Distinguishing Underlying and Derived Triggers in Process Interactions

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**Defining Opacity**

- Kiparsky (1971, 1973): a rule A → B / C __ D is opaque if there are 1) outputs containing CAD or 2) outputs derived by the rule that contain B in contexts other than __C__D.
- Direct mapping (Kenstowicz and Kisseberth 1977, 1979): applying rules simultaneously to the input form generates counterfeeding and counterbleeding without rule ordering. With ordering, transparency can be the default provided global rules that reference the UR directly are an option to account for opaque mappings.
- Joshi and Kiparsky (1979, 2006): Rule Q is opaque if the result of applying it and rule P to an input string simultaneously is the same as the string that results from applying Q before P but different from the string that results from applying P before Q.
- McCarthy (1999): opacity is the overapplication (counterbleeding) or underapplication (counterfeeding) of a rule.
- McCarthy (2007): with transparency—but not opacity—derived and underlying structures are treated the same.
- Baković and Blumenfeld (2017, 2018, 2019): Feeding is input-provision and output-provision; bleeding is input-removal and output-removal. Counterfeeding and counterbleeding are the result of swapping.

**Main Objective**

- Does the connection between opacity and reference to the input structure carry over to computational characterizations in which processes are functions?
- NO: input-based computation is not required to model opaque maps.

**Open Questions for Future Work**

- Do we get the same results with a composition analysis? Single-function analyses enable identification of order-independent properties of opaque maps (cf. Baković and Blumenfeld 2019), but function composition is more phonologically intuitive.
- Does the pattern of on focus versus on environment hold up when extended to other types of opacity, such as fed counterfeeding, mutual bleeding, and self-destructive feeding (Baković 2011)?

**Summary of Results**

<table>
<thead>
<tr>
<th>counter-feed/bleed</th>
<th>feed/bleed</th>
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<tbody>
<tr>
<td>on focus</td>
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<td>ISL</td>
<td>ISL and OSL</td>
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**Selected References**


