Book Reviews / Рецензии

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Jay H. Jasanoff.
Prehistory of Balto-Slavic Accent.

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Prof. Jasanoff's new book constitutes a landmark in accentological thought. It contains the first analysis of Balto-Slavic accentual mobility, completely outside the realm of and in opposition to the "Moscow Accentological School," that, unlike other comparable theories, pays special attention to the verb, not limiting itself to the noun. Given the unusual elaborateness and complexity of the theory offered in the work under review, it will probably be of use to reproduce here, briefly but thoroughly (with extensive citations), some of the ideas expressed in it. In order to avoid confusion, I will break this review into two parts, keeping the synopsis apart from my own comments, which are referred to in the text by numbers in square brackets.

The question the book aims to answer is formulated as follows: "how did the synchronic system(s) we see in the attested B[alto-]Sl[avic] languages come about?" (p. XI). According to the author, "the historical problems that engage the attention of professional BSl. accentologists [...] mostly center on relatively late phenomena in the individual languages, or in Baltic or Slavic alone" and that is why "the historically aware non-specialist who wants to learn in detail how Balto-Slavic differs from the rest of the IE family, and how it got that way, has few places to turn." This lamentable state of affairs is seen as a consequence of the fact that "the hopelessly inadequate Neogrammarian approach to BSl. accentuation was swept away over a half century ago by Stang," whereas the "major discoveries of the Moscow Accentological School [...] have yet to be incorporated into an acceptable historical synthesis." As to Kortlandt's "detailed IE-based narrative," it is based on assumptions "that most Indo-Europeanists find untenable," while the "best recent book on the prehistory of BSl. accentuation," by Olander, albeit "stimulating and immensely useful" is "not in the end convincing." It is precisely this "gap" that the book sets out to fill (p. XI). More specifically, the main point at issue is, as expected, the origin of Balto-Slavic paradigmatic mobility. Before proceeding to the main exposition, Jasanoff sets up a theoretical framework to lean on in the further discussion. I will now outline some of these preliminary points.

Vedic and Greek with "their stable, columnarly accented paradigms" differ drastically from the Balto-Slavic languages with "a restlessly mobile accent unlike anything elsewhere in the IE family." The "marked but not in principle unthinkable" idea of Baltic and Slavic accent being old (first expressed by Meillet) was "never attractive," moreover, it "has lost such appeal as it may once have had." In fact, by now, there are no "obstacles to an explanation of BSl. accentuation on the basis of the traditional Vedic and Greek-like system. Elaborating a theory along these lines will be the goal of the present work" (p. 2). The informed reader will note that this approach matches the one taken by Kortlandt and Olander and is quite unlike that of the "Moscow Accentological School" (Dybo, Nikolaev et al. and now also e.g. Kapović).

The latter approach is unhesitatingly dismissed as containing a "fundamental error" (the Tonological Hypothesis, see below) "that eventually undercut some of the group's most impressive achievements" (p. 111, fn. 14). According to the author, the "modern-day survival" of the theory tracing BSl. mobility back to PIE is in part explained by what is known as "Teeter's Law" ("specialists in one or another branch of a language family tend to overrate the archaism of that branch's most characteristic features"). Yet he dedicates a paragraph to the actual disproof of this theory: "it is scarcely possible, taking a larger view of the IE family, to accept the idea that the ubiquitous mobile *i*- and *u*-stems of Balto-Slavic could all have independently lost their mobility in Vedic, Greek, and Hittite (!), while root nouns and a limited number of obviously archaic suffixed consonant stems agreed in remaining mobile in these languages. It is even more difficult to believe that thematic (*o*-) stems, or the *ā*-stems [...] were mobile in the parent language," since their accent curve in Balto-Slavic does not match that of the "real" (i.e. consonant) stems in PIE (p. 112). **[1]**

The accentual system of PIE is presented as a fairly well understood entity, easily deducible from Vedic and Greek: among other things, "PIE had a mobile word accent," "made no distinction between contrasting accent types" (so no phonological tones), distin-

guished long and short vowels and could have but one accent per word "the position of which was regulated by a combination of lexical and morphological factors." Zero grade was formed by the loss of a "deaccented" vowel. As to mobility, athematic nominal stems displayed several accentual patterns intertwined with PIE ablaut ("acrostatic A", "acrostatic B", "proterokinetic", "hysterokinetic", "amphikinetic", p. 5). This system "ceased to be fully operational by the end of the IE period" having given up most vowel alternations in the root (cf. a stressed zero-grade syllable in **septḿ̥* '7', p. 5, fn. 13). Some athematic verbs were mobile, including the copula.

