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The origins of the Slavic aorist

Katsiaryna Ackermann has presented a detailed account of the oldest Slavic aorist forms of underived verbs with speculations about their origins (2014). Unfortunately, her theory of Slavic accentuation, which is largely based on Klingenschmitt's, has long been outdated. She starts from the assumption that the acute was long rising in spite of the fact that it was not rising when it was long (as opposed to the long rising neo-acute) and that it was not long after it merged with the short rising neo-acute in Late Proto-Slavic. She does not distinguish between different types of circumflex in Baltic and Slavic languages and does not recognize the relation between tones and accent paradigms established by Stang (1957) and Dybo (1962, 1968). She rejects Hirt's law, Winter's law, Meillet's law, Dybo's law, Stang's law, and other major findings of Slavic accentology, disregarding most of the relevant scholarly literature (cf. Kortlandt 2011 *passim*). In the following I intend to review the data against the background of modern research.

Ackermann assumes five types of Indo-European aorist (2014: 12-15):

1. root aorist,
2. thematic aorist,
3. reduplicated root aorist,
4. reduplicated thematic aorist,
5. *s*-aorist.

It is widely recognized that the thematic aorist represents a thematicization of the root aorist. This reduces the number of types to three, corresponding to the root present, the reduplicated root present, and the *s*-present that is found in the Italic future, the Celtic subjunctive, and the Baltic future, e.g. Umbrian 2nd sg. *menes* 'will come' < *g^wmes-*, 3rd sg. *ferest* 'will bring', *fust* 'will be', 3rd pl. *furent*, Old Irish subj. *-bé* < *b^hHues-*, Lithuanian *bùs* 'will be' (cf. Pedersen 1921, Kortlandt 1984). While the present formations had mobile stress, the aorist formations had fixed stress on the initial syllable (cf. Kortlandt 2015b).

For the Slavic aorist Ackermann distinguishes two types of asigmatic and five types of sigmatic formation, which are exemplified as follows (2014: 265):

A α – C-stem, root-stressed thematic present, e.g. 1sg. **padъ*, 2/3sg. **'pade*,
A β – C-stem, special thematic present, e.g. 1sg. **mogъ*, 2/3sg. **mo'že*,
S α – C-stem, no root-stressed thematic present, e.g. 1sg. **vēsъ*, 2/3sg. **vede*,
S β – V(R)-stem, root-stressed thematic present, e.g. 1sg. **'bīxъ*, 2/3sg. **bī*,
S γ – V(R)-stem, no root-stressed thematic present, e.g. 1sg. **'mērxъ*, 2/3sg. **mer + 'tъ*,
S δ – athematic present, e.g. 1sg. **'daxъ*, 2/3sg. **da + 'stъ*,
S ε – C-stem, extended *s*-aorist, 1sg. **-oxъ*, 2/3sg. **-e*.

This is a peculiar notation because the root vowel is acute in **padъ*, **pade*, **bīxъ*, **bī*, and **daxъ*, circumflex in **mer'tъ* and **da'stъ*, and neo-acute in **vēsъ* and **mērxъ*. It would be more correct to write **pàdъ*, **pàde*, **mògъ*, **mòžè*, **vě́sъ*, **věde*, **bìxъ*, **bì*, **mérxъ*, **mêr-tъ*, **dàxъ*, **dâs-tъ*. Ackermann's notation suggests that there is an accentual difference between the 1sg. and 2/3sg. forms in types A α and S β for which there is no evidence whatever. Similarly between **pàdъ*, **bìxъ* and **dàxъ* and between **vě́sъ* and **mérxъ*. On the other hand, it does not account for the real difference

between the acute in *bìxъ and the neo-acute in *mérxъ and between the acute in *pàde and *dàxъ and the circumflex in *vĕde.

In accordance with Dybo's theory (1981) as summarized by Reinhart (1992: 370f.), this system can be restated as follows:

C-stem, them. pres., accent paradigm (a) – A α, e.g. 1sg. *padъ, 2/3sg. *pade,
C-stem, them. pres., accent paradigm (b) – A β, e.g. 1sg. *mogъ, 2/3sg. *može,
C-stem, them. pres., accent paradigm (c) – S α, e.g. 1sg. *vĕsъ, 2/3sg. *vede,
V(R)-stem, them. pres., accent paradigm (a) – S β, e.g. 1sg. *bixъ, 2/3sg. *bi,
V(R)-stem, them. pres., accent paradigm (c) – S γ, e.g. 1sg. *merxъ, 2/3sg. *mertъ,
athematic present, accent paradigm (c) – S δ, e.g. 1sg. *daxъ, 2/3sg. *dastъ,
C-stem, them. pres., accent paradigm (a/b/c) – S ε, 1sg. *-oxъ, 2/3sg. *-e.

