

## Markedness and faithfulness constraints

- (1) Previously, we motivated the ranking  $\text{NoONSETCLUSTER} \gg \text{NoCODA}$  for Cairene Arabic, since a UR like /faslu/ ‘his term’ is realized as [fas.lu] rather than as \*[fa.slu].
- (2) Consider two more (losing) output candidates for the input /faslu/ ‘his term’, (c–d):

/faslu/ ‘his term’	NoONSETCLUSTER	NoCODA
→ a. fas.lu		*
b. fa.slu	*!	
c. <b>fa.lu</b>		
d. <b>fa.si.lu</b>		

- (a) What kinds of phonological process do we see applying in candidates (c) and (d)?
- These are strategies that some languages do use to fix problems with syllable structure, so (c) and (d) are plausible output candidates
- (b) How can we make sure that candidates (c) and (d) do not win?
- If we wanted to propose some phonological goal that these two candidates are failing to satisfy, what might that goal look like?
- (3) One important class of goals, to be formalized as constraints in OT, involves keeping surface forms the **same as their input forms** (URs)
- Constraints against deletion and epenthesis:
- (a)  $\text{NoDELETION}$  Assign one \* for every segment in the input that is not in the output
- (b)  $\text{NoEPENTHESIS}$  Assign one \* for every segment in the output that is not in the input

/faslu/ ‘his term’	NoONSETCLUSTER	NoDELETION	NoEPENTHESIS	NoCODA
→ a. fas.lu				*
b. fa.slu	* W			L
c. <b>fa.lu</b>		* W		L
d. <b>fa.si.lu</b>			* W	L

- Note the dotted lines in the tableau—we don’t know how the top three constraints are ranked with respect to each other, only that they are all higher than NoCODA (NoCODA is the constraint that Cairene Arabic chooses to violate, so it must be ranked lower)

- (4) Now we have seen examples of two classes of constraints
- (a) **Markedness** constraints (like NoOnsetCluster, NoCODA)
    - Look only at **surface forms**
    - Formalize phonotactic (well-formedness) constraints
    - Are typically based on phonetic or typological factors
  - (b) **Faithfulness** constraints (like NoDeletion, NoEpenthesis)
    - Look at **both inputs and outputs**
    - Assign violations if they are not the same on the relevant dimension
  - (c) In standard OT, *all* constraints are either markedness or faithfulness constraints