An outline of the main attested accentual systems is given. For instance, in Vedic mobility is confined to "uncompounded root-nouns" (acc. *pā́dam*, gen. *padáḥ* 'foot') and "original acrostatic stems" (*yákṛt*, gen. *yaknáḥ* 'liver', p. 9), in Greek the situation is "much the same" (p. 14), Hittite has some mobility "occasionally observable in consonant stems" (p. 16), and Germanic may in fact display traces of Balto-Slavic-like mobility in all nominal stems, but this is purely putative (p. 20).

In Greek and Vedic, thematic stems are always immobile, thus displaying no paradigmatic mobility, although "there is clear evidence of *derivational* mobility," cf. Gk. *tómos* 'a slice' (an action noun) vs. *tomós* 'sharp, cutting' (possessive adjective or agent noun). As to the accentuation of suffixal derivatives in these languages, Jasanoff remarks that it is "not a realistic goal—and certainly not a necessary or desirable one in the present context—to look for a complete, suffix-by-suffix account of the accentuation of secondary (and tertiary) derivatives in the protolanguage" (p. 22). In Vedic, for instance, some suffixes appear to be "dominant" (always stressed) and some "recessive" (stressed like the derivational base), and others "observe no consistent rules at all" (p. 23). Summing up his take on PIE accent, Jasanoff terms his book's theoretical orientation "generative Neogrammarianism," according to which phonological ("Neogrammarian") rules produce outcomes that are constantly adjusted due to speakers' "re- and misanalysis of the relations among surface forms" (p. 29). Thus, analogy is a fully systematic factor in the phonological evolution of language.

A separate chapter is dedicated to a synchronic description of the Balto-Slavic situation. In the discussion on the various phonological tones, their distribution in accentual paradigms (AP), de Saussure's Law in Baltic, Dybo's Law in Slavic, etc., it is noted that in Proto-Slavic (but not in Lithuanian) a form "could also have no underlyingly marked accent, in which case it received a surface falling accent on its first syllable (**gôlvy*, **vèdǫ*, etc.)"; such forms "'donate' their accent to an adjacent enclitic or proclitic" (p. 45). The (absence of an) accent in such enclinomena (i.e. some forms in the mobile AP *c*) is marked in the book with the new symbol /◡̀/: **vŏ̀dǫ*, **zĭ̀mǫ*,**gŏ̀lvǫ*, and is referred to as "left-marginal accent," as opposed to "lexical accent" in non-enclinomena (the rest of AP *c* forms and all of AP *a* and *b*, marked with a vertical accent mark: PSl. "Pre-Dybo's Law" **žę̀nǫ* (p. 55). This will be a crucial distinction for the author's theory (yet to be presented). Some attention is given to Latvian as well, where a phenomenon analogous to Slavic "left-marginal accent" is observed only on acute syllables (whereas in Slavic acuteness in such cases is eliminated by Meillet's Law). It surfaces as Latvian "broken tone" and is taken by Jasanoff to be the outcome of a late accent retraction from a non-initial syllable (p. 65). Old Prussian, although not playing "a major role in accentological discussions," nevertheless displays some paradigmatic mobility in verbs (p. 67). An important point concerning Balto-Slavic phonology is that acuteness is a purely Balto-Slavic feature associated with "a *stød*-like interruption of normal voicing" (a view promoted by Kortlandt, p. 71). The entire Balto-Slavic accentual system is characterized as "a far cry from the late PIE system, where there was no acuteness feature, no mobility in *ā*- and *o*-stems (and little or none in *i*- and *u*-stems), and no mobility-linked distinction between separate lexical and left-marginal accent types" (p. 73).