Examples of type S ε are *padoxъ* (a), *idoxъ* (b), *rekoxъ* (c).

Ackermann discusses the following Old Church Slavic primary verbs and their cognates (2014: 23-236):

A α – *pasti, izlěsti, sěsti, vrěšti, lešti, obrěsti, krasti,*
A β – *mošti, iti,*
S α – *žešti, vlěšti, -vesti* 'to drive', *vesti* 'to lead', *tešti, męsti, tręsti, -greti, -klasti, rešti, -cvisti, -vrěsti, sěšti, -lěšti, -nesti, bljusti, čisti, -bosti,*
S β – *mlěti, *dǫti, biti, šiti, spěti, sěti, čuti, *trěti, myti, zijati, ryti, žęti, kryti, sъměti, klati, brati (sę), orati, děti, počiti, obuti, znati, žrъti,*
S γ – *piti, -viti, -liti, -pěti, *izměti sę, prostrěti, -žrěti, -prěti (sę), jęti, -čęti, -pęti, *-žęti, -mrěti, -klęti, -suti, -vrěti, *ponrěti, ziti,*
S δ – *dati, byti, jasti.*

The thematic aorists *padъ, pade, lĕzъ, lĕze, vrъgъ, vrъže, kradъ, krade, mogъ, može, idъ, ide* are clearly the original imperfects of *padǫ* 'fall', *lĕzǫ* 'crawl', *vrъgǫ* 'throw', *kradǫ* 'steal', *mogǫ* 'can', *idǫ* 'go' that became aorists when the new ě-imperfect arose. The same can be assumed for *sědъ, sěde, legъ, leže, -rĕtъ, -rĕte*, where the thematic present was replaced by the infixed formation found in *sędǫ* 'sit down', *lęgǫ* 'lie down', *ob-ręštǫ* 'find'. The stem *rĕte-* represents a *te*-present of PIE *ureH₁-*, to be compared with *plekte-* 'plait' and *lekte-* 'fly' and going back to a *ske*-present (cf. Vaillant 1966: 173). The stems *krade-* and *ide-* represent *de*-presents like *klade-* 'put' and *jade-* 'ride', also *bǫde-* 'be' and *gǫde-* 'play' with a nasal infix, going back to a PIE imperative in *-dʰi*, e.g. Vedic *bodhi* (cf. Kortlandt 1979: 52f. = 2009: 151f.). The verb *mogǫ* represents a PIE perfect present, like *vĕdĕ* 'know', to be identified with Gothic *mag, wait*.

It appears that the thematic presents without an acute root vowel adopted final stress on the analogy of the athematic presents before the incorporation of *mogǫ* and *idǫ* into the present system. This development is reminiscent of Illič-Svityč's law, according to which accentual mobility was generalized in the masculine *o*-stems that did not have an acute root vowel, e.g. S/Cr. *zȗb* 'tooth', Greek γόμφος 'bolt' (cf. Kortlandt 2011: 27f., 165f.). The surviving athematic presents *damь* 'give', *jamь* 'eat' and *jesmь* 'am' had final stress, as is clear from the long neo-acute on the root in the modern languages (cf. Stang 1957: 125-127). The 1st sg. ending -ǫ < *-a-m was taken from the perfect, probably for disambiguation from the aorist suffix *-aH, and is therefore unstressed (cf. Kortlandt 1979: 57 = 2009: 156). As a result, thematic presents and imperfects of consonantal stems without an acute root vowel received mobile accentuation (c) and a falling tone on barytone forms of the paradigm (cf. Kortlandt 2011: 28, 166). Thus, we have *žegǫ* 'burn', *vezǫ* 'lead', *mętǫ* 'stir', *tręsǫ* 'shake', *bljudǫ*

'watch', *čьtǫ* 'count', all (c), corresponding to Vedic *dáhati, váhati, mánthati, trásati, bódhati, cétati*. The motivation for this analogical development, which did not reach *legъ, leže* (b), was evidently the disambiguation of homonymous forms.

