

ON THE PHONOLOGY OF EXPRESSIVE FORMS IN A GENERATIVE GRAMMAR — A CASE-IN-POINT FROM UKRAINIAN*

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Expressive forms are phonologically deviant in a systematic way; they include onomotopoeic and foreign words. Consider the following deviant verbs in Ukrainian: *brynčáty* 'strum', *burčáty* 'grumble', *dzyžčáty* 'buzz', *dzelenčáty* 'tinkle'. A few preliminary remarks are in order: final [ty] is derived from /tȲ/,¹ which marks the infinitive, [a] which precedes [ty] is derived from /ε/, one of two thematic suffixes which mark the imperfective aspect of onomotopoeic verbs;² /ε/ is specified as [+low] following palatal consonants. [č] is derived from /k/, a non-terminal thematic suffix which normally marks onomotopoeic stems; it is added to the verb root if the latter terminates in a non-peripheral consonant.

In the above mentioned verb stems, the rule which states that syllable final consonants are deleted does not apply; thus we find [n], [r], [ž], and [l] before [č] in the above examples. There is no underlying vowel which occurs between the final consonant of the root and /k/. The evidence for this is seen in a few verb stems: for example, *zvučáty* 'ring', and *movčáty* 'be silent', which are derived from the stems /zvon+k+ε/ and /mol+k+ē/ respectively, which are non-expressive although formed with /k/. /n/ which is in a closed syllable nasalizes the preceding vowel, which ultimately becomes [u], and /n/ is deleted; /l/, which is velarized, is delateralized becoming [w].

There are other rules or constraints which are violated: consider *bel'kotíty* 'mutter, mumble', which is formed with the non-terminal suffix /ot/ as well as /k/; here /ē/ is raised to [i], since it does not follow a palatal. The problem occurs with palatal [č]: a lateral in closed syllables delabializes; second, there is no way to account for the palatality of the lateral, since there are no underlying palatal consonants in Ukrainian. Palatality can only be introduced by means of a lexical subcategorization rule.

Next consider *dzyžčáty*: the derivation of /ž/ is also difficult to explain, since it is derived either from /g/ plus a front vowel, which cannot be the case here, or from

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¹ /Ȳ/ represents the archiphoneme resulting from the neutralization of /i/ and /ū/.

² The other thematic suffix is /δ/ → [a]: *dzelen'katy* 'tinkle'. The semantic difference between the two suffixes, if there is any, is unknown.

/zj/; we reject the latter form since it is in violation of the morpheme structure rules: /j/ cannot occur between a boundary and a consonant. The failure of /ž/ to devoice is also difficult to explain.³ Even more difficult to explain is [ʒ]; it does not occur except as the voiced allophone of /c/ before voiced consonants. All these forms would have to be derived by a set of minor rules or lexical subcategorization rules. There are not just a few onomatopoeic verbs, and there are hundreds of foreign words which are deviant. Clearly, these forms cannot be entered into the grammar at the systematic phonemic level if a systematic grammar is not to consist of huge gaps.

One fact that we can observe about these forms is that there is little phonological variation within the root. Let us examine what contrasts do occur at the surface level. In onomatopoeic words all obstruents in word final position occur non-palatal; there are four series of contrasting obstruents: labials, dentals, lamino-palatals, and velars; of the liquids [ń] and [l̥] occur palatal before [k], non-palatal before [č]; [m] and [r] occur non-palatal only. In prevocalic position there are phonetically palatalized or palatal consonants; there are similarly two sets of vowels, labial and non-labial; each may occur as palatal or non-palatal.⁴ Only palatal consonants may occur before palatal vowels. There are two solutions: either the palatal and non-palatal vowels are in complementary distribution, the feature of palatality being determined by the preceding consonant; or the consonants are in complementary distribution, the feature of palatality being determined by the succeeding vowels. Since in word final position there is no contrast of palatal or palatalized consonants, we assume that the same holds true in prevocalic position. Therefore, the number of consonants in contrast here is cut in half, and the number of vowels remains ten.⁵

In foreign words we find in root final position labials and velars which occur only non-palatalized; in the non-peripheral series we find in addition to a full range of non-palatal consonants, the palatal stops [t̥] and [d̥] and liquids except [r̥], which is palatalized, e.g., [kałkuľváty] 'calculate', [hospodar,üváty] 'keep house'; otherwise we do not find palatal affricates and continuants, but palatalized ones, e.g., [kl̥inc,üváty] 'wedge'. The palatal series is in complementary distribution with the

³ See Andersen (1969a, b, c) for further discussion on voicing assimilation.

⁴ The feature 'palatal' to distinguish vowels was introduced by Wang (1968). Here we use it to indicate fronted vowels, where the centre of the tongue is raised towards the palate with concomitant forwarding of the tongue; non-palatal vowels are made with a flatter tongue — these vowels are either central — fronted: [y], [é]; central: [a]; or back: [o], [u].

⁵ The inventory of the vowels we propose and their corresponding graphemes are the following:

		[−round]		[+round]	
		[+palatal]	[−palatal]	[+palatal]	[−palatal]
[−low]	[+high]	i i	y и	ü ю	u ч
	[−high]	e ε	ě е	ö ъо	o o
[+low]		ä я	a а		

palatalized dental series; hence we may assign palatals to that series. There already exists in Ukrainian a rule which derives palatal stops and liquids from palatalized ones.⁶ The phonological inventory of the foreign lexicon constitutes an extension of that of the onomatopoeic one.

