Robert Lagerberg

Variation and Frequency in Russian Word Stress

1. Introduction

An important and complex area of stress in Russian, which has to date received insufficient attention, is variation in stress. By variation in stress is meant the possibility of two (or more, in theory, but rarely in practice) syllables on which the stress may fall in a given word form. Thus, for example, the plural short form of the adjective *ве́рный* 'faithful' is given in standard sources as either *ве́рны* or *верны́*. We should underline that in essence we are talking about 'word form' here, since variation may occur in one or more inflected forms of a word, but not throughout the entire paradigm (e.g. dat. pl. of *вода́*, *во́дам* or *вода́м*, but only *вода́* nom. sg., *во́ду* acc. sg). In other cases, a word might be characterized by stress variation in all its forms depending on whether one is using one or other of the base forms, e.g. *твóрог* or *творóг* 'cottage cheese'. Thus, the former 'base form' results in all inflected forms having fixed stem stress (e.g. gen. sg. *твóрога*), and the latter in all forms having ending stress (e.g. gen. sg. *творога́*). Stress variation, to a greater or lesser extent, exists in all the Slavic languages in which stress is not determined solely on a purely syllabic basis (e.g. Czech, Slovak and Polish); thus, for example, Ukrainian displays extensive stress variation in the infinitives of verbs (see Clarke, 2004, 32).

In classic monographs on stress such as Fedjanina (1982) and Red′kin (1971), variation in stress was not a strong feature. Though, of course, it was mentioned in certain paradigms, little attention was given to the reasons for its presence, its stylistic variations and levels of acceptability, or the directions in which it might be proceeding both in individual words or in more general terms. Within suffixal stress, in particular, relatively little mention has been made of stress variants. Zaliznjak's study of 1985 was certainly far more aware of the possibility of variation in affixed forms, in particular his inclusion of the 'pragmatic factor' (essentially professional jargon stress – see below for more on this feature) and colloquial stress.

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Werner Lehfeldt's monograph of 2003 dedicates an entire chapter to stress variation in Russian, though is essentially a review of the main scholarship which deals with this feature. Quoting Gorbačevič (1978) (Lehfeldt 2003, 78), he offers the valuable observation that in Russian more than 3500 (going up to more than 5000) commonly occurring lexemes occur with stress variation of some sort; also quoting Tornow (1984), Lehfeldt mentions the fact that the more frequent a word, the more likely it is (in fact, according to Tornow, five more times likely, if it belongs to the 3000 or so most commonly used nouns, adjectives and verbs) to have stress variation. Also important in this regard is the frequency with which both variants occur, i.e. there is a potentially significant difference in essence between a (high-frequency) word with a rarely occurring stress variant, and a (high-frequency) word which occurs with roughly equal distribution of two stressed forms.

Frequency is indeed an important factor in connection with stress and goes a significant way towards explaining why stress variation and mobility continue to exist, and even flourish in some cases, in modern Russian. While this much is certainly valid for stress variation within inflectional paradigms, one may ask also, however, whether within the area of suffixal stress, especially within words containing a suffix which is liable to stress variation, e.g. *-ировать* (cf. *премирова́ть/премии́ровать* 'to give a bonus'), less frequent words are not more liable, at least temporarily, to show stress variation by virtue of the fact that dual stress often represents a temporary shift towards the 'normative' position, and less frequent words may in fact be less fixed in the minds of speakers, resulting in more stress variation. More on this latter point will follow below.

Another of the key points to emerge from Lehfeldt's (2003) analysis, which must be taken into account in any discussion of stress variation, is the feature of stylistic evaluation: which variants can be tolerated as standard and which not, and to what extent can non-standard stress variants be included in any statistical documentation of stress variation? In more recent times the situation has improved (e.g. Es′kova (1994)) to the extent that more tolerance has appeared in the form of more complex levels of acceptability; in Es′kova's dictionary, for example, five categories of variation are included on a scale ranging from, at the most tolerant level, absolutely equivalent variants (e.g. *и́скристый* vs. *искри́стый* 'sparkling') down to the most intolerant level of purely incorrect usage in the case of one of the variants (e.g. incorrect *мага́зин* vs. correct *магази́н* 'shop').