The endings of the thematic present and imperfect after the rise of the new timbre distinctions were the following (cf. Kortlandt 1979 = 2009: 151-165 and 2015a):

	present		imperfect	
	hard	soft	hard	soft
1sg.	-*ǫ*	-*ǫ*	-*ъ*	-*ъ*
2sg.	-*i*	-*i*	-*e*	-*e*
3sg.	-*e*	-*e*	-*e*	-*e*
1pl.	-*omъ*	-*emъ*	-*omo*	-*emo*
2pl.	-*ete*	-*ete*	-*ete*	-*ete*
3pl.	-*ǫtъ*	-*ǫtъ*	-*ǫ*	-*ǫ*

The 3rd pl. present ending -*ǫtъ* < *-*onti* had adopted *-*nti* from the athematic paradigm (cf. Kortlandt 1979: 65f. = 2009: 161f.). The homonymy between the 3rd sg. forms was now resolved by adding the stressed ending -*tъ* of the athematic paradigm to the thematic present ending -*e* of verbs without an acute root vowel. This development did not affect verbs with an acute root vowel because the acute had been eliminated from paradigms with mobile stress as a result of Meillet's law (cf. Kortlandt 2011: 163). The exceptions are *kradǫ* 'steal', *kladǫ* 'put', *prędǫ* 'spin' (not mentioned by Ackermann) and *sěkǫ* 'cut', which eliminated the acute in the present and the imperfect and therefore belong to accent paradigm (c) in these forms but (a) elsewhere. The 2nd sg. thematic present ending *-*i* < PIE *-*eH₁i* was replaced by -*eši* in Old Bulgarian and -*ešь* elsewhere, e.g. Old Slovene (Freising ms.) *zadenes, vzovues, prides*, with -*es* denoting [eš] (cf. Kortlandt 1979: 58 = 2009: 156). The forms without an acute root vowel adopted final stress from the athematic paradigms. Final stress was then extended to the plural forms of these paradigms.

The sigmatic aorist of underived verbs had fixed stress on the root, which is reflected as an acute (a) or long neo-acute (b) in the material, e.g. acute in S/Cr. *nàduh* 'blew up', *ràzbih* 'broke', *pòših* 'sewed', *dòspjeh* 'reached', *zàčuh* 'heard', *zàtrh* 'destroyed', *ìzmih* 'washed', *ràzrih* 'dug up', *pòžeh* 'reaped', *ràzkrih* 'uncovered', *pòklah* 'slaughtered', *òbuh* 'put on footwear', *pòznah* 'recognized' (all S β), *ìspih* 'drank up', *zàvih* 'wrapped', *pòlih* 'poured' (S γ), *ìzdah* 'issued' (S δ), and neo-acute in *ùmrijeh* 'died', *òtēh* 'grabbed', *pròstrēh* 'spread', *pròždrēh* 'devoured', *pòčēh* 'began', *pròpēh* 'raised', *ìžēh* 'squeezed out', *zàklēh* (Posavian *zaklē*) 'swore', *izàsūh* 'spilled' (all S γ), also in the consonantal stems (S α), as is clear from *dònijeh* beside *donèsoh* 'brought' and from the infinitive *rȉjet* (Dubrovnik) beside *rèći* 'to say' (cf. Kortlandt 1985: 113 = 2009: 52). Ackermann writes about the difference between 1sg. *ùmrijeh* and 2/3sg. *ùmrije* (2014: 176): "Die Form 1.Sg. s.-kr. *mrȉjeh* statt *mrjȅh* setzt mit ihrem ursprünglichen Akut eine ieu. Langstufe fort. Es handelt sich also um eine noch ganz regulär gebildete Form des sigmatischen Aorists, obwohl sie eine ursl. Neubildung ist. Dieses Faktum ist bis jetzt, nach meinem Wissen, völlig übersehen worden." This is a culmination of errors resulting from the author's ignorance of what has been achieved in the field of Slavic accentology since Stang's classic monograph (1957). The 1st sg. form *ùmrijeh* belongs to the sigmatic aorist, a paradigm with fixed stress (a/b), and therefore has a long rising (neo-acute) root vowel because the root is not acute. This is

the regular outcome of a lengthened grade vowel (cf. Kortlandt 1985 = 2009: 51-60). The 2nd and 3rd sg. forms belong to the root aorist, a paradigm with mobile stress (c), and therefore have a long falling (circumflex) root vowel that loses the stress to a prefix. The form *mrȉjeh* contains the regular phonetic reflex of a lengthened grade vowel and is not analogical. There never was a form **mrjȅh. If the form *ùmrijeh* were modeled on *ùmrije*, it would doubtless have adopted its accentuation together with its vocalism. It must be regretted that the relevant scholarly literature is "völlig übersehen worden" in Ackermann's account.

