RECENZIJOS

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Thomas Olander, **Proto-Slavic inflectional morphology: A comparative handbook**, Leiden, Boston: Brill, 2015, 411 pp.

In the foreword of this new book, Thomas Olander asks himself 'what justifies a study like the present one' (p. 5). This is not a pointless question: there is no shortage of handbooks, separate studies or papers devoted to Slavic historical morphology and the research field already appears saturated by the huge amount of literature that has been built up over the last two centuries. The potential reader of Olander's book may legitimately ask what justifies a new discussion about the Proto-Slavic inflectional endings. According Olander (2015, 5-8), there are several reasons that give this book its legitimacy. The first one is that 'very few specific problems of Slavic historical morphology can be treated in isolation' (p. 7), and this global perspective regarding the historical data 'as parts of a larger picture', Olander says, is something that justifies writing a new book in this so often explored area. A second reason is that Slavic historical phonology is meanly concerned with the establishment of phonetic laws applicable to root syllables; there is still much to do about the treatment of the final syllables

(Auslautsgesetze), and to shed some light on this very vexed question is precisely one of the objectives of Olander's book. Thomas Olander is certainly one of the best equipped scholars to meet this challenge, for at least three reasons. The first one is that he has genuine experience and expertise in the field of accentology, being the author of an excellent book on Balto-Slavic accentual mobility (Berlin, New York, 2009). This is a crucial point, since it has been repeatedly claimed that some of the different treatments observed in the Slavic final syllables may be due to different tonal properties; Olander's sceptical position on the subject is of undeniable interest. Another strongpoint in Olander's scientific profile is his equal competence in Baltic and Slavic; whatever our position on Balto-Slavic and its degree of uniformity, it proves impossible to say anything serious about Slavic without a look on Baltic, and vice versa. Finally, Olander has an excellent knowledge of the current state of research in Indo-European linguistics, which it is more and more difficult to master, considering the unceasing flow

of publications in this domain. The reader therefore approaches this book with confidence and his expectations are not thwarted: Olander has produced an excellent book, written both in a highly professional way and in a reader-friendly format, containing objective and reliable information and, most importantly, providing new insights into long-term issues. Whether I always agree with the author's views, is an irrelevant question that has no effect upon my very positive judgement.

The book consists of five parts: a long introduction discussing the aim, scope and justification of the book and presenting its method and structure (p. 1-38); a second chapter devoted to the phonological background of the study (p. 39-67); a third chapter, which is the main part of the book, dealing with nominal inflection (p. 68-295); a fourth chapter dealing with verbal inflection (p. 296-365) and finally an extremely brief conclusion summarising the results of the study (p. 366-367). The heart of the book is Chapter 3, consisting of a discussion of every single inflectional ending of the Slavic nominal declensions, classified by case form and declension type. At first glance, this could lead to an atomistic approach, treating every ending in isolation, irrespective of the system as a whole, and it is true that this presentation does not encourage a systematic recognition of all the possible analogies that can have taken place between the individual cases. But this is compensated by the extensive discussions about every inflectional ending, and the global perspective advertised at the beginning of the introduction is not an empty phrase: it is clearly perceptible throughout the book.

Each book has its own background and profile. On each page, here, we feel the influence of the so-called 'Leiden school', with a constant recourse to its standards in the text (and more than two pages of references to Frederik Kortlandt in the secondary literature); in addition, the Danish school of Indo-European linguistics (Rasmussen, Olsen) also has a strong presence in Olander's book. This is not a bad thing in itself, all the more so given that Olander regularly mentions scholars of divergent theoretical persuasions (e.g. Jasanoff) or even earlier works by Fortunatov, Meillet or Pedersen, which are still worth a look around. Nonetheless, Olander too has his own thoughts and there is a certain coherence between this book and Olander's earlier publications: to take just one example, Olander's 'mobility law', developed in his 2009 monograph and defined as the loss of the accent on the last mora of accented final syllables, runs like a red thread through the whole 2015 book (see e.g. p. 49f.). Another idea explicitly endorsed by Olander is the independence of the Ancient Greek and the Balto-Slavic prosodic distinctions. Not only does he claim that 'there were no syllabic tones' in Indo-European (p. 40), but he also rejects the idea of a

common source for the Greek and Balto-Slavic developments: in the discussion about the thematic locative singular, for example (p. 178), he refuses to equate the difference in Greek between $\grave{\alpha}\gamma\varrho\sigma\i$ (nom. pl. 'fields') and ໂσθμοῖ (loc.sg. 'on the Isthmus') with the difference in Slavic between *gradi* (nom.pl. of *gradъ* 'city') and *gradě* (loc.sg. of the same word), which is certainly a defensible stance.

