: 'baby-DAT'
- /sokak-a/ soka: 'street-DAT'

2. Deletion blocked in non-DEs

- /hareket/ hareket 'motion.NOM.SG'
- /avukat/ avukat 'lawyer.NOM.SG'

Counterexamples

- Underapplication in verbal stems (Inkelas 2009) and other lexical exceptions (Balci 2008)
- Overapplication in non-DEs (Gökse & Kerslake 2005)

3. Underapplication in some nominals

- /ek-i/ eki 'addition-ACC.SG'
- /fark-i/ farki 'difference-ACC.SG'

4. No deletion in verbal roots

- /gerek-i/ gerei 'need-ACC.SG'
- /gerek-ir/ gerekir 'is necessary'

5. Overapplication in non-DEs

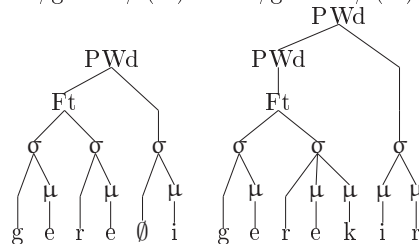
- /bugu/ bu: 'moisture.NOM.SG'
- /agir/ air 'heavy'

Prosodic analysis

- Velar deletion applies within the syllable in a single prosodic word
- Mostly only disyllabic stems with certain types of affixes trigger deletion (Inkelas 2009)

6. Affix classes differ in prosodification (Selkirk 1995)

- a. /gerek-i/ (n.) b. /gerek-ir/ (v.)



CASE #3: ENGLISH

English vowel-tensing

- æC]_σ → eəC]_σ in **non-derived** environments

1. Tensing in non-DEs (Northern Irish English, Harris 1985)

- [wɛ:d] 'wed' [tæ.nəɪ] 'tenor'
- [pɛ:s] 'pass' [pæ.səʃ] 'passage'

2. No tensing with Class 1 affixes

- [wæd-ɪŋ] wedding (n.)
- [pæs-ɪv] 'passive'

3. Tensing with Class 2 affixes

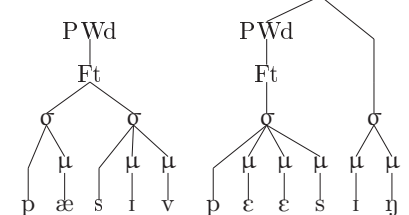
- [wɛ:d+ɪŋ] wedding (part.)
- [pɛ:s+ɪŋ] 'passing'

Prosodic analysis

- Vowel-tensing (already conditioned by syllable) applies within the foot

4. Affix classes differ in prosodification

- a. [pæs-ɪv] b. [pɛ:s+ɪŋ]



ADVANTAGES

1. Fewer counterexamples

- Especially wrt variation
- (Some) prosodic structure is independently required

2. Unified treatment of (non-)DEs

- Both apply within prosodic units

3. No DEEs across prosodic boundaries

- vs purely morphological analysis: across morpheme boundaries
- Lack of long-distance DEEs

- /tilat-i/ [tilas-i] *[silas-i]
- /sokak-a/ [soka-a] *[so.ak-a]

CONCLUSIONS

Morphological vs prosodic conditioning

- Reference to morphological derivedness cannot capture DEE behaviour
- Apparent morphological conditioning is an artifact of the persistence of prosodic structure through the derivation, no phonological strata needed
- Phonologically-conditioned DEEs occur strictly within prosodic boundaries

SELECTED REFERENCES

Balci (2008). *Turkish consonants: a Government Phonology analysis*. Anttila (2006). Variation and opacity. *NLLT* 24, 893-944. Harris (1985). *Phonological variation and change: studies in Hiberno-English*. Inkelas (2009). Another look at velar deletion in Turkish, with special attention to the DEC. *Berkeley Phonology Lab Report*, 387-403. Selkirk (1995). The prosodic structure of function words. *Papers in Optimality Theory*, 439-470. Skousen (1973). *On the nature of morphophonemic alternation*.