

### On the Classification of Ukrainian Nominal Stress Paradigms

#### 1. Introduction

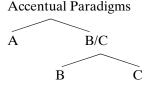
This paper is an attempt to classify the stress patterns of the Ukrainian noun. Extant classifications either focus on specific types of stress alternation without giving an overview of all types (Stankiewicz 1993: 232–42) or atomistically list all possible types without regard for accentual complementary distribution based on the morphological environment (Matvijas 1969: 130–31, 134–36). The Ukrainian system of nominal accentual paradigms, in comparison with that of Russian, has experienced radical change, especially in the plural. This has been largely due to the loss of a case mobility (i.e. a difference of stress within the plural, where stem stress occurs in the direct cases but desinential stress in the oblique, cf. Skljarenko 1969: 138 and 1983: 84), both in zero-noun masculines with genitive plural in -iv (e.g. βοβκ 'wolf') and a-nouns (e.g. γορά 'mountain'). This has led to the fact that the plural accentual subparadigms of Ukrainian have fewer distinctions than do their corresponding singular subparadigms. Although Russian also has some instances of accentual neutralization in the plural, the process is much less advanced in Russian than it is in Ukrainian. For example, Russian zero-nouns cmon 'table'/βολκ 'wolf' have opposing plural subparadigms of desinential vs. mobile stress, and Russian a-nouns cecmpá 'sister'/zopá 'mountain' have plurals which oppose stem vs. mobile, but the corresponding Ukrainian plurals now manifest neutralized desinential stress for plurals of both cmin 'table'/βοβκ 'wolf' and neutralized stem stress for both cecmpá 'sister'/20pá 'mountain'. True, some isolated Ukrainian survivals do maintain the old plural accentual oppositions, but they do not represent the general pattern. In view of the fact that the Ukrainian singular accentual subparadigms are more distinctive than the plural, the present classification has a three-part division (types A, B, and C), based primarily on the stress patterns of the singular. Within each of these three main accentual types that are being posited, there are subgroupings based upon the accentual behavior in the plural. Furthermore, both in the singular and the plural, there are many instances of surface differences which are predictable on the basis of a variety of morphological (and less often, phonological and semantic) features, such as declension type, specific word-formational suffixes, and such phonological

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features as the number of stem syllables. They will be indicated as part of the review of accentual types in section IV.

#### 2. The Three Main Classes of Ukrainian Nominal Stress

The three main types of stress paradigms will be referred to as A, B, and C, but it should be emphasized that the opposition really represents two binary oppositions, as in the following diagram:



A Morphologically unpredictable Stem-Stress in Singular

B and C Morphologically predictable stress types

B Singular desinential stress in all case forms (excluding vocative)

C Initial stress in at least one singular case form

Figure 1. Binary oppositions of the three basic stress types of Ukrainian

Nouns are considered to belong to type A if they have a morphologically unpredictable stem-stress, which I am using as an alternative label for lexically specified stress. Since stems do not have a fixed syllabic length and type A stress can appear on any stem syllable, no sort of morphological information can lead to a prediction of which syllable is stressed in a type A noun. However, in addition to the nouns considered to be of type A, there are nouns which have stress that is restricted to stem-initial, stem-final, or desinential positions (or mobility that combines desinential with either stem-initial or stem-final). These restricted types will be referred to as types B and C, and the specific stress assignments can be predicted if one knows the morphological declension class plus the "B" or "C" designation. Therefore, a noun of a given declension type can either have a type A lexical specification on any stem syllable, or a B or C designation that is not assigned to a specific syllable, but can be predicted on the basis of the declension type.