However, more statistical evidence to 'blacklist', for example, *prostorečie*/dialect stress variation, is lacking, so that the extent to which certain 'unapproved' forms are actually being used in normal social interaction is simply not clear.

This normative factor is indeed crucial, for how do we evaluate varying responses in a linguistic survey? More recent research of this kind by Ukiah (e.g. Ukiah 2002) and the present author (e.g. Lagerberg 2005) has revealed a much higher level and range of variation in the actual speech of Russians than is reflected by normative sources. Thus, to take a suffix which displays stress variation like, for example, the verbal suffix *-ировать*, indeed the majority of words included in a survey of Russian speakers in Russia conducted by the present author (Lagerberg 2005) demonstrated stress variation, and this given the fact that nearly all the respondents had university education, thus essentially ruling out the *prostorečie* factor. Dialectal variation, where present in any sociolinguistic survey, would certainly be easier to identify and exclude on the basis of education and geographical location. Professional stress, or the 'pragmatic factor' of Zaliznjak (1985, 56 & 79), as mentioned above, can also play a role. Essentially this is a preference amongst members of a particular profession for end or mobile stress ('non-trivial stress') over 'trivial' fixed stem stress. Thus, for example, amongst masseurs, it would be the use of gen. sg. *массажа́* instead of standard *масса́жа*. Once again, the identification and regulation of such a feature would be possible by ascertaining the professions (both past and present) of participants in any linguistic survey. Two other questions relating to linguistic surveys, which are discussed at some length by Lehfeldt (2003, 85–93), but which we cannot go into at present, are the level of variation which is judged to be significant, and the number of participants required to reach a satisfactory level of representation of speakers of the language.

It is clear that variation of a kind and level which are not being accurately reflected by lexicographical sources is a subject worthy of more serious investigation. The aim of the present paper is to look at different types of variation occurring in the language in an attempt to reach some form of typology. Thereafter the question of frequency and its relationship to stress variation will be looked at. Above all we are interested in what pointers the different types of variation give us to the future picture of stress in Russian. By their very nature, stress variants represent some degree of ambivalence, which, presumably, in the future will be resolved in one way or another. This much has already been shown by the

present author in looking at the development of suffixal stress from the eighteenth to twentieth centuries, so that clear evidence of a general shift from a morphemic stress model to a 'rhyming', uniform syllable model has been observed (see, for example, Lagerberg 1999).

2. Types of Stress Variation

Before more systematic analysis of stress variation can be conducted in the future, it is expedient to delineate different types of variation which exist in the total corpus of Russian words, since obtaining a clearer delineation of these types will enable us to determine more accurately future directions in stress change.

i) Inflectional variation

Inflectional variation is the area of stress variation which has received the most attention by accentologists. Accounts of stress by scholars such as Fedjanina (1982) and dictionaries regularly, but to varying degrees, and generally in an *ad hoc* fashion, include mention of problematic cases of inflectional stress.

A more detailed picture of what is actually occurring in the speech of Russians is provided in sociolinguistic research by, for example, Ukiah (2002) and Marklund Sharapova (2000), in the form of surveys of native speakers. Thus, for example, Ukiah's article on the stress of *f* pattern nouns (fixed ending stress in the singular, stem stress in nom./acc. pl. and ending stress in the oblique plural, on ending/stem final in gen. pl. e.g. *губа́* 'lip', *сковорода́* 'frying-pan') offers a complex picture with high levels of variation in such word forms. In a similar way, Marklund Sharapova finds, for example, that a form such as *включ́ишь* (fut. tense 2nd p. sg. of *включить* 'to include'), which is expressly deprecated as non-normative by various sources (e.g. *Орфоэпический словарь русского языка*, 1997), received 85.8% support from her respondents. Her research leads her to conclusions of the type: '… that the compilers of stress handbooks do not have a defined norm concept, but see *norm* rather as an opportunity to have one's subjective pick from predecessors' recommendations' (Marklund Sharapova 2000, 93). Without going into further detail here, what becomes clear is that the level of differentiation between recommended usage and what 'people are actually saying' can be quite marked. It is, therefore, important to work out the underlying movements of stress patterns to be able to predict in what direction

change will proceed and, in this way, to be more tolerant of such stresses, since, in a sense, they will be more expected than otherwise if this is done. In the same way, non-motivated, *prostorečie* stress variation can be more easily and convincingly dismissed.