The root aorist was an athematic formation with mobile accentuation (c) and, consequently, a falling tone on the barytone forms of the paradigm, e.g. S/Cr. *pȋ* 'drank', *vȋ* 'wound', *lȋ* 'poured', *ȉspī*, *zȁvī*, *pȍlī*, *ùmrije*, *ȍtē*, *prȍstrē*, *prȍždrē*, *pȍčē*, *ȉžē*, *zȁklē*, *nȁsū* (S γ), *dȃ* 'gave', *bȋ* 'was', *ȉzdā*, *dȍbī* (S δ). Van Wijk has demonstrated that the OCS 2nd and 3rd sg. ending *-tъ* is limited to the original root aorists *pitъ*, *vitъ*, *litъ*, *mrětъ*, *jętъ*, *strětъ*, *žrětъ*, *čętъ*, *pętъ*, *klętъ*, *sutъ*, *žitъ* 'lived', *sętъ* 'said', *dastъ*, *bystъ*, also *pětъ* 'sang', which adopted mobile stress, and the original imperfect *jastъ* 'ate' (1926, 1937). Taking into account the Prussian evidence, I have argued that the ending *-tъ* was originally a particle **tu* 'then', which may have replaced the augment **e-* in Balto-Slavic times (cf. van Wijk 1918: 114 and Kortlandt 2009: 283-285). It was evidently preserved under the stress in Old Church Slavic and lost elsewhere. The 3rd sg. ending *-tъ* was replaced by *-tъ* in Old Bulgarian and a part of the Russian dialects, followed by the corresponding plural ending in Old Bulgarian (cf. Kortlandt 1979: 59-62 = 2009: 157-159). The fact that the short forms *da*, *by*, *-ě* predominate in compounds while the long forms *dastъ*, *bystъ*, *jastъ* are predominant without prefix suggests that the prefix was stressed in these instances, in agreement with the Serbian and Croatian evidence. The conditional particle *by* never appears as *bystъ*, which supports the view that *-tъ* had a temporal meaning.

There are two problems that remain: why do *dastъ* and *bystъ* look like sigmatic aorist forms and how did the athematic presents acquire final stress? I have proposed that *dastъ* can be identified with Greek *ἔδωκε* 'gave' as a *k*-aorist **dōk* with *satəm* palatalization of the velar stop yielding **dōs* and that *bystъ* is an analogical *k*-aorist, to be compared with the Greek perfect *πέφῡκε* 'grows' < 'has sprung (up)' (cf. Kortlandt 2018). Since the *-κ-* is limited to the singular in the Greek active aorist indicative, I am inclined to regard **dōs* as the phonetic reflex of monosyllabic **dōk* < **deH₃t*, where **-k-* may have been an intrusive consonant after the laryngeal before the ending (like *-p-* in Latin *emptus* 'bought' or **-s-* in Hittite *ezta* 'he ate' < **edto*) before the final **-t* was lost. The form **dōs* survived because it was supported by the present tense *damь* < **dōdmi*, where the reduplicating syllable received a long vowel as a result of Winter's law. The form **būs* has the zero grade of the plural forms. The verbs *děti* 'put' and *stati* 'stand (up)' adopted derived presents *dežde-* < **dedje-* and *stane-* and sigmatic aorists with fixed stress. The Lithuanian verbs *dedù* 'put' and *dúodu* 'give' for Greek *τίθημι* and *δίδωμι* show that the generalization of the root vowel in the reduplicating syllable and zero grade in the root of the reduplicated presents dates back to the Balto-Slavic period. The stress must then have shifted to the ending, cf. OLith. *demì* and Latvian *duômu*, and this must have been the model for the root presents, e.g. Lith. *ėdąs* 'eating', Latvian *ę̂mu* 'I eat'. The paradigm 3sg. **stastāti*, 3pl. **stastinti* became the model for the Balto-Slavic causative formations (cf. Kortlandt 1989 = 2009: 171-179). Accentual mobility was preserved in the paradigms of *imatъ* and **zъnatъ* (cf. Kortlandt 2009: 167-169).

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