An example of the fact that the type A stress is morphologically unpredictable can be seen in a polysyllabic stem, in which one knows that the stress type is immobile and **stem-stressed** across both subparadigms. If the stem consists of two syllables, for example, knowledge of the stem-type would still not permit the observer to predict whether the stress was located on the first or second stem syllable (as in the actual Ukrainian words  $\acute{\alpha}\acute{\theta}e\partial a$  'slander'/ $\acute{\alpha}i$ oda 'berry' vs.  $\emph{morûna}$  'grave'/ $\emph{\delta}ep\acute{e}\acute{s}a$  'birch'). On the other hand, types B and C are

defined as having morphological predictability. Thus, if it is known that a zeronoun has a type B stress, one can predict that the singular subparadigm (as in the words cmin 'table'/κορόπο 'king') have end-stress and that the plural subparadigm also had the same constant end-stress throughout all case forms. If the morphological information is different, i.e. if an a-noun has a type B stress, we can predict that there will be constant end-stress throughout the singular (e.g. cecmpá 'sister'/κοβδαcá 'sausage'), and that the plural has constant pre-desinential stress. Zaliznjak (1985: 17) makes use of this distinction in his study of Russian accentuation, referring to the morphologically unpredictable stem-stress as "trivial," as opposed to the morphologically predictable type, called "non-trivial." The trivial type is defined as a subparadigm "with stem-stress in all forms of the word, located on the very same syllable (counting from word-initial)." Any other type is regarded as non-trivial, and it is the non-trivial type that permits an accentual prediction based on morphological features. We shall see that for Ukrainian, the definition of trivial subparadigms is more complicated than it is in Russian. In Ukrainian, unpredictable (lexically specified) stress in the singular subparadigm, rather than both singular and plural, is the invariant of the two subtypes of trivial stress, subsumed under the label type A. Likewise, the invariants of the non-trivial types B and C are also best defined on the basis of the situation in the singular subparadigm. Ukrainian accentual type B, as indicated in figure 1 above, has the property of constant end-stress in the singular, while type C presents the case of singular stem-initial stress in at least one case form.

The specific accentual manifestation of a noun is a function either of its lexical stress mark (type A), or its B or C designation plus information about its declensional class. The three primary declensional classes relevant to our classification, based on the nominative singular desinence, are as follows:

#### 1. Zero-nouns.

- a. **Zero***l-iv* nouns, which have the zero ending in the nominative singular and *-iv* in the genitive plural; masculine in gender.
- b. **Zero***l-ej* nouns, with nominative singular zero but genitive plural *-ej*, originally *i*-stems. Predominantly feminine (rare masculine exceptions are *zicmb/zocmeŭ* 'guest' and the original *jo*-stem кінь/коней 'horse').

These two morphological subtypes of zero-noun regularly differ from each other in their stress pattern, rather than sharing the same accentual paradigm. Their stress patterns are generally in complementary distribution (e.g. the -iv subtype regularly has constant stress across the cases of each number and uses

mobility to oppose singular vs. plural, while the *-ej* subtype prefers case mobility, which opposes direct vs. oblique case forms within the plural). Therefore, I consider them to be a single declensional class.

- 2. **a-nouns**, with nominative singular ending -a, mostly feminine.
- 3. *o*-nouns, with nominative singular in -o/-e, mainly neuter.

# 3. Subtypes of Accentual Paradigm A and Invariants of All the Basic Accentual Types

As indicated above, type A refers to a lexically marked stem-stress, which consequently cannot be predicted on the basis of morphological information. Although this unpredictability is easiest to illustrate for polysyllabic stems, immobile monosyllabic stems with constant stress in both singular and plural are also considered to be of lexically marked type A, in spite of the fact that their single stem syllable admits no other sort of stem-stress.