The next important preliminary issue is the origin of the acute intonation in Balto-Slavic. For Jasanoff, acuteness appears on (1) "long vowels by post-IE tautosyllabic laryngeal lengthening"; (2) "inherent long vowels [...]: a) apophonic long vowels, as in Narten ablaut [...] and *vr̥ddhi* derivation [...], b) long vowels by word-final compensatory lengthening before a lost **-s* or **-H* (Szemerenyi's Law) [...], c) long vowels by inner-IE contraction at morpheme boundaries (e.g., *o*-stem nom. pl. **-ōs* < **-o-es*)"; (3) lengthening by Winter's Law. On the other hand, "long vowels by post-IE contraction across a laryngeal hiatus" yield extra-long segments and hence circumflex (p. 74). Contrary to the mainstream tradition, Jasanoff marks acuteness with an underscore (e.g. BSl. acc.sg. **gā̲lvān*). The derivation of the acute from apophonic long vowels is in sharp contrast with the theory, ardently defended by Kortlandt, that acuteness is yielded solely by vowel + laryngeal combinations and Winter's Law. It is further observed that acute (long, i.e. bimoraic) vs. circumflex (extra-long, i.e. trimoraic) in final syllables in Balto-Slavic is paralleled in Germanic, e.g. PIE *ā*-stem nom.sg. **-eh₂* > BSl. **-ā̲* (in Jasanoff's notation) ~

Go. *-a* < **-ō*, but PIE *ā*-stem nom.pl. **-eh₂es* > BSl. **-ãs* ~ Go. *-os* < **-õz* (p. 77).

Also important is Hirt's Law, whose "effect was to draw a non-initial accent onto an immediately preceding syllable containing a monophthong (including a syllabic liquid or nasal) followed by a tautosyllabic laryngeal": **...CVHC₀V́ ...* ⇒ **...CV́HC₀V ...* (p. 106), with examples such as PIE **gʷr̥iH-u̯éh₂* > BSl. **gr̥̄vā* > PSl. **grívа* 'mane' (cf. Ved. *grīvā́* 'neck') and PIE **dʰuH-mó-* > BSl. **dū́ma-* > Lith. *dū́mai* 'smoke', PSl. **dymъ* (cf. Ved. *dhūmá-*). In some cases, though, the effect of Hirt's Law was leveled out, so **gʷiHu̯ós* > **gi̯Hu̯os* → *giHu̯ós* 'alive'. This happened because Hirt's Law had regularly produced an impermissible combination of forms, e.g. nom.sg. **gi̯Hu̯os* (with "lexical accent") but acc.sg. *gìHu̯on* (with "left-marginal" accent). It was this difference alone that caused **gi̯Hu̯os* to revert back to **giHu̯ós* to make the paradigm fit the normal mobile pattern. In other cases this reversion did not take place. It was a matter of unpredictable lexical choice (p. 107).

Next, two existing "theories of mobility" are reviewed and assessed. The first one belongs to de Saussure who assigned "a pivotal role to what we would now call hysterokinetic consonant stems" and, by "positing a retraction from medial syllable," derived e.g. Lith. acc.sg. *dùkterį* from a protoform **duktẽrin*, thus explaining bilateral mobility, which would then be "analogically transferred to oxytone vocalic stems" (p. 108). "This theory amounts to three investigable claims: (1) consonant-stem forms like Lith. *dùkterį* arose by retraction from **duktė́rin*; and (2) mobile vowel stems correspond to historically oxytone stems which (3) joined the type of *duktẽ*, *dùkterį* analogically. In the long century since Saussure wrote, (2) has effectively been settled in Saussure's favor, while (1) and especially (3) remain live issues" (p. 109). De Saussure's theory was further elaborated by Pedersen, who attempted to make it more regular, converting it to a "morphological sound law" feeding the massive analogy that brought about mobility in the other stem types. Then "Meillet and Stang de-emphasized both sound change and analogy [...] and saw mobility, at least in *i-*, *u-* and *ā*-stems, as a retention from PIE" (p. 110). Oxytonicity was the source of mobility for Illič-Svityč, as well as for early Dybo and his colleagues (who then "developed a very particular doctrine on mobility, identifying the BSl. descriptive contrast between 'dominant' and 'recessive' morphemes with a hypothetical tonal contrast that they then projected back to PIE," p. 111, fn. 14, a "fundamental error" in Jasanoff's view, see above). Be that as it may, the link between oxytonicity and mobility is not an issue for Jasanoff: "[i]n the highly contentious discourse surrounding the origin of mobility, the etymological identity of mobility and oxytonicity in nouns became a sort of 'fundamental theorem' of BSl. mobility. We will **take it for granted** in what follows" (p. 111, emphasis added).