The introduction (p. 1-38) lays down the basic principles that will be subsequently driven through the book. Methodological considerations are first developed, leading to a rather expected conclusion: 'the historical linguist should aim at a reasonable balance between simplicity and explanatory power when positing models of prehistoric reconstructions and developments' (p. 12); it is probably the opposite that would raise problems. Another methodological principle strongly advocated by Olander is the necessity to differentiate as many synchronic states as required by the relative chronology of the facts. His point of departure is 'Proto-Slavic' (PS), which he proposes distinguishing from Common Slavic (CS) by the fact that it refers to 'the last stage of Slavic before the first development not shared by all dialects' (cf. Olander 2015, 42), whereas Common Slavic 'refers to the Slavic dialect continuum during the period after the dissolution of the Slavic proto-language' (p. 29). This means, for example, that Proto-Slavic is reconstructed without the first

and second palatalisations which are considered to be of post-Proto-Slavic date: Olander (2015, 149) opposes, e.g., Proto-Slavic * nagāi and Common Slavic *nogě (ā-stem dat.sg. from PS *na'gā, CS *nogà 'foot, leg'). A second Proto-Balto-Slavic stage is defined as the common ancestor of Baltic and Slavic: Olander's position (p. 24-25) does not depart from the traditional one, which posits 'a period of development common to the later Baltic and Slavic branches' (p. 24), and we find throughout the book Proto-Balto-Slavic (PBS) reconstructions in parallel with Proto-Slavic (PS) and Common Slavic (CS) ones. The reason for distinguishing Proto-Slavic and Proto-Balto-Slavic is the necessity to include the Baltic branch in the latter. Not surprisingly, however, there is often a complete identity of Proto-Slavic (PS) and Proto-Balto-Slavic (PBS), and I have the impression that their definition is potentially marked by a certain degree of circularity: if Proto-Slavic is defined as the branch of Balto-Slavic that does not yet display some of the most characteristic Common Slavic innovations and if Proto-Balto-Slavic is the common ancestor of Baltic and Slavic without the innovations by which each group is characterised, where does the difference between Proto-Slavic and Proto-Balto-Slavic lie? The only answer is that Proto-Slavic is already marked as Slavic by several innovations that separate it from Proto-Balto-Slavic: for example, Proto-Balto-Slavic has a thematic nomi-

singular ending (still native *-as preserved in Lithuanian), whereas Proto-Slavic has *-a and Common Slavic -b (see Olander 2015, 102). Correlatively, this implies that the distinction between Proto-Slavic (PS) and Common Slavic (CS) is not absolutely that between a stage not yet marked and a stage marked by Slavic innovations: in both of them, we have Slavic characteristic features, in any case differences from the Balto-Slavic model in comparison with Proto-Baltic. The question is then: what do we gain from positing a Proto-Slavic stage distinct from a Common Slavic stage? How are we justified in isolating a set of Slavic innovations as elements of definition of Proto-Slavic (e.g. the evolution PBS *-as > PS *-ə) from other sets of Slavic innovations qualified as elements of definition of Common Slavic (e.g. the first palatalisation)? Are there organic differences that make such a distinction necessary? This is not a rhetorical question: it has practical consequences on the way we figure out the prehistory of the Slavic dialects. The straightforward answer given by Olander is that the frontier between Proto-Slavic (PS) and Common Slavic (CS) is the existence of innovations that were not common to all Slavic dialects (see Olander 2015, 27), but how can we speak of Common Slavic if it is defined by innovations that are already not common to all Slavic dialects? Reconstructing relative chronology is one thing, setting synchronic stages in

stone as rigid labels is another one: too much realism in linguistics can lead to unrealistic effects.