As noted above, Ukrainian and Russian have an important structural difference with respect to their type A stress paradigms. In Russian, a morphologically unpredictable and lexically specified constant stem-stress implies the identical stem-stress in the plural subparadigm. However, when Russian has constant singular stem-stress on the initial syllable, and it is paired with a non-initial stress in the plural (e.g. ιόροδ 'city'/ιοροδά, nom. pl.), we can say that the singular is not completely unpredictable, since a stem-medial stress, such as Αμέρυκα is not normally tolerated with an end-stressed plural subparadigm. Contrary to this pattern of Russian, Ukrainian has productively developed an innovative accentual paradigm which does pair a truly unpredictable singular stem-stress (which can stress either the initial, medial, or final syllable of the stem) to constant desinential stress in the plural. In Russian, there is only a relatively small number of exceptional, semantically related examples of this type, such as the end-stressed plurals that are paired to stemmedial stress in the singular with the suffixes -op/-meль (e.g. учи́тель 'teacher'/νμμπελά, δυρέκπορ 'director'/δυρεκπορά, etc.). However, the Ukrainian type is a very important systematic type and many immobile type A nouns have doublets with the new type A (see Serex, 1951: 198). Therefore, since the Ukrainian type A stress can either have the identical unpredictable stem-stress in both singular and plural, or only in the singular, paired to an endstressed plural, this classification will recognize two subtypes of A stress: Immobile A and Shifting A. As stated, the feature common to both subvarieties of A stress is the morphologically unpredictable stem-stress in the singular subparadigm. This supports the claim that all of the basic varieties of Ukrainian stress can be defined on the basis of the accentual pattern of the singular subparadigm. The fact that there are two subtypes of singular immobile accent means that in addition to a simple lexical stress mark on the stem, an additional notation would be required to represent the fact that some type A occurrences are immobile across both singular and plural subparadigms, while others are shifting. I assume that immobile A is the less marked type. As a result, Ukrainian nominal stress appears to require the following four structural types of representation:

- 1. A stress mark on a stem-syllable, which applies to the full paradigm (immobile A).
- 2. A stress mark on a stem-syllable, which applies to the singular only, plus an indicator that the plural stress is advanced (shifting A).
- 3. No stress mark on the stem, with morphological predictability of type B.
- 4. No stress mark on the stem, with morphological predictability of type C.

#### 4. Review of the Major Stress Types

This section will exemplify and comment on the accentual behavior of representative members of the four main accentual types listed at the end of section three. For further reference, an appendix at the end of the paper exemplifies the full paradigms of the major types.

#### A. Type A Stress: lexically specified stress placement in the singular.

1. Immobile A accentual paradigm: lexically specified stress in both singular and plural.

This is the simplest type to describe since the stress mark on a stem syllable of the singular implies the same stress throughout both singular and plural. Any stem syllable can be stressed, regardless of morphological category. Therefore, the stress placement in a polysyllabic stem is not predictable. The following examples are grouped by declension type and exemplify stems of different lengths and stress on various positions within each polysyllabic stem size. Comments on the individual types are made as appropriate.

- 1. Zero-nouns.
  - a. Zero/-iv nouns: ∂ρýε 'friend', όβοч 'fruit', μορός 'freezing weather'.
  - b. Zero/-ej nouns: cínь 'salt', óciнь 'autumn', nó∂opoж 'journey'. A very small category in which non-initial stress in polysyllabic stems appears to be lacking (original second syllable stresses have changed to end-stress in nonúh 'wormwood', мозо́ль 'blister').
- 2. **a**-nouns: *cýma* 'dry land', *μ*μβa 'sown field', *zópπuμ*π 'turtledove', *zpámoma* 'charter', *δepésa* 'birch', *κοδ*μπα 'mare'.
- 3. **o**-nouns: *δλi*ο*λo* 'dish', *i*δ*λyκο* 'apple', *κορύπο* 'trough', *β*οετιμιμε 'fireplace', *β*ερεπέτο 'spinning wheel'.

#### 2. Shifting A accentual paradigm: lexically specified stress in singular.

In the singular, these nouns display the invariant property of type A nouns: the possibility of stress placement on any stem syllable, i.e. unpredictability of stem-stress. The plural automatically has end-stress, except in the case of onouns, in which the stress of the singular simply shifts forward to the next syllable in the plural subparadigm. The effect on monosyllabic o-noun stems is simply to stress the desinence, while the result in two-syllable o-noun stems is stress on the predesinential syllable of the plural, as illustrated below. Nouns are cited by giving the nominative of both singular and plural, plus the genitive singular for zero nouns.