The other theory is Olander's, whose book "marks a milestone in the discussion of the problem." He "takes the creation of BSl. mobility to have been a process by which some forms in oxytone paradigms, but not others, lost their inherited accent and literally became accentless" and claims that "a high pitch (= accent) that stood on the last mora of a phonological word was deleted" (p. 113). To achieve this, Olander lays down some costly stipulations which still fail to save the theory from some "embarrassing failures of fit." Besides, "Olander's proposals have nothing convincing to say about the neglected 'other' theater of accentual activity in Balto-Slavic—the verb" (p. 115).

Now the actual presentation of Jasanoff's own theory of Balto-Slavic mobility begins. As he has pointed out earlier, the existing theories are weak in what concerns verbal paradigmatic mobility. It has been lost in finite forms in Lithuanian, except a trace in the nom.pl.masc. form of the present participle, cf. *vedą̃* 'leading', which not only preserves the accent of, but actually continues the lost 3 pl. **vedantì* (p. 127, fn. 45). Another indirect trace of mobilty in Lithuanian is the retraction (in some verbs) "from the left-marginally accented 1 sg. onto a particle (*iš-*, *nèvedu*, *nèveda*, etc.). "[T]he traditional lack of attention to verbs in the accentological literature" is understandable, since "[t]he data are less abundant and less transparent than in nouns," moreover, "East Baltic has no mobile finite paradigm at all, and the Slavic facts were a hopeless jumble until the work of Stang" (p. 116). It is now apparent that "the locus of mobility in verbs in BSl. was precisely in stems like **vede/o-* (< **u̯édʰ-e/o-*), i.e., full-grade simple thematic presents with stable accent on the root, the so-called PIE '**bʰéreti*-type'. The final accent in oxytone verbal forms like PSl. **vedetь* / Proto-BSl. **vedetì*, unlike the final accent in mobile nominal forms like **galvą̀* or **sūnùs*, could not have been original. The genesis of the overall phenomenon of mobility, therefore, was not simply a matter of retracting or deleting the accent in some ending-accented forms and leaving it intact in others; there must also have been some BSl. process that displaced the inherited root accent rightwards" (p. 116).

This is the gist of Jasanoff's theory. He elaborates it as follows: "[f]rom a purely mechanical point of view, a theory of mobility will have to contain two parts, a 'retraction module' and an 'advancement module.' In nouns, the chief function of the retraction module

will be to replace, in some forms only, a lexical accent at or near the right edge of a word by a left-marginal accent (e.g., nom. pl. **ǥolHu̯éh₂es* > **ǥa̱lvās*). In verbs, the retraction module will replace an inherited initial lexical accent—again, in some forms only—by a left-marginal accent on a preceding particle (e.g., 1 sg. **ne u̯édʰoh₂* > **nè̯ vedō*)" (p. 117). Thus, two phonological ("Neogrammarian") rules are formulated:

1. "Saussure-Pedersen's Law" ("SPL"): "The PIE/pre-BSl. accent was retracted one syllable to the left from a word-internal short open syllable ($\#x_1 \dots x_n - \acute{x}_{n+1} \dots > \#x_1 \dots \acute{x}_n - x_{n+1} \dots$). In the special case where the syllable that received the accent was word-initial it received a contrastive left-marginal contour ($\#x_1 - \acute{x}_2 \dots > \#\grave{x}_1 - x_2 \dots$) " (p. 122).
2. "Proto-Vasiľev-Dolobko's Law" ("Proto-VDL") "In phonological words of four or more syllables headed by a left-marginal accent, the final syllable acquired a lexical accent and the left-marginal accent was lost ($\#\grave{x}_1 - x_2 - x_3 \dots x_n\# > \#x_1 - x_2 - x_3 \dots \acute{x}_n\#$)" (p. 128).

As to the chronology, "[b]oth the retraction and advancement modules had to apply very early, since full mobility was already in place at the time of Hirt's Law, which was earlier than the loss of laryngeals and the rise of the acute : non-acute contrast" (p. 118).