To the extent that sociolinguistic surveys offer the best way of ascertaining current trends in the language, at this point two related points become particularly salient:

i) To what extent do the results obtained by such surveys correspond to norms as established by lexicographical sources? In fact, the various recommendations of these sources are themselves often prone to quite large degrees of variation. All this points to the fact that the study of stress variation is in need of a more serious, objective approach, less reliant on subjective opinions and more open to current usage, while at the same time bold enough to reject sub-standard stress. The question of when actual usage of at least a certain percentage of speakers becomes the basis for future codification is central here. To a certain extent it is the actual percentage that is crucial here, since if, for example, the majority of speakers are using a supposedly non-normative stress, then, clearly, the normative source is less than helpful. On the other hand, at what level under 100% does actual recorded usage bring about a change in recommended norms – 90%, 70%, or perhaps 51% as a cross-over point from a minority to a majority of speakers? This is a hard question to answer and perhaps needs to be addressed descriptively rather than prescriptively in lexicographical sources, i.e. by identifying the rate of usage among educated speakers, an estimate of its acceptability can be presented.

ii) Stress variation in inflected word forms seems to be directed in particular directions on the basis of analogy. Thus, in the case of *f*-pattern words (e.g. *губа́*) (Ukiah 2002, 25), '… a strong tendency is identified towards the elimination of stress contrasts within the plural subparadigm, establishing a singular versus plural opposition in stress', i.e. a type *d*-stress pattern (*сова́* 'owl' type). There is, therefore, a clear movement away from the more complex mobile pattern towards a more straightforward (symmetrical) mobile pattern, which, presumably, is most apparent in lower frequency words. This much should not surprise us: more complex stress patterns are retained by constant usage, i.e. higher frequency. Stress variation would seem to be an indication of an ongoing shift from one type to the other. In this way, normative sources could offer recommendations based on possible/probable future trends.

ii) Derivational variation

Within derivational stress, variation occurs, in general, not on particular word forms, but on the initial form (infinitive of verbs, nom. sg. of nouns and adjectives (masc.)). Thus, for example, with the suffix *–ировать* several lexemes display either final stress in the infinitive or stress on the pre-penultimate syllable (*премирова́ть/премѝровать*). On the basis of this 'primary' variation, stress in inflected forms may fall on different syllables as a direct consequence of the speaker choosing one or other of these forms as the 'starting point' (*премирова́ть* > 1st. p. sg. *премиру́ю*, *премѝровать* > *премѝрую*). As a rule, suffixed words display fixed stress either on the stem or ending, but not mobile stress (only in rare cases, cf. *глазо́к* 1. dim. of eye, 2. peephole, eyelet (tech.), nom. pl. respectively *гла́зки/глазки́*).

Though less attention has been given to variation within suffixal stress than inflectional stress, the former has already been established by the present author as a case of rhyme analogy in progress, or, to use another approach, as Anderson's (1973) 'abductive change'. According to this model, while the underlying linguistic model is one of rhyming stress uniformity for certain suffixes (i.e. all words with a given suffix have stress on the same syllable), many speakers continue, to a greater or lesser extent, to apply adaptive rules ('A-rules'); an A-rule is 'a stylistically motivated rule' (Andersen 1973, 773). Andersen's model, if accepted, makes it clear that the older stress position (in the form of the A-rule), and, therefore, the stress variation itself, is ultimately doomed to extinction, whether sooner or later, in favour of the rhyming model. Certain suffixes have already undergone a complete shift from the older morphemic type of stress to the new rhyming model (e.g. *–онок/–ёнок/–чонок*), which historically can be traced quite accurately (see, for example, Lagerberg 1998). In addition, it can be ascertained quite clearly that a suffix such as *-чатый* is currently in the process of becoming uniform in terms of its stress: by examining earlier sources, a clear pattern of morphemic stress can be observed (i.e. the stress type of the motivating word/root and the stress properties of its other morphemes playing the key role), gradually changing under the influence of the increasingly dominant role of the suffix, which brings about, in this case, suffixal stress, e.g. *зубчатый* 'tooth-shaped', 'cogged'. It also appears to be the case that a general move towards uniform stress among words with the same (dominant) suffix is often resisted

best by words which occur with a higher frequency. The relevance of frequency to stress variation will be returned to below.

