

Homework #4: Paradigm Uniformity in Historical Change

Due Monday May 13 in class

Read the brief passage attached from Paul Kiparsky's "Explanation in phonology" (1972). This describes an "analogical" change that took place in Ukrainian/Belorussian. The presumed prior historical state is still preserved in Russian. A palatalization process partly regressed, limiting alternation to place rather than place and continuancy.

1. Modeling the earlier stage

Assume the following candidates; "dzh" = [dʒ]; "zh" = [ʒ].

da	da	1
	dzha	
	zha	
di	di	
	dzhi	
	zhi	1
gha	gha	1
	dzha	
	zha	
ghi	ghi	
	dzhi	
	zhi	1

and set up constraints permitting the pattern to be derived. Arrange the constraints in a maxent grammar and use the Excel Solver to find appropriate weights.

2. Modeling the change

Provide some mechanism that leads to a grammar in which /di/ yields /dzhi/, all other outcomes the same. I will be happy to accept imperfect answers, since I'm not happy with my own! But I encourage speculation on how this classical problem might be addressed with current methods.

One thing to ponder is that *Russian didn't change* — there has to be more than mislearning, some sort of randomness, perhaps of the kind we associate with sound change, must also be present.