The scope of these rules is threefold: non-derived *-o*, *-ā*, *-i*, and *-u* stems, derived nominal stems, and verbs (as well as, additionally, some pronouns). As follows from the formulations, both rules heavily depend on syllable-count. The first one applies only in forms with three or more syllables, and the second, with four or more. Where the above ("Neogrammarian") sound laws fail to apply, analogical explanations (apparently, "generative") are recurred to, based on parallel forms with more (or fewer) syllables. The operation of the rules is exemplified on a number of case forms of various stem types (Jasanoff gives *-ā*, *-i*, and *-u* stems together, while *-o* stems, for which the example PIE **u̯ornóːs* 'crow' is used, are treated separately later) where the input is the end-stressed forms (more precisely, forms stressed on the last syllable of the stem). He begins with nom.sg. forms (">" means "became by sound change" and "→" means "became by non-phonological process", p. 133):

PIE		post-SPL		Proto-BSl.		Lith.			Proto-Sl.
**ǥolHu̯éh₂*	>	**ǥolHu̯ȁH*	>	**ǥa̱lvā̱*	>	*galvà*	||	>	**golvȁ*
**mn̥tís*	>	**mn̥tȉs*	>	**mintȉs*	>	*mintìs*	||	→	**kȍstъ*
**suHnús*	>	**suHnȕs*	>	**sū̱nȕs*	>	*sūnùs*	||	→	**sy̑nъ*

Here neither the "SPL" nor the "Proro-VLD" rules aply, since there are no internal-word accents here. Everything works out fine, despite the apparently divergent Slavic forms, but "[t]he actual forms **kȍstъ*, **sy̑nъ* are the segmentally identical historical accusatives—a substitution also found in the *o*-stems" (p. 133). Let's now turn to gen.sg.:

PIE		post-SPL		Proto-BSl.		Lith.			Proto-Sl.	
**ǥolHu̯éh₂es*	>	**ǥŏlHu̯aHas*	→	**ǥa̱lvā̱s*	>	*galvõs*	||	>	**golvy̨*	
**mn̥téis*	>	**mn̥tȅis*	>	**mintȅis*	>	*mintiẽs*	||	>	**kostȉ*	
**suHnéus*	>	**suHnȅus*	>	**sū̱nȅus*	>	*sūnaũs*	||	>	**synȕ*	(?)

Here the *ā*-stem gen.sg. form poses a problem: "PIE **-éh₂es* would have been subject to SPL, yielding a left-marginal accent in Balto-Slavic" (p. 133). In any case, "the normal *ā*-stem forms, both in Lithuanian and Slavic, have final accent, presumably under the influence of the *i*-, *u*-, and consonant stems (cf. Lith. *dukteř̃s* < **-rès*)" [...]. The acc.sg. forms are tougher:

PIE		post-SPL		Proto-BSl.		Lith.			Proto-Sl.
**ǥolHu̯ā́m*[1]	>	**ǥolHu̯ȁn*	→	**ǥa̱lvā̱n*	→	*gálvą*[2]	||	>	**gôlvǫ*
**mn̥tím*	>	**mn̥tȉn*	→	**mĭntin*	>	*miñtį*	||	>	**kȍstъ*
**suHnúm*	>	**suHnȕn*	→	**sū̱̆nun*	>	*sū́nų*	||	>	**sy̑nъ*

[1] " < **-éh₂m* by Stang's Law."

[2] "With analogical non-acute *-ą*."

"Here for the first time, none of the three forms is correctly generated by SPL, and the *o*-stem form (Lith. *vañnạ*, PSl. **vôrnъ* < **vărnan*) is "wrong" as well" (p. 135). To remedy this problem a third rule is posited:

3. "Final **-V̌N(C)* retraction": **...C0VC0V̌N(C)# ⇒ ⁎...C0V̌C0V̌N(C)#* — "[t]he retraction of the accent from final **-V̌N* sequences was phonologically regular" (but notice the new "⇒" symbol).

"The effect of final **-V̌N(C)* retraction would have been to take quasi-PIE **mn̥tím*, **suHnúm*, and **u̯ornóm* to **mĭ̆ntin*, **sŭ̄nun*, and **vărnan*, respectively. A seemingly ad hoc rule of this type would ordinarily be a costly expedient, especially since the facts to be accounted for are deeply embedded morphologically and thus potentially explainable by analogy. In the present case, however, a phonological retraction from final **-V̌N(C)* is independently motivated by the left-marginal accent of the acc. pl. [...] and the nom.-acc. sg. of neuter o-stems" (p. 136). So this third rule is applicable to some more cases.