iii) Historical variation

By historical stress variation we have in mind a small number of cases of variation where a non-derived word, or, at least, word whose morphology is perceived to be non-derived, has two historical, legitimate stress positions in its initial form with no difference in meaning: e.g. *твóро́г*. Such cases are few, but no doubt will be resolved decisively in one direction ultimately. In the case of the latter word, final/ending stress is now preferred (i.e. *творо́г*, *творога́*). Retracing such instances of (now resolved) variation could give important information for current instances of such variation or, indeed, for general trends in the preferred syllabic position of Russian stress.

iv) Semantic variation

Semantic cases of stress variation are those when a different stress is connected to a different meaning, i.e. these are homographs, e.g. *а́тлас* 'atlas' and *атла́с* 'satin'. In some cases (mainly adjectives) they can differ in form to a small degree: *подви́жный* 'mobile, lively' vs. *подвижно́й* 'mobile, movable, travelling (tech.)'. In actual fact, then, these are not true cases of stress variation, since a different stress position is equated with a different meaning, though there remains the question of mutual interference: such a phenomenon has been evident within word formation, e.g. *зубчатый*. Thus, in the case of this word, it would appear that previous differentiation of meaning and stress (*зу́бчатый* for 'tooth-shaped' and *зубча́тый* for 'cogged') has now been resolved in favour of a single stress position (*зубча́тый*) and the same difference of meaning (Lagerberg 2006, 230).

v) Professional stress

This is one of the most interesting areas of stress variation. Stemming from the work of Zaliznjak (1985, 56 and 79), non-trivial (i.e. ending or mobile) stress is identified with words that have become more assimilated ('pragmatic factor'). In terms of professional stress Zaliznjak identifies variant stress in the speech of certain professions, a kind of jargon (thus, ending stress in *масса́ж* 'massage'

amongst masseurs, as opposed to stem stress in the standard language) (ibid., 68–69). This professional stress, however, would have to be of limited importance to stress variation in general, because it is unlikely to go far beyond the circle of people who use it in their work. Nevertheless, upon encountering it in surveys, how is one to identify it as such? And do professionals distinguish between using such a 'slang' stress at work, and another stress when not at work? One way of identifying it would be to include present and past employment in the data relating to respondents in surveys. In that way one could watch for a higher preponderance of a stress amongst workers of a particular profession. Indeed, an area of investigation could be the extent to which workers of a given profession code-switch between the standard and professional stress.

vi) Dialectal variation

There are in Russian considerable dialectal differences, which, however, have limited effect on the standard language since they are essentially restricted by geography and social class. In particular, south Russian dialects differ from standard Russian in some areas of stress (e.g. acc. sg. non-retracted stress for fem. nouns with retracted stress in the standard language: *воду́*, *ногу́* vs. standard *во́ду*, *но́гу*) (Cubberley 2002, 326). As with professional stress, surveys could be set up to account for dialectal stress by including the current and previous town/region, education, and employment among the data gathered for each respondent.

From the above discussion, it is clear that of the six types of stress variation identified, two types of stress variation are inherently close to each other, namely inflectional and derivational, since both essentially represent intermediate stages in an ongoing analogical process. Though inflectional stress variation is generally more complex and volatile than derivational, both types appear always to have an ultimate goal towards which they are proceeding. The ultimate goal of these respective processes is uniform stress among all members of the given sets, and to that extent both types represent unstable stress. The modus operandi is different in each, and the sets too are, of course, different; for inflected words the set in question is determined by the stress type of the word. Thus, if it is a *f*-pattern word (e.g. *губа́*) it is immediately in tension with a general pull towards a binary singular-plural opposition in words with mobile stress, since it maintains mobile stress in the plural (nom. pl. *гу́бы*, dat. pl. *губа́м*). For suffixed words, the set is

determined by the suffix in question. Thus, if, for example, a word contains the suffix *-ировать* and has final stress (*премирова́ть*), then it is already in tension with the general tendencies of that suffix towards stress on the pre-penultimate syllable (*прем́ировать*). Professional/dialect/semantic stress variation are more isolated/insulated types of variation and less likely to have effect on the standard language; in addition they do not represent a motivated, incomplete shift from one stress to another, but already the 'final product', as it were. It is, of course, possible that in some cases a combination of types could occur, such as the coincidence of a dialect stress with an inflectional stress variant, though the educational and geographic background of each respondent should be able to identify such a stress as dialectal.