#### 1. Zero-nouns.

a. Zero/-iv nouns: εόβκ(a) 'wolf'/βοβκύ, πράκπορ(a) 'tractor'/mpa κπορύ, οςπρόε(y) 'prison'/οςπροεύ, πάργδοκ 'lad'/πάργδκα/παργδ κύ, προφέςορ(a) 'professor'/προφεςορύ, ποβάρυω(a) 'comrade'/ ποβαρυωί, νολοβίκ(a) 'man, husband'/νολοβίκύ.

Certain zero/-iv nouns of the Shifting A type can take a stressed  $-\hat{u}$  ending in the locative case (e.g.  $y \ ca\partial \hat{y}$  'garden') which must be lexically specified for those words which admit it.

- b. Zero/-ej nouns. This category is not represented, which means that the two subtypes of zero-noun are in complementary distribution for the Shifting A accentual paradigm. The innovative Shifting A accentual paradigm was used by Ukrainian for zero-nouns which were abandoning case mobility in favor of number mobility. The masculine -iv subtype opted for the latter (and has only a single relic noun left with the old mobility: 3y6 'tooth'), while the mostly feminine -ej subtype retained its mobility and, consequently, did not develop the new Shifting A accentual paradigm.

Many *a*-stems with the shifting A accentual paradigm have one of the following two morphological properties: either the use of the non-zero genitive plural ending -*iv*, normally used only with masculine zero-nouns, or the presence of a vowel-zero alternation in stem-final position. The connection between these two features is clear—they permit monosyllabic stems to have a genitive plural form with a surface stress on a syllable other than the one which gets stressed in all of the singular cases. Thus, the genitive plural form clearly

appears to manifest end-stress, rather than an ambiguous stress which could potentially be an underlying stress shift back to the stem, which would not be characteristic of the constant plural stress of the shifting A pattern. For example, genitive plural  $\delta a\delta - i \epsilon$ ,  $\partial i \epsilon \delta \kappa - \emptyset$  have a surface stress which differs from that of the paradigmatic forms of the singular, e.g.  $\delta a\delta - a$ ,  $\partial i \epsilon \kappa - a$ . Since this is not an ironclad rule, some words, such as x ama, have the nominative and genitive plurals x ama / x am, which does not avoid the potential ambiguity of a genitive plural that could be derived either from x ama / x ama /

3. **o**-nouns: *cπόβo* 'word'/*cπoβá*, *péшemo* 'sieve'/*peшéma*, *δзépκαπο* 'mirror'/*дзерκάπα*, *δοπόmo* 'marsh'/*δοποmá*.

These o-noun neuters are notable for the fact that the plural advances the stress by a single syllable, rather than uniformly shifting it onto the desinence, as demonstrated by such examples as  $p\acute{e}memo/pem\acute{e}ma$  and  $\partial s\acute{e}p\kappa a no/\partial sep\kappa \acute{a}na$ , etc. This exemplifies the fact that one can predict the surface manifestation of a given stress type (shifting A in the case at hand) only on the basis of morphological information, such as the declension type.

#### B. The type B Accentual Paradigm: End-Stressed Singular

The common trait of the B type noun stress is the desinential stress of the singular subparadigm. Certain cases, such as the vocative and the secondary genitive in -u, do not admit end-stress, and therefore must manifest stem-stress even in the B paradigm; e.g. cmin 'table', cópom 'shame' have the secondary genitive in such prepositional expressions as  $\partial o cmóny$  'to the table'/6es cópomy 'without shame', with a corresponding initial stem-stress (which does not occur in the usual genitives cmona/copoma). Likewise, the vocative displays a predesinential stress (e.g. κορόπο 'king') which contrasts to the usual end-stress, seen in the genitive singular κοροπα. In the plural, the distribution of B stress is a function of declensional type: zero-nouns maintain their desinential stress in the plural (e.g. cmona, nom. pl.), while non-zero types (a- and o-nouns) have predesinential stress in the plural (e.g. κορδαcu 'sausage'/noπomha 'canvas', nom. pl.).