Let us skip the rest of the shorter case forms and proceed directly to the longer ones, e.g. dat.pl.; here the "Proto-VDL" comes into play, hence, along with the above examples, a longer (derived) stem is given (**golHu̯inós*, as in Rus. *golovnój* 'of the head'), and, instead of a *u*-stem, an *o*-stem (**u̯ornós* 'crow')[3]:

PIE		post-SPL+anal.		post-Proto-VDL/anal.		Proto-BSl.		Lith.		Proto-Sl.
**golHu̯éh₂mos*	→	**gŏlHu̯aHmos*	→	**golHu̯aHmós*	>	**galvā́mas*	>	*-óm(u)s*	|| >	**-ā́mъ*
**mn̥tímos*	>	**mĭ̆ntimos*	→	**mn̥timós*	>	**mintimà́s*	→	*-ìm(u)s*	|| >	**-ъmъ̀*
**u̯ornómos*	>	**u̯ŏrnomos*	→	**u̯ornamós*	>	**varnamà́s*	→	*-àm(u)s*	|| >	**-omъ̀*
**golHu̯inómos*	→	**gŏlHu̯inomos*	>	**golHu̯inamós*	>	**-amà́s*	→	*-àm(u)s*	|| >	**-omъ̀*

The analogies in this table are numerous (e.g. **golHu̯éh₂mos* should not undergo "SPL" since its stressed syllable is closed). In fact, none of the three-syllable forms obtain their stress phonologically (cf. PSl. **vornomъ̀* instead of the expected ***vôrnomъ*). So they must be analogical to the longer forms (such as Slav. **golvъnomъ̀*). This is the only mechanism whereby one obtains the end-stressed longer case forms in non-derived nominals: all of them must have been influenced by longer derived formations (p. 150). **[2]**

We will now stop taking up Jasanoff's derivation of nominal case forms, but one final remark is in order. One will have noticed that the table entry **golHu̯inómos → *gŏlHu̯inomos* is analogical, not phonological. This outcome is predicted by Jasanoff: it is an analogy to the non-derived items, so instead of **golHu̯ìnomos* predicted by "SPL" (shift one syllable left from a word-internal syllable) we get the "left-marginal accent" like in e.g. *u̯ŏrnomos* (a three-syllable form) (p. 152). This analogical form influences the non-derived items (as apparent from the table), so that the very form thanks to which another form has emerged is now itself analogically changed by it. **[3]**

This brings us to Jasanoff's treatment of nominal suffixal derivatives. Given the fact that non-derived nouns were in Proto-BSl. either stem-stressed or end-stressed, their derivatives somehow inherited this accentual property (this accentual derivation mechanism was an analogical BSl. innovation, p. 177), hence all derivatives of end-stressed nouns must have been end-stressed. Derived nouns would mostly have contained at least four syllables in some of their case forms, so that, for example, from the nom.sg. forms **golHu̯inós* (adjective), derived from **golHu̯éh₂* 'head', and **suHnukós* (diminutive), from **suHnús* 'son', we would get the following longer forms, subject to "SPL", e.g. gen.sg. **golHu̯ìnoHat* < **-inóh₂ed* and **suHnùkoHat* < **-ukóh₂ed*. However, in reality we have PSl. **gôlvъnъ*, fem. **golvъnà* vs. **synъkъ̀*, gen. **synъkà*, evidently behaving differently accentually (AP c vs. AP b). Jasanoff explains this difference on the ground of an arbitrary choice by the speakers: "SPL" had produced an impermissible pattern of "internal mobility" that had to be resolved, so speakers "took a different tack" in **golHu̯ìnoHat* as opposed to **suHnùkoHat*: the original **-inós* was perceived as producing mobile derivatives (by borrowing the "left-marginal" accent from non-derived items), while **-ukós* was arbitrarily decided upon by the speakers as an end-stressed suffix (by the way, Lith. pl.nom. *sunùkai* is again analogical in lieu of **sūnukà́i*). This is how some suffixes became "dominant" and some "recessive" (p. 123). **[4]**