Characteristically enough, Olander does not venture to reconstruct a Proto-Baltic stage: 'for practical purposes it would be possible to reconstruct a Baltic proto-language [...] but since Proto-Baltic, unlike Proto-Balto-Slavic, is only of minor relevance to the reconstructions and developments assumed here, I do not systematically provide Proto-Baltic reconstructions' (p. 25). In fact, Proto-Baltic disappears completely from the rest of the book, apart from regular mentions of the individual Baltic counterparts of the Slavic endings. Of course, the author should not be blamed for this. since the focus of his book is essentially Proto-Slavic, not Proto-Baltic, but, on the other hand, his Proto-Balto-Slavic reconstructions are so strongly dependent on the way he interprets the Baltic evidence that one would be very happy to learn how he sees things. I think that Olander's willingness to avoid reconstructing Proto-Baltic is perfectly well founded, since there are infinitely more insurmountable problems with the notion of Proto-Baltic than with Proto-Slavic: I suppose hardly anyone would dare to write a tale in Proto-Baltic, as Schleicher did for PIE.

Proto-Indo-European (PIE) is the last stage of Olander's reconstruction (2015, 21–24). Indo-European prototypes are regularly given in parallel with Proto-Slavic (PS) and Proto-Balto-Slavic

(PBS) ones in each of the tables presented throughout the book. Olander discusses at length (p. 21–24) the definition of Indo-European, in particular the question whether it should include Anatolian or not. Practically, separating Anatolian from the rest of Indo-European ('Non-Anatolian Indo-European' or 'Core Indo-European') has little relevance to the study carried out here about Slavic.

Chapter 2 presents the phonological background of the study. Olander recognises himself that his reconstruction of the PIE phonological system is 'rather mainstream' (p. 39). Note that he considers that 'laryngeal colouring seems to have applied already in the proto-language' (p. 39-40), which is the reason why he consistently notes $*ah_2$, not $*eh_2$; the problem is how to account in this perspective for Eichner's law, which posits non-colouring contexts still preserved in PIE (e.g. * $m\bar{e}h_2$ - μr > Hitt. me-e-hur 'time')? Of course, an easy way out would be to deny the validity of Eichner's law... The Proto-Balto-Slavic stage is then reconstructed (p. 41f.). Olander (p. 41) posits a distinction between acute and circumflex syllables containing long vowels or diphthongs: he writes ${}^*\bar{V}$ or *VR for the former, ${}^*\bar{V}$ or *VR for the latter, and derives acute vowels or diphthongs from *Vh, *VRh or Winter's law, 'most likely by being glottalised'. This view is consistent with the customary standards of the Leiden school. Two other statements (p. 41) deserve special attention: 'in

monophthongs quantity acute not distinctive; they were always long. There probably was no phonologically relevant distinction between short and long vowels followed by a tautosyllabic sonorant.' My understanding of the first statement is that Olander considers that there was no distinction in PBS between *VH and *VH, both being reflected as acute monophthongs, which means glottalisation was predominant over quantity; actually, at another level, this seems to be at odds with Eichner's law. As to the second statement, I understand it as the idea that short and long diphthongs (* $\check{V}R$ and * $\bar{V}R$) merged in PBS, without any specification of whether long diphthongs go back to $*\bar{V}R$ (morphological lengthening) or to *VHR or *VRH (laryngealconditioned lengthening); it might be worth precising whether there can be a difference between those contexts. Besides, the reconstruction of tonal (acute vs. circumflex) distinctions in PBS raises the question why they are not noted throughout the book for PS: compare PS * sūnu 'son' (where CS has *sŷnъ) vs. PS *bagūnįī 'goddess' (where CS has *bogÿn'i). Does this mean that tonal distinctions were present in PBS and lost in PS? Or does this mean that there was in PBS a phonemic distinction of whatever nature that lead to the rise of tonal distinctions later on in the individual Baltic and Slavic branches? Olander writes explicitly that 'there was no phonological distinction between

glottalised and non-glottalised syllables after Dybo's law' in PS (p. 43). This seems to be consistent with Derksen's statement (Etymological dictionary of the Slavic inherited lexicon, Leiden, 2008, 7), based on Kortlandt, that 'the rise of tonal distinctions must probably be dated to the separate branches of Balto-Slavic'. I am entirely prepared to accept the idea that tonal distinctions are separate innovations in Baltic and Slavic, but one must assess its implications: first, the comparison with the Ancient Greek tones cannot be upheld as a continuous line of inheritance from PIE, at least directly; second, the precise correspondences between Baltic and Slavic should be viewed as parallel developments, which requires some intellectual effort.

