

Exercises

1: Serbo-Croatian

These data from Serbo-Croatian have been simplified in two ways, to make the problem more manageable. Vowel length is omitted, and the only accent that is included is the predictable accent. Invariant lexical accent is not marked, and your analysis should explain how accent is assigned in the predictable-accent class, where accent is marked. You cannot write rules which predict accent for those words in the unpredictable accent class, and you cannot (and should not try to) write a rule which somehow predicts *whether* a word receives a predictable accent. Ignore the accent of words with no accent mark (other parts of the phonology of such words must be accounted for). Past tense verbs all have the same general past tense suffix, and that the difference between masculine, feminine and neuter past tense involves the same suffixes as are used to mark gender in adjectives.

Adjectives

| <i>Masc.</i> | <i>Fem.</i> | <i>Neut.</i> | <i>Pl.</i> | |
|--------------|-------------|--------------|------------|-----------|
| mlád | mladá | mładó | mladí | young |
| bogat | bogata | bogato | bogati | rich |
| béo | belá | beló | belí | white |
| veseo | vesela | veselo | veseli | gay |
| debéo | debelá | debeló | debelí | fat |
| mío | milá | miló | milí | dear |
| zelén | zelená | zelenó | zelení | green |
| kradén | kradená | kradenó | kradení | stolen |
| dalék | daleká | dalekó | dalekí | far |
| visók | visoká | visokó | visokí | high |
| dubók | duboká | dubokó | dubokí | deep |
| križan | križana | križano | križani | cross |
| sunčan | sunčana | sunčano | sunčani | sunny |
| svečan | svečana | svečano | svečani | formal |
| bogat | bogata | bogato | bogati | rich |
| rapav | rapava | rapavo | rapavi | rough |
| yásan | yasná | yasnó | yasní | clear |
| vážan | vážná | vážnó | vážní | important |
| sítan | sitná | sitnó | sitní | tiny |
| ledan | ledna | ledno | ledni | frozen |
| tának | tanká | tankó | tankí | slim |
| krátaK | kratká | kratkó | kratkí | short |
| blízak | bliská | bliskó | bliskí | close |
| úzak | uská | uskó | uskí | narrow |
| dóbar | dobrá | dobró | dobrí | kind |
| óštar | oštrá | oštró | oštrí | sharp |

| | | | | |
|-------|--------|--------|--------|--------|
| bodar | bodra | bodro | bodri | alert |
| ustao | ustala | ustalo | ustali | tired |
| múkao | muklá | mukló | muklí | hoarse |
| óbao | oblá | obló | oblí | plump |
| pódao | podlá | podló | podlí | base |

Verbs

| | | | | |
|-----------------|-------------------|------------------|-------------------|--------|
| <i>1sg pres</i> | <i>masc. past</i> | <i>fem. past</i> | <i>neut. past</i> | |
| tépém | tépao | teplá | tepló | wander |
| skubém | skúbao | skublá | skubló | tear |
| tresém | trésao | treslá | tresló | shake |
| vezém | vézao | vezlá | vezló | lead |

2: Standard Ukrainian

Standard Ukrainian has palatalized and non-palatalized consonants, but only non-palatalized consonants before *e*. Consonants are generally palatalized before *i*, with some apparent exceptions such as *bilʲ* ‘ache’, which need not be seen as exceptions, given the right analysis. Give ordered rules to account for the alternations of the following nouns. The alternation between *o* and *e* is limited to suffixes. Also for masculine nouns referring to persons, *ov/ev* is inserted between the root and the case suffix in the locative singular (see ‘son-in-law’, ‘grandfather’). The data are initially ambiguous as to whether or not the alternations between *o* and *i* and between *e* and *i* are to be implemented by the same rule. Consider both possibilities; give an argument for selecting one of these solutions.

Masculine nouns

| <i>Nom. sg.</i> | <i>Dat. pl.</i> | <i>Dat. sg.</i> | <i>Loc. sg.</i> | <i>Gloss</i> |
|-----------------|-----------------|-----------------|-----------------|--------------|
| zub | zubam | zubovʲi | zubʲi | tooth |
| svʲit | svʲitam | svʲitovʲi | svʲitʲi | light |
| zʲatʲ | zʲatʲam | zʲatevʲi | zʲatevʲi | son-in-law |
| košʲilʲ | košʲelʲam | košʲelevʲi | košʲelʲi | basket |
| zlodʲiy | zlodʲiyam | zlodʲiyevʲi | zlodʲiyevʲi | thief |
| mʲisʲatʲsʲ | mʲisʲatʲsʲam | mʲisʲatʲsevʲi | mʲisʲatʲsʲi | month |
| korovay | korovayam | korovayevʲi | korovayi | round loaf |
| kamʲinʲ | kamenʲam | kamenevʲi | kamenʲi | stone |
| mʲidʲ | mʲidʲam | mʲidevʲi | mʲidʲi | copper |
| xlʲiw | xlʲivam | xlʲivovʲi | xlʲivʲi | stable |
| holub | holubam | holubovʲi | holubʲi | dove |
| sʲin | sʲinam | sʲinovʲi | sʲinʲi | son |
| lebʲidʲ | lebedʲam | lebedevʲi | lebedʲi | swan |
| susʲid | susʲidam | susʲidovʲi | susʲidovʲi | neighbor |
| čolovʲik | čolovʲikam | čolovʲikovʲi | čolovʲikʲi | man |
| lʲid | ledam | ledovʲi | ledʲi | ice |