We now come to the verb, the centerpiece of Jasanoff's theory. As with nouns, the accentuation of the PIE verb is given as known a priori. Thematic "**bʰéreti*-type" verbs were always root-stressed. Such forms became mobile in Balto-Slavic, and here is how: first, mobility emerged only "in an initially-accented verbal form with a preverb or preverbal particle, e.g., 1 sg. **dằ-vedō* < **do-u̯ìdʰoh₂*, 3 sg. **nè vezéti* < **ne u̯ìǵʰeti*, 3 sg. impf. **pằ-dege* < **po-dʰìgʷʰet*" ("conjunct forms", p. 185) and then spread analogically to "absolute" forms ousting their regular immobile accent. The derivation is as follows (inferred from pp. 129, 185):

[3] Jasanoff gives these forms in two tables; we will skip his "post-SPL" column (in favor of his "post-SPL + analogy") and "Proto-VDL" (in favor or "Proto-VDL/anal.").

	PIE		PSl. “conjunct”		“absolute”
1.sg.	*(*ne*) *u̯éd*^{h}*oH*	>	**nè vedǫ*	→	**vèdǫ*
2.sg.	*(*ne*) *u̯éd*^{h}*esei*	>	**ne vedeši*	→	**vedeši*
3.sg.	*(*ne*) *u̯éd*^{h}*eti*	>	**ne vedetъ*	→	**vedetъ*
1.pl.	*(*ne*) *u̯éd*^{h}*emos*	>	**ne vedemъ*	→	**vedemъ*
2.pl.	*(*ne*) *u̯éd*^{h}*ete*	>	**ne vedete*	→	**vedete*
3.pl.	*(*ne*) *u̯éd*^{h}*onti*	>	**ne vedǫtъ*	→	**vedǫtъ*

But some verbs with obstruent-final stems are immobile, e.g. **lězǫ*, *pádǫ* (AP a); the long acuted vowel in their roots precludes “SPL”, so immobility is predicted correctly, and the non-acuted immobiles *mogǫ́* and *jъdǫ́* are “not historically thematic” (p. 189). Presents of the “*tudáti*-type” were suffix-stressed in PIE, so the outcome of the combination of “SPL”, “Proto-VDL” and analogy does not yield the desired outcome (mobility). Thus, for example, 1 sg. *supṓ*, **gu̯rHṓ* remain end-stressed, and 3 pl. **supǫ́nti*, **gu̯rHǫ́nti* do not undergo “SPL” because their stressed syllable is closed. To explain mobilty in this type Jasanoff proposes “thematic barytonization”: “Prior to the operation of SPL and Proto-VDL, Pre-BSl. **gu̯rHé/ó-* was remade to **gu̯rHe/o-*” (p. 191) and then underwent all the expected changes just like the “**bʰéreti*-type”. On the other hand, nasal presents, such as **bʰundʰéti*, come out immobile in Balto-Slavic. This, too, is explained by “thematic barytonization”, so that **bʰundʰé/ó-* → **bʰúndʰe/o-*, the latter form not undergoing “SPL” since its stressed syllable is closed. Similar logic is applied to other types of verbs with obstruent-final roots.

A potential challenge for the theory is constituted by verbs with vowel- and sonorant-final roots, which can be either mobile or immobile. To these belong (1) thematic (**bʰéreti*-type) presents (cf. mobile PSl. **bèrǫ* ‘take’ vs. immobile **ženǫ́* ‘chase’), (2) *tudáti*-presents (cf. mobile **pȅ̀nǫ* ‘stretch’ vs. immobile **mъnǫ́* ‘trample’), (3) *n(C)e/o*-presents (cf. mobile *vînǫ* ‘twist’ vs. immobile **dűnǫ* ‘blow’), (4) *i̯e/o*-presents (cf. mobile **ȍ̀rjǫ* ‘plow’, **dâjǫ* ‘give’ vs. immobile **žъrjǫ́* ‘sacrifice’). However, Jasanoff says, the problem is only apparent, since most of these immobile verbs are not inherited from PIE, but are in fact recent Balto-Slavic creations. Some are secondarily thematized, e.g. **ženǫ́*, which corresponds to Ved. *hánti* and Hitt. *kuenzi*. So, “[w]hat is clear is that the stronger the comparative evidence for the thematic inflection of a given stem in PIE, the likelier it is to be mobile in Slavic” (p. 189); in some cases, mobility vs. immobility is unpredictable, but this is “hardly surprising” (p. 194) because cases “where Slavic fails to show mobility are unoriginal or secondary,” although the analysis of some such cases “must remain a task for the future” (p. 197).