In the following section, Olander discusses the phonological developments from PIE to Slavic, classified by their relative chronology. First, from Proto-Indo-European to Proto-Balto-Slavic (p. 46-53): 1° loss of laryngeals; 2° diphthongisation of syllabic sonorants (*R > iR); 3° common Indo-European vowel contractions; 4° mobility law (Olander's law); 5° devoicing of word-final obstruents; 6° Winter's law and deaspiration of voiced aspirated stops; 7° delabialisation of *o to *a; 8° assibilation of palatal stops (* \hat{k} , * \hat{g} > *ś, *ź); 9° loss of word-final stops; 10° diphthongisation of ${}^*reve{e}$ to ${}^*reve{i}ar{a}$ before tautosyllabic *u; 11° backing of *e to *a before *u. Then the changes from Proto-Balto-Slavic to Proto-Slavic are

discussed (p. 53-59): 12° ruki change; 13° Dybo's law and deglottalisation; 14° labialisation of i to u after \bar{o} in final position; 15° delabialisation of $*\bar{o}$ to $*\bar{a}$; 16° loss of *n between a high vowel and word-final *s in final position; 17° loss of word-final fricatives with centralisation of preceding $*\check{a}$ to $*\check{\bar{a}}$; 18° loss of word-final dentals after long vowels, with raising of the vowel; 19° loss of word-final *m after short vowels, with rounding and raising of preceding *a to *u. There follow Common Slavic developments (p. 59-67): 20° fronting non-front vowels after palatal consonants; 21° first palatalisation of velars; 22° monophthongisation of oral diphthongs; 23° second palatalisation of velars; 24° raising of *e to *i before *j; 25° Common Slavic vowel contractions: 26° elimination of post-consonantal *i; 27° backing of $*\bar{e}$ to $*\bar{a}$ after palatalised consonants; 28° monophthongisation of nasal diphthongs; 29° reinterpretation of vowel quantity as quality. There would be much to be said about this presentation, in particular about the ordering of the individual sound changes. I will confine myself to making two observations. First, relative chronology is based on two types of evidence: (a) language split, which means that a sound change is ascribed to a given period in the light of its extension (if it occurs both in Baltic and Slavic, it can be Balto-Slavic; if it only occurs in Slavic, it is likely to be post-Balto-Slavic, etc.); (b) internal coherence, which means that a sound

change is ascribed to a given period in the light of its antedating or postdating another sound law (e.g. 14° must antedate 15°, since it implies the preservation of $*\bar{o}$). The first type of evidence is sometimes ambiguous, because parallel developments cannot be completely ruled out. One can only agree that Winter's law (6°) is Balto-Slavic not only on account of its occurring both in Baltic and Slavic, but also because it is a non-trivial sound change, so that the assumption of independent developments is unlikely. But delabialisation of *o to *a (7°) is a very trivial development, widely attested in various Indo-European languages, beyond the sole Balto-Slavic territories, so that the connection between Baltic and Slavic on this point can be just superficial. More seriously, I wonder whether satemisation (8°) really took place after Winter's law (6°): what are the arguments for this assumption? Another observation is that listing sound changes one after the other provides an exploded view of linguistic evolution: individual sound changes can be parts of major reshaping processes of phonological systems. It is often assumed that (Protoor Common?) Slavic was characterised by the so-called 'law of open syllables'; several sound changes, separately listed by Olander, are often seen as manifestations of this common law. It would be useful to take a position on this issue.

Chapter 3 (p. 68–295) is the heart of the book. Basically, it consists of data sheets about every single case form of the

Slavic nominal inflections, all organised in the same way: a table with PS, PBS and PIE reconstructions, followed by their historical descendants, is first given; then there are bibliographical references about each of these three stages (PIE, PBS and PS); finally, there is a more developed discussion about the assumed developments for PIE, PBS and PS. This presentation performs a pedagogical function (Olander's book has the following subtitle 'a comparative handbook') and it is true that an innocent reader like me can quickly find the information he is looking for. On this point, there is no doubt that Olander's book will successfully serve the scholarly community. On the other hand, in order to avoid the atomistic effect I have been talking about at the beginning of this review, Olander has to cross-reference the analysis of the individual items. This job is generally well done. The order of presentation is traditional in the sense that singular forms are treated before dual and plural forms, which is not problematic; the nominative comes first, followed by the accusative, the genitive, the dative, the instrumental, the locative and the vocative, which should have been justified in terms of functional coherence (grammatical vs. concrete cases?) or of formal proximity (direct vs. oblique cases?). Let us take it as a conventional classification. Another convention is to begin with consonant stems followed by i-, u-, \bar{a} -, and o-stems. No presentation is entirely neutral, of course, but it is always better to explain one's choices.

