

Unexceptional segments

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Abstract A famous perennial problem in Slavic phonology is yers: vowels that idiosyncratically alternate with zero (e.g., [mox] vs. [mx-a] ‘moss (nom/gen sg)’ alongside [nos] vs. [nos-a] ‘nose (nom/gen sg)’). The widely accepted analysis of these “ghost vowels” is that they must be underlyingly marked as exceptional on a segment-by-segment basis. Moreover, usually they are assumed to be underlyingly representationally defective—either nonmoraic or lacking features (Kenstowicz and Rubach 1987, *inter alia*). In this paper, I revisit yers from a different perspective. Instead of treating the segments as special, I argue that exceptionality is a property of whole morphemes. This theory of exceptionality has many incarnations (Chomsky and Halle 1968 *et seq.*), but my version is formalized as Lexically Indexed Constraints in Optimality Theory: in any given language, a universal constraint can be indexed to individual morphemes in the lexicon and ranked in two different positions in the language’s hierarchy (Pater 2000, 2006). In Russian, the relevant indexed constraint is *MID, which penalizes the peripheral mid vowels [e] and [o]. The general, non-indexed constraint is independently needed to explain vowel reduction in unstressed syllables. The indexed version explains why only mid vowels alternate with zero in Russian. This generalization about yer quality is lost in representational accounts, since any vowel can be labeled as nonmoraic underlyingly. Another unsolved mystery about Russian yers is that only vowels in the final syllable of a morpheme

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can alternate with zero. This requires a phonological explanation—labeling only the alternating vowels as underlyingly special does not address the position problem.

Keywords Phonology · Morphology · Lexical exceptions · Minor rules · Indexed constraints · Ghost vowels · Yers · Slavic · Russian · Turkish · Hebrew

1 Introduction

1.1 Exceptionality as a property of morphemes

Most languages appear to have some rules that apply to an arbitrary subset of eligible words, from English trisyllabic laxing alternations (Chomsky and Halle 1968) to French learned backing (Dell and Selkirk 1978). More peculiar are rules that affect a subset of eligible segments in a language. One of the best-known examples of such alternations is Slavic yers (jers): vowels that idiosyncratically alternate with zero. Some typical examples from Moscow Russian are given in (1) and (2). Comparing (1a) and (2a),¹ we see that in some words, the vowel [ə] disappears in suffixed forms. Interestingly, though, not all instances of [ə] can alternate with zero—for example, the schwa in words such as [ígərʲ] is always present. Identifying the conditions that affect the realization of yer vowels has become a perennial problem in Slavic phonology (Lightner 1972; Rubach 1986; Kenstowicz and Rubach 1987; Czaykowska-Higgins 1988; Szpyra 1992; Yearley 1995; Zoll 1996; Hermans 2002; Matushansky 2002; Steriopo 2007; Jarosz 2008), but the pattern shares notable similarities with vowel-zero alternations in unrelated languages such as Itelmen (Bobaljik 1997), Hungarian (Siptár and Törkenczy 2000), and Salish languages (Kinkade 1997; van Eijk 1997; Blake 2001; Rowicka 2002; Gouskova 2003).

(1) Some typical yer alternations from Russian:

- | | | | |
|----|---------|---------|----------------------|
| a. | úgərʲ | ugrʲ-ú | ‘eel (nom/dat sg)’ |
| b. | lʲón | lʲn-á | ‘linen (nom/gen sg)’ |
| c. | vʲétʲir | vʲétr-ə | ‘wind (nom/gen sg)’ |

(2) Lack of alternations in identical contexts:

- | | | | |
|----|--------|----------|-----------------------------|
| a. | ígərʲ | ígərʲ-u | ‘Igor, a name (nom/dat sg)’ |
| b. | lʲénʲ | lʲénʲ-i | ‘laziness (nom/gen sg)’ |
| c. | mʲétr | mʲétr-ə | ‘meter (nom/gen sg)’ |
| d. | kátʲir | kátʲir-ə | ‘motor boat (nom/gen sg)’ |

¹ All transcriptions are in the IPA, and all data are from the author unless otherwise noted. The following abbreviations are used in glosses: “nom” for nominative, “acc” for accusative, “gen” for genitive, “dat” for dative, “inst” for instrumental, “prep” for prepositional, “voc” for vocative, “abl” for ablative, “sg” for singular, “pl” for plural, “fem” for feminine, “masc” for masculine, “neut” for neuter, “attr” for attributive or “long form”, “pred” for predicative or “short form”, “dim” for diminutive, “vulg” for vulgar, “adj” for adjective, “N” for noun, “V” for verb, “perf” for perfective, “impf” for imperfective, “def” for definite, “imp” for imperative, “eccl” for ecclesiastic, “Lat” for Latinate, “Gr” for German, “Fr” for French.