Examples of nouns with type B stress paradigms are as follows:

#### 1. Zero-nouns.

a. Zero/-iv nouns: *cmín/cmoná/cmonú*, κορόπь/κοροπή/κοροπί, καβήμ 'watermelon'/καβγμά/καβγμί.

As in Russian, some zero/-iv class diminutive nouns (e.g.  $3y\delta\delta\kappa$  'tooth, dim.') have predesinential, rather than end-stress in the plural, following the anoun pattern (i.e.  $\kappa \dot{\gamma} \delta \kappa u$ , nom. pl.); as often happens in the case of accentual deviation from the norm, this can be attributed to use of different stress patterns for different meanings of a lexeme. In this case,  $3y\delta\delta\kappa$  with predesinential plural stress means 'tooth, dim.', while the expected plural end-stress is used to mean 'tooth of a piece of machinery'.

#### b. Zero/-ej nouns: nymь 'path'/nymí/nymí.

As in several other stress types, this declension type is represented by a tiny number of examples. In addition to nymb, Stankiewicz (1993: 231) cites end-stress as the "genitive singular" of  $zpy\partial b$  'chest', i.e.  $zpy\partial i$ , but the Ukrainian handbooks of stress (Pohribnyj 1964 and Vyxovanec' et al 1973) only specify it after prepositions. Some individual lexical anomalies occur within the class of zero/-ej nouns with a type B singular. The accentually isolated noun  $\kappa ihb$  (gen. pl.  $\kappa ohe i$ ) has stem-stress throughout the plural, which can be interpreted as predesinential, which would mean that the a-noun model of type B stress is used for this noun.

#### 2. a-nouns: біда/біди, сестра/се́стри, ковбаса/ковба́си, низина́/низи́ни.

A particular semantic group, referring to body parts (plus the related word cπδο3ά 'tear'), deviates from this stress pattern by pairing its singular end-stress to plural mobility, rather than the expected predesinential stress. This includes the nouns cmoná 'foot', μοκά 'cheek', naxθά 'armpit' and cπδο3ά. More information is provided about this group under the heading of type C stress. Interestingly, the mobility (presented below as type C) is not that of a-nouns, but a rare conservative survival of the original direct vs. oblique case plural mobility, now characteristic only of the zero/-ej declension class. Furthermore, three of the major exceptions to the type C accentual class itself also involve body part nouns. Perhaps their accentual deviation can be attributed to the fact that they are often deviant morphologically, in view of their frequent use of old dual forms instead of plurals in modern Slavic languages.

A small group of a-nouns, mostly foreign loans (e.g.  $a\ddot{u}s\acute{a}$  'quince'), follow the zero-noun pattern of constant end-stress in the type B plural. As noted by

Stankiewicz (1993: 240), Ukrainian has fewer such nouns than does Russian. The atypical plural stress serves to signal such nouns as foreign.

3. **o**-nouns: село/се́ла, полотно/поло́тна, джерело́/джере́ла.

Note that the non-zero types behave similarly, with predesinential stress in the plural. In fact, each basic stress type (other than immobile stem-stress A) appears to single out the behavior of a particular declension class. In the case of shifting A, the *o*-nouns were seen to be unique in their forward shift by one syllable in the plural; zero-nouns uniquely have end-stress in the B stress type and it will be seen that *a*-nouns have their own unique pattern of stress mobility in the stress type C. As to the predesinential (i.e. stem-final) stress which occurs in the type B plural of non-zero nouns, there is some variability when a mobile vowel appears in the last vocalic position of the stem. Some nouns have predesinential stress on the vocalized mobile vowel (e.g.  $cecm\acute{e}p$ ), while others ignore the mobile vowel position for the purposes of assigning predesinential stress (e.g.  $non\acute{o}meh$ ). This is identical to the predesinential variability found in Russian, for which I have offered the solution of treating some mobile vowels as underlying segments and others as inserted vowels (Feldstein 1979).

