Iterative Optionality and Markedness Suppression

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Vata Vowel Harmony

- [+ATR] optionally spreads leftward across word boundaries (Kiparsky 1985):
  - /kai z pi/ → /'ke.i.z.p'i/ ‘he will cook food’
  - /kai z pi/ → /'ke.i.z.pi/
  - /kai z pi/ → /'ke.i.z.pi/

**Iterative Optionality:** Harmony is optional, and the choice to spread at each point is independent of the choice made at other points (Vaux 2003).

- On the basis of phenomena like iterative optimality, Vaux (2003) against OT and in favor of derivational frameworks.

⇒ **Rule-Based Analysis:**

VC

[+iterative, +optional]

[+]ATR

- Iterativity and optionality parameters permit a simple analysis.

⇒ **OT:** Common theories of variation (Stochastic OT (Boersma & Hayes 2001), Multiple Grammars (Aristila 2007)) can produce only maximal harmony or no harmony (high-ranking DTR requires spreading, not insertion):

| /kai z pi/ | *[-ATR] | IDENT |
| /kai z pi/ | *[-ATR] | IDENT |
| /kai z pi/ | *[-ATR] | IDENT |
| /kai z pi/ | *[-ATR] | IDENT |
| /kai z pi/ | *[-ATR] | IDENT |

- The intermediate forms are harmonically bound.

How can OT produce iterative optionality?

Markedness Suppression

- Rules can be optional, why not allow optional constraints?
- What does it mean for a constraint to be optional?
  - A violation mark it would normally assign is not assigned—its violations are “suppressed.”

**Markedness Suppression:** On a language-particular basis, markedness constraints can be tagged with the operator ⊗, and in an evaluation, any number of violation marks assigned by the constraint may be omitted.

- Markedness constraints trigger processes. Suppressing their violations is like refraining from applying a process.
- Depending on which violations are suppressed, any of the possibilities in Vata can be produced:

| /kai z pi/ | *[-ATR] | IDENT |
| /kai z pi/ | *[-ATR] | IDENT |
| /kai z pi/ | *[-ATR] | IDENT |
| /kai z pi/ | *[-ATR] | IDENT |
| /kai z pi/ | *[-ATR] | IDENT |

- Suppression is limited to Markedness constraints:
  - Suppression of Faithfulness constraints could lead to massive unfaithfulness. E.g., suppressing DTR would permit large-scale eponym.
  - Markedness Suppression simply permits variation toward greater faithfulness—the range of variation is intrinsically bounded.

References


French Schwa Deletion

- /a/ is optionally deleted where permitted by the resulting syllable structure, etc. (Dell 1973):

  envie de te le demander ‘feel like asking you’

- A suppressible * makes deletion of /a/ possible.
- A suppressible * makes no deletion.

| /[a]d/-dimide | *[-ATR] MON |
| /[a]d/-dimide | *[-ATR] MON |
| /[a]d/-dimide | *[-ATR] MON |
| /[a]d/-dimide | *[-ATR] MON |

- It is not clear how these constraints are projected. Multiple grammars are still needed to produce all possibilities.
- Markedness Suppression achieves the same result without expanding the set of constraints.

**Conclusion:** Given the same resources that are available to rule-based theories, OT can produce iterative optionality.

- Markedness Suppression is the OT analog of an optimality parameter. By eliminating violations, Markedness Suppression mimics derivations in which optional rules fail to apply.
- With suppression limited to markedness constraints, we don’t introduce runaway unfaithfulness.
- Iterative optimality is not evidence in favor of derivational phonology.

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