Derived Environment Effects and Optimality Theory

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(1) Yawelmani Yokuts

C → ø / CC + _
C → ø / C + _ C
ø → V / CC _ {#, C}

(2) Rules that do not apply in nonderived environments

(a) Finnish Assibilation (Kiparsky 1973a)

(i) t → s / _ i
(ii) /tilat+i/ → tilasi ‘ordered’
    /vete/ → vesi ‘water’ Nom. Sg.
(iii) /koti/ → *kosi ‘home’

(b) Sanskrit ruki-Rule (Kiparsky 1973a)

(i) s → [+high] / i, u, r, k _
(ii) /agni+su/ → agnis ≥ u ‘fire’
(iii) /kusuma/ → *kus ≥ uma ‘flower’

(c) Catalan Devocalization (Mascaró 1976)

(i) i, u → y, w / V _ (in unstressed syllable)
(ii) /de+u/ → déw ‘God’
(iii) /ruin+os/ $\rightarrow$ *ruynós ‘ruinous’

(3) **Rules that do apply in non-derived environments**

(a) allophonic rules: Aspiration in English
(b) structure building rules: Stress Assignment, Syllabification in English

(4) *The Revised Alternation Condition (RAC)* (Kiparsky 1973a)

Neutralization processes only apply in derived environments.

(5) **Korop Vowel System** (Kastelein 1994)

- [back]
  - [ATR] i u [high]
  - e o
  - E O
- a [low]
(6) **Korop Vowel Harmony**

(a) $V \rightarrow [ATR] / \_ [ATR]$

(b) $/E+dE+ni/ \rightarrow edEni$ ‘knife’
$/dE+nO:mi/ \rightarrow dEnO:mi$ ‘is nice’
$/kE+bini/ \rightarrow kebini$ ‘charcoal’
$/O+kE+bE/ \rightarrow OkE+bE$ ‘box’
$/O+nato:n/ \rightarrow Onato:n$ ‘woman’

(c) $/kO+\hat{O}n/ \rightarrow *ko’oni$ ‘saliva’
$/E+wo:ka/ \rightarrow ewo:ka$ ‘buffalo’
$/bE+tena/ \rightarrow betena$ ‘3Pl-Past-show’

(7) **Zulu Vowel System (Harris 1987, Doke 1969)**

    [back]
    i  u  [high] ([ATR])
    E  O
    a  [low]

(8) **Zulu Vowel Harmony**

(a) $V \rightarrow [ATR] / \_ [ATR]$

(b) $/phE+k+a/ \rightarrow phEka$ ‘cook (vb)’
$/um+phE+k+i/ \rightarrow umpheki$ ‘cook (n)’
$/On+a/ \rightarrow Ona$ ‘sin (vb)’
$/is+On+i/ \rightarrow isoni$ ‘sinner’
$/nO+tS?a:ni/ \rightarrow nOtS?a:ni$ ‘and grass’

(c) $/izi+ncEku/ \rightarrow izinceku$ ‘chiefs’
$/ama+gEja/ \rightarrow amagEja$ ‘hoes’
$/izi+yOni/ \rightarrow iziyoni$ ‘birds’
$/izi+nyOka/ \rightarrow izinyOka$ ‘snakes’

(9) If potential output ≠ underlying pattern (non-neutralizing rule), then apply the rule (unless prohibited by an independent cooccurrence restriction)
else
    if input = lexical item (non-derived environment), then do not apply
    the rule
else
    apply the rule

(10) **NEUTRALIZATION**

No neutralization of contrasts is allowed in morphologically simplex environments.

(11) **Strict Consistency Constraint**

No elements of a type T (*in casu* association lines) may be added to a form of which the
morphological specification contains elements of type T.

(12) a. harmonic root b. disharmonic root

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    F       F
V ... V ... V   V ... V
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(13) **Polish Iotation** (Rubach & Booij 1990, Rubach 1984)

(a) t, d, s, z -> tS, dJ, S, J / __ j
(b) /voz+ji+onc/ -> voJonc 'carrying'
(c) /djalekt/ -> *dJalekt 'dialect'

References