#### C. The type C accentual paradigm: initial stress in all or part of the singular.

The type C accentual paradigm's common trait is case mobility in at least one of its subparadigms (singular or plural) and at least one instance of stem-initial stress in each subparadigm. The C accentual type has come to consist almost exclusively of feminine nouns (either zero/-ej or a-nouns), since both zero/-iv and o-nouns have almost completely abandoned their subparadigmatic case mobility in favor of the number mobility that typifies the shifting A type. Therefore, except for a few anomalous cases, the type C class consists of zero/-ej and a-nouns only. Their patterns of mobility are markedly different and the morphological difference of declension class can serve as the basis for predicting which type occurs. The types are as follows:

- 1. Zero-nouns.
  - a. Zero/-iv nouns: exceptionally, only 3ý6 'tooth'.
  - b. Zero/-ej nouns: κίς m ω 'bone', μίν 'night', βόλος m ω 'district', όδλας m ω 'region'.

In the singular, these nouns are characterized by initial stress. Certain lexically specified nouns of this class have end-stress in the locative singular, analogous to the similarly specified stress on the  $-\dot{u}$  desinence in such shifting A type words as  $ca\partial$  'garden'. In the plural, the zero-noun mobiles have direct vs.

oblique case mobility, with initial stress in the direct cases and desinential in the oblique.

The direct/oblique case mobility of these nouns represents a conservative preservation of the older state of affairs. While the vast majority of previously mobile-stress nouns outside the zero/-ej declension class have lost their plural mobility, the restricted class of body parts has retained it. Thus, the zero-iv noun 3y6 'tooth' is the only Ukrainian noun of that declension to also have the type C paradigm. A very small number of a-nouns also has type C mobility in the plural, either paired with type B end-stress in the singular (брова́ 'eyebrow', cmoná 'foot', naxвá 'armpit', щока 'cheek', сльоза 'tear'; the latter a body secretion rather than a body part) or with a-noun type C in the singular (pyκά 'arm, hand', μοτά 'leg, foot', τγδά 'lip, mouth', plus a secondary variant stress of  $\mu o \kappa \dot{a}$ ). The o-noun body parts  $\dot{o} \kappa o$  'eye' and  $\dot{b} \dot{y} x o$  'ear' are also anomalous in their use of type C accentual mobility, an exception which also occurs in Russian and can be attributed to the non-standard o-noun morphology of the nominative plural case form. Perhaps this deviation served as the basis for the large number of other members of this semantic class which have anomalous type C mobility, particularly in the plural.

 a-nouns: ∂ymá 'soul', εοδά 'water', δοροδά 'beard', εολοβά 'head', εκοβοροδά 'frying pan'.

These nouns have initial stress in the accusative and vocative singular, but desinential stress in the rest of the singular. The plural has mobility characterized by initial stress in all case forms except the genitive case, which has end-stress. This leads to an interesting set of structural ambiguities, since the single end-stressed case of the plural—the genitive—uses the zero-ending. Therefore, if the stem is monosyllabic, the retracted genitive plural stress does not differ from any other sort of stem-stress and such nouns come to have a constant stem-stress on the surface. On the other hand, if the stem is longer than a monosyllable, the genitive plural stressed zero will retract to the stemfinal syllable, which does contrast to the other plural cases. For example, the genitive plural of  $\partial yu\dot{a}$  is  $\partial \dot{y}u$ , which matches the stress of nominative plural  $\partial \hat{y}ui$ . However, the analogous forms of the two-syllable noun  $\delta o po \partial \hat{a}$  are *δορί*δ and *δόροδυ*, with contrasting stress placements. This would seem to be further evidence that the type C class is moribund and is actively being replaced by B stress in the a-noun class, since if monosyllable a-noun stems simply abandon their accusative singular initial stress for end-stress, they instantly can be re-evaluated as nouns with type B stress.

3. o-nouns: exceptionally,  $\delta \kappa o$  'eye' and  $\delta y \kappa o$  'ear', discussed above in reference to their deviant morphology and their reference to body parts.