There would be much to say about the detailed analyses given by Olander for every single case, but in a review like this I cannot discuss every detail as I would wish myself. Some of the descriptions or reconstructions are unproblematic: for example, that the \bar{a} -stem nominative singular (p. 99–100) is PS $-\bar{a}$ going back to PIE *-ah2 (*-eh2), cf. Old Church Slavic glava, Lithuanian galvà, compared to Vedic jihvá, Greek φυγή, Gothic giba, etc., is a description that will not be controversial, or so I hope. Many of the analyses proposed in this chapter are simply prevailing textbook knowledge, and this is rather reassuring. In many cases, Olander's presentation can be seen as a useful updating of common knowledge, in particular when it introduces laryngeal notations for case endings that were previously simply noted with indiscriminate long vowels. The ā-stem instrumental singular (cf. Old Church Slavic glavo, Lithuanian gálva), traditionally traced back (with a secondary nasal of unclear origin) to *- $\bar{a}(n)$, is here reconstructed as *- $ah_2(a)h_1$ (p. 163-166). This is certainly an improvement, even if there can be much discussion about the real reconstruction $(*-eh_2-eh_1, *-h_2-eh_1 \text{ or } *-eh_2-h_1)$: in any case, it is better to view the issue with clarity than to repeat an imprecise reconstruction *-ā. In other cases, Olander provides explanations that may appear very good or questionable: this is a matter of taste. It is only natural that there might be some disagreement here and there. In order to keep this review to a reasonable size, I will only take three examples of discussions that might arise from a careful reading of Olander's book:

I am not too sure that 'PIE *-er was preserved as *-'er in Proto-Balto-Slavic' (p. 82) and that, later on, the final -r was dropped by analogy to nasal stems. The convergence between Vedic Sanskrit mấtā, Lithuanian mótė and Old Church Slavic mati (all without -r) could well plaid in favour of a PIE development * $-\bar{e}r\# > *-\bar{e}\#$, with final -r easily restored Greek μήτης, Armenian mayr, Phrygian ματαρ, Latin māter, Old High German muoter and Tocharian A mācar by analogy to the rest of the paradigm. The problem is the direction of the analogy: in Greek, we have the nasal (ποιμήν 'shepherd', δαίμων 'divinity') and the liquid (μήτης 'mother', ὕδως 'water') always preserved; in Lithuanian, they are always dropped (nasal piemuõ 'shepherd', liquid *mótė* 'woman'), which suggests that analogical levelling has taken place in one of these two languages or in both of them, in variable proportions. Note that Old Prussian seyr 'heart' if from $*\hat{k}\bar{e}r$, is better explained by Olander's scenario than by the one suggested here, but the Prussian word remains admittedly puzzling. If Finnish paimen 'shepherd' was borrowed from the Baltic nominative *pāimēn (= Greek ποιμήν), later on reshaped in Baltic as *pāimon > Lith. piemuo, this could even

suggest the preservation of final -n after long vowel in Proto-Baltic, but the nature of the evidence is too fragile to support this claim. The Slavic treatment *-er# > *-i is explained by Olander (2015, 82) as resulting from a raising of *- \bar{e} to *-ibefore *-r, which is somewhat circular. We have exactly the same problem with Proto-Slavic *- \bar{u} (> Common Slavic -v, cf. Old Church Slavic kamy 'stone') from * $-\bar{o}n$: since he claims for a PIE evolution $*-\bar{o}n\# > *-\bar{o}\#$, Olander must admit the restoration of final -n in order to get a context that might explain the raising of *- \bar{o} to *- \bar{u} (an ending *- \bar{o} # would have yielded *-a#, as in the nominativeaccusative dual: Old Church Slavic $grada < PIE *-oh_1$). There seems to be a contradiction: how can we assume that the development *- $\bar{e}r\#$ > *- $\bar{e}\#$ is late in Balto-Slavic, without any analogy having taken place from the rest of the paradigm, whereas the development $*-\bar{o}n\# > *-\bar{o}\#$ is considered ancient, but was corrected by the reintroduction of the final nasal by analogy to the rest of the paradigm?

