Rule Interactions

This handout is based off data and descriptions found in the following books/articles: Kenstowicz (1994); Hayes (2011); Baković (2011).

Feeding

- Rule A feeds rule B when:
  - A is ordered before B.
  - A creates novel configurations to which B may apply.
- Example: Basque Biscayan dialect raising (Rule A) and umlaut (Rule B).

UR	/asto-a/	/ate-a/
Rule A: $\left[\ +\text{syl}\ \right] \rightarrow \left[\ +\text{high}\ \right] / \_ \left[\ +\text{syl}\ \right]$	astu-a	ati-a
Rule B: $\left[\begin{smallmatrix} +\text{syl} \\ +\text{low} \end{smallmatrix}\right] \rightarrow \left[\begin{smallmatrix} -\text{low} \\ -\text{back} \end{smallmatrix}\right] / \text{C}_0\_$	astu-e	ati-e
SR	[astue]	[atie]

- Notice that Rule B can only apply in these derivations if Rule A has already applied. In other words, Rule A creates the environment for Rule B to apply.

Bleeding

- Rule A feeds rule B when:
  - A is ordered before B.
  - A removes configurations to which B could otherwise have applied.
- Example: Karok truncation (Rule A) and palatalizationt (Rule B).

UR	/ʔu-iskak/	/ni-uksup/
Rule A: V $\rightarrow \emptyset$ / _V	ʔu-skak	ni-ksup
Rule B: s $\rightarrow$ ʃ / i(C)_	–	ni-kʃup
SR	[ʔuskak]	[nikʃup]

- Notice that Rule B can not apply to the UR form /ʔu-iskak/ because Rule A deletes the /i/ that would have been the trigger for Rule B to apply. In other words, Rule A destroys the environment for Rule B to apply.

Counter-Feeding

- Rule A feeds rule B when:
  - A is ordered after B.
  - A creates novel configurations to which B could have applied, if A had been applied before B.
- Example: Lomongo gliding (Rule B) and Deletion (Rule A).

UR	/o-bina/	/o-isa/
Rule B: [-low] → [-syl] / _V	–	w-isa
Rule A: [+voi, -son] → ∅ / V_	o-ina	–
SR	[oina]	[wisa]

- Notice that Rule A for UR /o-bina/ creates an intermediate form o-ina that fits the description for Rule B's application, but since it is ordered after Rule B it cannot apply. If the ordering of Rule A and Rule B were reversed Rule A would feed Rule B, hence the name counter-feeding. Think of counter-feeding as "too late to feed". It's also important to remember that counter-feeding is not the same thing as bleeding!

Counter-Bleeding

- Rule A feeds Rule B when:
  - A is ordered after B.
  - A would have removed configurations to which B applies, had A applied first.
- Example: Polish raising (Rule B) and devoicing (Rule A).

UR	/ʒwob/	/sol/
Rule B: [+back, -low] → [+high] / _[+voi, -nas]	ʒwub	sul
Rule A: [-son] → [-voi] / _#	ʒwup	–
SR	[ʒwup]	[sul]

- Notice that Rule A for UR /ʒwob/ creates an intermediate form where the final sound is [-voice]. If the ordering of Rule A and Rule B were reversed Rule A would block the vowel raising in Rule B from happening, hence the name counter-bleeding. Think of counter-feeding as "too late to bleed".

Further Discussion

It's important to remember that the ordering of rules is not universal, but rather is dependent on a specific language or dialect. What is a bleeding order in one dialect may be a counter-bleeding order in a second dialect. For example, it has been reported that there were at one time two dialects of Canadian English that varied in how they ordered two rules: vowel raising and tapping. The tapping rule eliminates the environment where the vowel raising rule can apply. So in Dialect B where the tapping rule comes before the raising rule, the rules are in a bleeding order. In Dialect A where the tapping rule comes after the raising rule, the rules are in a counter-bleeding order.

Dialect A

UR	/ɹaɪt/	/ɹaɪd/	/ɹaɪt-ɚ/	/ɹaɪd-ɚ/
aɪ → ʌɪ / _[-voi]	ɹʌɪt	–	ɹʌɪt-ɚ	–
[+cor, -son, -cont] → ɾ / V̀_V	–	–	ɹʌɪɾ-ɚ	ɹaɪɾ-ɚ
SR	[ɹʌɪt]	[ɹaɪd]	[ɹʌɪɾɚ]	[ɹaɪɾɚ]

Dialect B

UR	/ɹaɪt/	/ɹaɪd/	/ɹaɪt-ɚ/	/ɹaɪd-ɚ/
[+cor, -son, -cont] → ɾ / V̀_V	–	–	ɹaɪɾ-ɚ	ɹaɪɾ-ɚ
aɪ → ʌɪ / _[-voi]	ɹʌɪt	–	–	–
SR	[ɹʌɪt]	[ɹaɪd]	[ɹaɪɾɚ]	[ɹaɪɾɚ]

References

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