#### 4. Note on the Vocative

The vocative, which is usually referred to as a **form**, rather than a **case**, is syncretic with the nominative in neuter nouns and in the plural of all nouns. In type A (e.g.  $\partial pyz$ ,  $\kappa o \delta ú na$ ), it simply agrees with the unchanging stress of the singular ( $\partial p \acute{y} me$ ,  $\kappa o \delta \acute{u} na$ ), while in type C ( $\delta \delta nacmb$ ,  $zonob \acute{a}$ ) it has initial stress ( $\delta \delta nacme$ ,  $z \delta nob a$ ). Type B is variable, i.e. subject to lexically conditioned variation. According to the accentual tables presented by Matvijas (1969: 130–31), two-syllable nouns (e.g.  $b \partial ob \acute{a}$  'widow') have a retraction to the penult ( $b \partial \acute{o} b o$ ) in the vocative, while longer nouns do not (e.g.  $\kappa ob \delta ac \acute{a}$ ,  $\kappa ob \delta ac \acute{a}$ ). Bulaxovs'kyj (1977: 283) indicates that there is a great deal of stylistic variation in the vocative stress types represented by such two- and three-syllable end-stressed a-nouns. Consequently, it is difficult to establish any firm rule for such vocative forms. In view of these facts, it might be better to consider the vocative to be a derived form, rather than an integral part of the nominal paradigm.

#### 5. Conclusion

In conclusion, we can summarize the major types of synchronic Ukrainian nominal stress paradigms by stating that each basic type, except for the purely lexical immobile A type, appears to set off one of the declensional categories in terms of stress pattern, which may serve as a redundant morphological signal. The basic types and their marked declensional classes are as follows:

Type	Marked Declension Class
Immobile A	All declension classes are equivalent.
Shifting A	Only <b>o-nouns</b> shift stress forward by a single syllable in plural, in contrast to other types which simply have desinential stress in plural (e.g. <i>pewéma</i> vs. <i>moвариш</i> and <i>виховательк</i> ).
Type B	Only <b>zero</b> nouns have end-stress in the plural, while non-zero types have predesinential (e.g. $\kappa a \epsilon y \mu u$ vs. $\kappa o \epsilon \delta a c u$ and $no \lambda o m \mu a$ ).
Type C	Only <i>a</i> -nouns have singular case mobility, based on the more marked direct cases (accusative and vocative) vs. the others (e.g. <i>τολοβά/τόλοβ</i> vs. <i>όδλαςμ</i> and <i>όκο</i> ).

**Figure 2.** Features of Ukrainian declensional classes within each major accentual paradigm.

In spite of these differences, each type also has its invariant features, mainly in reference to the singular subparadigms, which have served as the basis for this paper's recognition of the three main categories. Type A was seen to unpredictably stress any stem syllable of the singular subparadigm; type B has constant desinential stress in the singular, while type C has case mobility involving a direct case in either the singular or plural subparadigm, but as a rule not in both.

#### References

- Bulaxovs'kyj, Leonid Arsenijovyč. 1977. *Історичний коментарій до укра- їньскої літературної мови*, in *Л. А. Булаховський: Вибрані праці в п'яти томах*, ed. by Bilodid, I. K. et al. Київ: Наукова думка, pp. 217–24.
- Feldstein, Ronald F. 1979. "On Stress and the Vowel-Zero Alternation in Russian," *Russian Language Journal* 23(115): 29–44.
- Pohribnyj, M. I. 1964. *Словник наголосів української літературної мови*. Київ: Радянська школа.
- Matvijas, І. Н. 1969. "*Іменник*," in *Сучасна українська літературна мова: Морфологія.*, ed. by Русанівський, В. М. Київ: Наукова думка, pp. 32–139.
- Šerex, Ju. 1951. *Нарис сучасної української мови* Munich: Молоде життя.
- Skljarenko, V. H. 1969. *Історія акцентуації іменників а-основ української мови*. Київ: Наукова думка.
- Skljarenko, V. H. 1983. *Нариси з історичної акцентології української мови* Київ: Наукова думка.
- Stankiewicz, Edward. 1993. *The Accentual Patterns of the Slavic Languages*. Stanford University Press: Stanford, California.
- Vyxovanec', I. R. et al. 1973. Українська літературна вимова и наголос. Київ: Наукова думка
- Zaliznjak, A. A. 1985. *От праславянской акцентуации к русской*. Москва: Наука.