Another traditional *crux* in Slavic historical phonology is the treatment of final *-os# and *-om#. It seems to be the case that *-os# yielded -o in the sigmatic neuters (Old Church Slavic *slovo* 'word' < PIE *-os, p. 96f.), but -v in the masculine thematic nominative singular (Old Church Slavic *plodv* 'ship' < PIE *-o-s, p. 102f.), whereas *-om# yielded -o in the thematic neuters (Old Church Slavic *město* 'place' < PIE *-o-m, p. 105 f.), but -v in the masculine the-

matic accusative singular (Old Church Slavic *gradъ* 'city' < PIE *-o-m, p. 118f.). There have been many attempts at bringing order to this vexed question. Olander (2015, 97; 106), adheres to the view that -o in the (sigmatic and thematic) neuters is of secondary origin, due to the analogy of the pronominal neuter ending -o (ultimately from PIE *-od), and that both *-os# and *-om# have yielded -υ in Slavic, which is reasonable. The position of the Old Novgorodian nominative singular ending -e is disputed: phonetic evolution? reassignment of the inherited vocative ending? analogy of the *-iostems? The discussion is based on a previous paper co-published by Olander in 2012 (Proto-Indo-European *-os in Slavic, Russian Linguistics, 36(3), 319-341). One should also bring the Baltic data into the discussion. The analogical extension of the neuter pronominal ending *-o (< PIE *-od) to neuter nouns and adjectives has a good parallel in Lithuanian, where the same ending expanded from the pronouns (e.g. Lithuanian visa 'all') to the adjectives (e.g. Lithuanian gera 'good' vs. Old Prussian labban 'good').

A classical difficulty raised by the Slavic *Auslautsgesetze* is the role ascribed to tonal distinctions to explain discrepancies in the treatment of apparently identical endings. For example, reconstructing the thematic locative singular and the thematic nominative plural both as $*-o\dot{i}$ (cf. Ancient Greek Ἰσθμοῖ 'on the Isthmus' vs. ἀγροῖ 'fields'), one wonders

why they are treated differently in Slavic: the former is apparently reflected by $-\check{e}$ (loc.sg. gradě), the latter by -i (nom.pl. gradi). Traditionally, this difference is explained in terms of tonal distinctions, the locative singular being characterised by a circumflex (cf. Lithuanian namie 'at home', Greek Ἰσθμοῖ 'on the Isthmus'), the nominative plural by an acute tone (cf. Lithuanian gerì 'good', nom.pl. < *-íe, Greek ἀγροί 'fields'). I think that the Greek contrast between Ἰσθμοῖ (loc. sg.) and ἀγροί (nom.pl.) is completely irrelevant, since the Greek nominal declensions follow a simple rule of thumb: direct cases have the acute, oblique cases the circumflex. The Greek circumflex is likely to be an innovation that has developed within the Greek language to mark a prosodic contrast with the (originally) unmarked acute specifically where this contrast was parallel to a contrast in stress placement (we thus have e.g. acc. κεφαλήν / gen. κεφαλῆς 'head' like acc. κύνα / gen. κυνός 'dog'). The Baltic data have their own problems: is a classical headache. As to Slavic, Olander rejects the idea that segmental differences were ever produced by tonal distinctions in Slavic (cf. 2015, 12) and offers another explanation to account for the minimal pair $-\check{e}$ (loc.sg.) vs. -i (nom. pl.) by assuming that the latter goes back to *-ais (PIE Transponat *-oi+s) with the addition of final -s 'due to the influence of the nominative plural forms of the other paradigms' (2015, 234); a similar development is said to have taken place in Old Norse beir and Old Latin heisce (nom.pl., both allegedly from *-oi+s). Note that this implies that Proto-Slavic still had a difference between short and long diphthongs, with $*-\check{o}is > Slavic -i$ in the nominative plural vs. * $-\bar{o}is > Slavic -y$ in the instrumental plural. I am not sure that this scenario is the most desirable, but it cannot be dismissed entirely. By the way, this explanation supposes an unbalance between PBS *- $\bar{a}i$ - and *- $\bar{e}i$ -. We have a completely uniform treatment for $*-\bar{e}i\#$, $*-\bar{e}i\#$, $*-\bar{e}i\#$ and $*-\bar{e}i\#$ Slavic *-i* as shown by the following table:

*-ĕį# > S1i	*-ēi# > S1i	*-ĕis# > S1i	*-ēis# > S1i
voc.sg. gosti	loc.sg. gosti	gen.sg. gosti	(preterite 2nd sg. bi
< PBS *-ĕį́#	< PBS *-ēį#	< PBS *-ĕį́s#	< PBS *bēi-s# ?)
$=$ Lith. $-i\tilde{e}$	(2015, 171)	= Lith. $-i\tilde{e}$ s	(2015, 318)
(2015, 180)		(2015, 125)	

not only do we have to oppose $-i\tilde{e}$ (cf. Lith. $nami\tilde{e}$) and -ie (cf. Lith. geri), but there is also $-a\tilde{i}$ in the nominative plural of nouns (cf. Lith. $dieva\tilde{i}$ 'gods'). This

but we have different treatments for $*-\check{a}\underline{i}\#,\ *-\check{a}\underline{i}\#,\ *-\check{a}\underline{i}\$\#$ and $*-\check{a}\underline{i}\$\#$ (with $*\check{a}$ < PIE $*\check{a}$ or $*\check{o}$):

*-ă <u>i</u> # > S1ĕ	*-āi# > S1ĕ	*-ăis# > Sli	*-āis# > Sly
loc.sg. gradě	dat.sg. glavě	nom.pl. <i>gradi</i>	instr.pl. grady
< PBS *-ăį#	< PBS *-āį#	< PBS *-ăį+s#	< PBS *-āis#
$=$ Lith. $-i\tilde{e}$	= Lith <i>ai</i>	(2015, 232)	Lithaĩs
(2015, 176)	(2015, 149)		(2015, 284)

This does not mean that these reconstructions are false. Unbalanced treatments of parallel sequences are by no means impossible: mutatis mutandis, one might compare the merger of *o and $*\ddot{a} > a$ with the distinction of $*\bar{o} > uo$ and $*\bar{a} > o$ in Lithuanian. An additional problem is raised by the dative singular ending of the personal pronouns, where we have in Slavic exactly the reverse of what we expect: $*teb^hei > Old Church$ Slavic tebě (cf. Old Prussian tebbei), but *toi > Old Church Slavic ti (cf. Old Lithuanian ti). Olander (2015, 154) explains tebě by the analogy of the instrumental tobojo, which looked like a feminine \bar{a} -stem ending, giving rise to a similar ending for the dative as well *tebāi > Old Church Slavic tebě. I wonder whether such a solution can be deemed likely. As to *toi, Olander (2015, 157) notes that only Greek τοι supposes *toi, whereas Slavic ti points to *tei and the forms of the remaining languages are ambiguous (cf. Vedic Sanskrit te, Old Avestan tōi, te, Old Latin $t\bar{\iota}(s)$): according to Olander, the problem thus does not lie in the Slavic treatment. but in the PIE prototype itself.

Chapter 4 (p. 296–365) is devoted to verbal inflection. Whereas there is considerable convergence between the

Baltic and Slavic nominal inflections, the verbal system of the two branches is so different that it is often difficult to find points of contact between them: more weight is given in Slavic to aspectual parameters, whereas the Baltic verb is more tense-oriented and closer to what we find in Germanic, for example. Even shared material is sometimes difficult to identify: there is no sigmatic agrist of the Slavic type in Baltic, and, apart from a few relics, no sigmatic future of the Baltic type in Slavic. It comes as no surprise that Stang, in his classical monograph on the Slavic and Baltic verbal systems (Das slavische und baltische Verbum, Oslo, 1942), juxtaposed the two domains without merging them into a unified description. As a consequence, the reconstruction of Proto-Balto-Slavic (PBS) often lacks the support of Baltic counterparts. Olander's chapter 4 follows the same pattern as chapter 3: it consists of data sheets, organised in exactly the same way, with PS, PBS and PIE reconstructions, followed by the historical material, a list of commented references, and an extensive discussion on each of the three chronological stages. The organisation goes from the first singular to the third plural and distinguishes the indicative present, the

indicative preterite and the imperative. The advantage of this presentation is clear: the same endings are used for these different tenses and moods. Olander's analyses may have a bearing on Baltic as well. In the following, I will only discuss a few points.