We propose, therefore, that expressive lexical items are entered into the grammar at a later level in the phonological component; we indicate this graphically by enclosing the non-expressive morphemes in internal slants; expressive morphemes are enclosed in only one set of slants, e.g., /bur/+k+ē+t̥Y//. The rules which occur before this level do not apply to expressive forms enclosed outside of the internal slants; the rules which occur after this level apply to all forms. These rules include in addition to the palatal shift rule, which replaces palatalized stops and liquids except /r̥/ with palatal ones, other rules; for example, a rule which adjusts palatalized consonants; that is, before [i], consonants are considered semi-palatalized; otherwise they are considered fully palatalized; and a rule which determines that vowels which occur immediately preceding palatal consonants are tense phonetically. The treatment of /r̥/ is a good case-in-point: it is borrowed as a palatalized consonant in the genitive singular of *sekretár* 'secretary', [sykrytar,á]; in word final position palatalized [r̥] cannot be tolerated phonetically: it occurs in the nominative singular non-palatalized, [sykrytár]. And we can now explain the failure of voiced continuants and affricates to become voiceless before voiceless ones: the voicing assimilation rule occurs before this level; it does not reapply following it, nor does it apply across a prefix boundary '= ', e.g., //roz=sond+i+t̥Y// → [rozsudyty] 'judge'.

There appears to be some evidence that this level may constitute an autonomous level, since the orthography corresponds to this level (e.g., the ten graphemes representing vowels correspond to the ten vowels postulated for this level); rhyming may occur at this level, but apparently at no point before;⁷ and perhaps children's secret code word games operate at this level. However, we have not been able to find one yet that Ukrainian children use. This level appears to correspond to the classical phonemic level, but this is not the case in Standard Literary Ukrainian, where, for example, /i/ and /y/ occur in complementary distribution in classical phonemic theory;⁸ here we claim that they are contrastive.

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⁶ See DeArmond (1971) for further discussion and interpretation of these rules.

⁷ Rhyming does not necessarily occur at this level; the contrast of palatality, for example, may be neutralized so that /i/ and /y/, /e/ and /ě/ rhyme, et cetera.

⁸ Shevelov (1950) states that [y] occurs after palatal consonants in the third person pronouns, e.g., [jym] 'him (instr. sing.)', and in the soft declension adjectives, e.g., [syńyj] 'blue'. The dialect he describes does not correspond exactly with the standard literary dialect described by the Academy grammars, but if indeed [y] does occur after palatal consonants in the literary dialect, then /y/ and /i/ contrast, since /i/ occurs in that position as well: [jij] 'her (gen. sing.)'.

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DISCUSSION

RUDNYČKYJ (Winnipeg)

There are two synonymous suffixes in Ukrainian, *-itY* and *-aty*, cf. *bel'kotity* and *bel'kotaty*, both meaning the same: 'mutter, mumble'. Yet the latter must not be considered on the same level as *brynčaty*, *burčaty*, *movčaty*, etc. for two reasons: (1) the quoted verbs in *-aty* have no correspondents in *-ity* (there are no words like **brynčity*, **burčity*, **movčity*, etc.) and (2) the historical and pre-historic 'deep level' of those formations is different: in the case of *bel'kotaty* it goes back to *-aty* suffix, in *brynčaty*, *burčaty*, *movčaty*, etc., it derives from *-ēti* (*-ēti*), viz. **brink-ē-ti*, **burk-ē-ti*, **molk-ē-ti*, etc. Unfortunately, the author did not pay attention to this fact, nor did he check his material in the *Etymological Dictionary of the Ukrainian Language* (Winnipeg, 1962-71) where some of those verbs were properly treated. Otherwise, the paper has many merits bringing a new interpretation of the old material.

DEARMOND

These are two suffixes which mark imperfective suffixes: /ē/ and /s/. They are synonymous:

//bel, /+k+ot+ē+tȳ/	→	[byl'kot'ity]	} 'mutter'
//bel, /+k+ot+s+tȳ/	→	[byl'kotaty]	
//ʒel, /+en+k+ē+tȳ/	→	[ʒylynčaty]	} 'tinkle'
//ʒel, /+en+k+s+tȳ/	→	[ʒylynkaty]	

FROMKIN (Los Angeles)

I am not sure that I understand the status of your single vs. double slashes. Are you suggesting that both appear in the surface structure? If so, how will they be represented? That is, do we need a new non-segmental boundary, and what features will be used to differentiate this boundary from the other boundaries already specified?

DEARMOND

1. There must be some sort of a formal phonological boundary, which prevents a rule from applying to forms enclosed between two of them; or, perhaps, between any boundaries on the left and the proposed boundary on the right assuming that there are no internal boundaries within expressive roots. The use of double slashes is merely a writing device, but the internal slashes are equivalent to the proposed boundary.

2. The underlying systematic phonemic inventory is that proposed by James Foster's (1966) analysis of Ukrainian which is based on Lightner's (1965) analysis of Russian. I have found some evidence which indicates that the vocalic system may be reduced to /e/ and /o/; and I have heard that Halle has reduced Russian to no vowels.

ANTILA (Los Angeles)

To add historical depth to this, it is interesting to note that Robert Austerlitz was propounding very similar views in the early sixties (LI, 62, 63) on the phonology of Finnish expressives. At least one other paper was given on the phonology of Russian interjections.

DEARMOND

The view expressed here is expected to be universal, and I am not at all surprised that a similar observation has already been noted. As Victoria Fromkin mentions, although some languages show some evidence that some expressive forms may be phonologically abstract, a far greater majority show evidence for the existence of the intermediate ('neo-phonemic') level.