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# Appendix. Full Accentual Paradigms of the Major Types Accentual Paradigm A

дру́г 'friend'	кори́то 'trough'	коби́ла 'mare'
дру́г	кори́то	коби́ла
дру́га	кори́то	коби́лу
дру́га	кори́та	коби́ли
дру́гу/дру́гові	кори́ті	коби́лі
дру́гу/дру́гові	кори́ту	коби́лі
дру́гом	кори́том	коби́лою
дру́же	кори́то	коби́ло
дру́зі	кори́та	коби́ли
дру́зів	кори́та	коби́л/коби́ли
дру́зів	кори́т	коби́л
дру́зях	кори́тах	коби́лах
дру́зям	кори́там	коби́лам
дру́зями	кори́тами	коби́лами
	дрýг дрýга дрýга дру́гу/дру́гові дру́гу/дру́гові дру́гом дру́же дру́зі дру́зів дру́зів дру́зях дру́зям	дрýг кори́то дру́га кори́то дру́га кори́то дру́га кори́та дру́гу/дру́гові кори́ті дру́гу/дру́гові кори́ту дру́гом кори́том дру́же кори́то дру́зі кори́та дру́зів кори́та дру́зів кори́та дру́зях кори́тах дру́зям кори́там

# **Accentual Paradigm Shifting A**

	тра́ктор 'tractor'	ре́шето 'sieve'	вихова́телька 'educator, fem.'
N	тра́ктор	ре́шето	вихова́телька
A	тра́ктора	ре́шето	вихова́тельку
G	тра́ктора	ре́шета	вихова́тельки
L	тра́ктору/тра́кторові	ре́шеті	вихова́тельці
D	тра́ктору/тра́кторові	ре́шету	вихова́тельці
I	тра́ктором	ре́шетом	вихова́телькою
V	тра́кторе	ре́шето	вихова́телько
N	трактори́	реше́та	виховательки́
A	трактори́	реше́та	виховательо́к
G	тракторі́в	реше́т	виховательо́к
L	трактора́х	реше́тах	вихователька́х
D	трактора́м	реше́там	вихователька́м
I	трактора́ми	реше́тами	вихователька́ми

# **Accentual Paradigm B**

	O		
	каву́н 'watermelon'	полотно́ 'canvas'	ковбаса́ 'sausage'
N	каву́н	полотно́	ковбаса́
A	каву́н	полотно́	ковбасу́
G	кавуна́	полотна́	ковбаси́
L	кавуні́	полотні́	ковбасі́
D	кавуну́/кавуно́ві	полотну́	ковбас
I	кавуно́м	полотно́м	ковбасою
V	каву́не	полотно́	ковбасо́
N	кавуни́	поло́тна	ковба́си
A	кавуни́	поло́тна	ковбаси
G	кавуни́в	поло́тен	ковбас
L	кавуна́х	поло́тнах	ковба́сах
D	кавуна́м	поло́тнам	ковба́сам
I	кавуна́ми	поло́тнами	ковба́сами

# **Accentual Paradigm C**

<b>обпасть</b>	'district'	голова́	'head'
ооласть	CHSTLICE	голова	HEAG

N	область	голова́
A	область	го́лову
G	області	голови́
L	області	голові́
D	області	голові́
I	областю	голово́ю
V	областе	го́лово
N	області	го́лови
A	області	го́лови
G	областей	го́лів
L	областя́х	го́ловах
D	областя́м	го́ловам
I	областя́ми	го́ловами