3. Frequency

Another crucial factor which needs to be taken into account in stress variation is frequency, though here there are also considerable difficulties in doing so. Tornow (1984) (quoted in Lehfeldt 2003, 787–9) states that the more frequent a word, the more likely it is to have stress variation. Presumably this relates to non-derived words. Within fluid areas of stress in word-formation, however, lower frequency seems to lead gradually, via varied stress, to 'rhyming', uniform stress, whereas higher frequency, though certainly not excluding such 'normative' stress, is more able to retain 'irregular' stress, but on its own is not enough to guarantee such stress.

An example of this is the suffix/combining form *-лог*. Although for animate nouns with this suffix, penultimate stress has been generalised (e.g. *гео́лог* 'geologist'), for non-animate nouns there is a certain tendency towards final stress (e.g. *моноло́г* 'monologue'). However, a survey conducted by the present author (as yet unpublished) revealed a greater amount of variation than is reflected in normative sources. Five out of eight words surveyed displayed varying degrees of stress variation, but all basically tending towards penultimate stress (e.g. *апол́ог* to *апо́лог* 'apologue'). Only three words received uniform responses for stress, namely *диало́г* 'dialogue', *моноло́г* 'monologue' and *проло́г* 'prologue', all with a relatively high frequency count.[1] Thus it seems clear that higher frequency in

[1] The frequency of these eight surveyed words as recorded in Zasorina (1977) is as follows: аналог – 0, аполог – 0, диалог – 7, каталог – 5, мартиролог – 0, монолог – 3, некролог – 1, пролог – 5.

this case plays a role in preserving the older stress position. On the other hand, it does not operate as an absolute guarantee of 'stress preservation', but rather a contributing factor: *каталог* 'catalogue', a word with a relatively high frequency, received only slightly more than half the responses in the survey as *катало́г*, the others favouring *ка́талог*.

It is, therefore, important to note that frequency is not an absolute test of stress position, nor a guaranteed factor to fall back on in difficult cases of stress – there certainly are other factors which play a role, such as analogy, semantics and the influence of other related words. However, it seems clear that to ignore the frequency factor is also to condemn oneself to an incomplete understanding of what is currently taking place in the spoken Russian language. Unquestionably there is a higher probability of anomalous stress being retained in such cases where the word has a significant level of frequency. Where exactly that level begins is still a moot point which probably can never be gauged exactly, but remains, nevertheless, a factor to be considered.

4. Conclusion

Variation in stress is in need of more serious study as it can lead to some important discoveries concerning the direction which stress is taking. Recent research from various scholars using surveys has discovered there to be a much higher degree of variation in people's speech than might be deduced from normative sources, and this needs to be followed up by more studies of this type. By delineating the different types of stress variation (inflectional, derivational, historical, semantic, professional, dialectal), a more precise understanding of its characteristics and future development is made possible. Of these types of variation, inflectional and derivational stress were identified as being closest to each other typologically, since they are basically intermediate stages in an analogical process. Normative standards also need to be taken into account more objectively by using available sociolinguistic data, otherwise there is a risk of circular arguments being used to label newer stress positions as non-standard. However, questions still remain about the proportion of responses from educated speakers needed to accept a previously deprecated stress position. The role of frequency in stress variation also needs to be taken into account. While higher frequency is certainly linked with variation in inflection, the role of frequency in suffixational stress remains

less clear. Within fluid areas of derivational stress it appears that higher frequency can lead to a higher retention of the older stress, i.e. a resistance to the rhyming stress pattern of suffixes, while lower frequency makes derived words more prone to succumb gradually (i.e. via varied stress) to the dominant, rhyming model of the suffix in question.

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