In the discussion about the first singular *-mi (p. 302-305), Olander writes that 'PIE *-mi was preserved in Proto-Balto-Slavic' (p. 304) and is still reflected in Old Church Slavic -ть. -тъ. In Baltic, he says, the inherited ending was preserved in Old Lithuanian -mi, the 'long' form -mie- (used when followed by an enclitic) being of secondary origin (proportional analogy of the type vedù / vedúos(i), hence dúomi / X, where $X = d\acute{u}omies(i)$). This is a possible scenario, even if it has the disadvantage of separating the Lithuanian ending from the Old Prussian one (OPr. -mai in asmai 'I am'), which Olander derives from a contamination of -mi with the perfect ending $*h_2a+i$, like Old Church Slavic vědě. It is often assumed that Lith. -mi (< -mie) and OPr. -mai go back to the same source, but one must recognise that the acute tone of -mie does not fit well with the reconstruction of the perfect ending as *- h_2a+i (*- h_2e+i). The thematic ending *-oH, directly reflected in Lithuanian (vedù 'I lead' < *-úo# < PIE *-oH), was reshaped in Slavic by the addition of -mi, as in Indo-Iranian (Vedic Sanskrit bhárā-mi 'I carry'); the evolution of *-ōmi to Slavic *-ōm (> Old Church Slavic -q) is ascribed

by Olander to 'certain speech styles' (p. 309), which does not make really sense. It is perhaps better to admit that syncope of final -i was dependent on the volume of the word: preserved with monosyllabic stems (Old Church Slavic esmb 'I am', damb 'I will give'), it was dropped in polysyllabic stems (*vedōmi 'I lead' > *vedōm > Old Church Slavic vedo). It is striking that athematic verbs are all monosyllabic stems in Balto-Slavic. Note that I cannot accept the existence of 'a pre-Proto-Indo-European development of *-omi to PIE *-oh' (p. 308).

The second singular (p. 312-323) is controversial. External evidence points to *-si (thematic *-e-si), but Slavic has -i (Old Church Slavic jesi 'you are'), which reflects a long vowel or a diphthong (*- \bar{i} or *-ĕi), and Lithuanian opposes esì 'you are' and Old Lith. esíe-gu (+ enclitic), which points to an acute diphthong. We have the same difficulty in the thematic type, with the additional problem that Slavic has -esi (with $-i < *-\bar{\iota}$ or *- $\bar{e}i$), whereas Lithuanian has -i (< *-ie $< *-\check{e}\check{i}$). Greek -εις is a classical problem. Olander (2015, 315) considers that Old Lithuanian éssi 'you are' reflects the inherited ending *-sī with a short vowel. The thematic ending *-ei (> Baltic *-ie) is traced back to the addition of -i (from *esi 'you are' resegmented as *es-i) to the thematic vowel; the acute tone is due to the analogy of the first singular. All this is possible. As to Slavic, Olander frankly recognises that he is unable to

find a plausible solution: I have not been able to find a plausible source of $*-\bar{i}$ or $*-\bar{e}\bar{i}$, nor a motivation for the partial substitution in Slavic of inherited *-i with a long vowel or diphthong' (p. 317). I find it a very open and honest attitude.

For the third person singular (p. 324-338), the problem is not on the Slavic side (Old Church Slavic jesto 'he is' \leq PIE * h_1 es-ti, vedet ν 'he leads' \leq PIE * ued^h-e-ti), but partly on the Baltic side: whereas Old Lith. est. OPr. ast can be traced back to PIE $*h_1es-ti$, the thematic zero ending (Lith. vēda 'he leads / they lead') is problematic. Olander (2015, 327) adheres to the traditional view that Lith, veda 'reflects the thematic thirdperson singular secondary ending *-et, with regular loss of *-t and replacement of the thematic vowel with *-a by analogy with the endings of the first dual, the first plural, and, possibly, the third plural' (p. 327). I find it more likely

to avoid reconstructing a distinction between primary and secondary endings well into the immediate prehistory of the Baltic languages, moreover without any motivation for its extension to the present tense; I would prefer a solution that would not have such high cost.

To sum up, this is a very nice book which I have read with great interest. Not only does it reflect the current state of research in Slavic inflectional morphology, but it also provides new insights and interesting thoughts about issues that are also relevant for Baltic linguistics.

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