Another challenge is Slavic verbs in **-i-*, inf. *-iti*, which can be mobile or immobile. To boot, the immobile ones have two kinds of AP *b*. Jasanoff’s sound laws and analogies predict immobility, e.g. **ne prokéi̯eti* > **ne pròsitъ* (AP b_1, p. 209), where the “conjunct” form was generalized (as in thematic verbs). As to AP b_2, the explanation given by Dybo et al. (different *-i-* morphemes had different valencies, and hence tones) “is no explanation at all” (p. 211). Jasanoff’s explanation is that AP b_2 analogically spread from denominatives formed from oxytone nouns, such as AP *b *selȍ*. The accent **seli̯e/o-* > PSl. **selitъ* ‘settles’ (AP b_2) is apparently analogical, since in other cases a “barytonization” is expected (like in **gʰénHi̯e/o-* > *ženîti*, AP b_1, p. 216). To Jasanoff, AP b_2 is, in fact, the same as AP *c*, which, in turn, is the result of the analogical generalization of the “absolute form” (and not the “conjunct” one, as expected). Sometimes, though, the generalization of either the “absolute” or the “conjunct” form was incomplete, which explains *poluotmetnost’* (cf. in some Old Štokavian dialects of BCS *ložî*, but *polȍžī*). Similar explanations are proffered for some other parts of the verbal system. **[5]**

After this lengthy summary, which in fact only covers a small subset of the numerous ideas laid out in the book, I will now comment on some of them. First, a few general remarks on the genre of Prof. Jasanoff’s work. It does not aim to reconstruct any unknown linguistic entity. The proto-language in question (PIE) is perceived in this work as already reconstructed, hence known. The task set out for the study would be properly called “derivation”, viz. of the more complex attested Lithuanian and the “quasi-attested” Proto-Slavic accentual systems from the simpler one postulated for PIE.

[1] Under this approach, Balto-Slavic accentuation, which is deemed a recent complication of the older system, must be fully deducible from it. This view is somewhat of an axiom for most Indo-Europeanists, but it seems to be based on the idea that Balto-Slavic mobility cannot be inherited because it is utterly different from “PIE mobility,” which is taken to be directly reflected in Vedic and Greek consonant noun stems. Jasanoff mentions “gross differences” and “endless disagreements of detail” between the two types of mobility, including: (1) “the exclusive ‘bilaterality’ of BSl. mobility,” (2) the fact that “[i]n PIE declension the nom. sg. and acc. sg. are strong cases [i.e.

root-stressed], opposed to the gen. sg., dat. sg., and instr. sg. (*inter alia*), which are weak [i.e. ending-stressed]," whereas "in Balto-Slavic, the nom. sg. and acc. sg. of non-neuters never agree except secondarily (cf. Lith. *galvà*, *gálvą*; *sunùs*, *sū́nų*; *duktẽ*, *dùkterį*; etc.), and the gen. sg. and dat. sg. disagree everywhere except in *o*-stems (cf. *galvõs*, *gálvai*; *sunaũs*, *sū́nui*; OLith. *dukterès*, *dùkteri*)" (p. 112). Indeed, these differences become apparent if one compares the accentual curve of, say, Ved. *pitā́* 'father' with that of Lith. *galvà* 'head':

		Lith.		Vedic
Sg.	nom.	*galvà*	=	*pitā́*
	gen.(-abl.)	*galvõs*	=	*pitúḥ*
	dat.	*gálvai*	≠	*pitré*
	acc.	*gálvą*	≠	*pitáram*
	instr.	*gálva*	≠	*pitrā́*
	loc.	*galvái*[*p*]	?	*pitári*
Pl.	nom.	*gálvos*	≠	*pitáraḥ*
	gen.	*galvų̃*	≈	*pitr̥̄ṇā́m*
	dat.(-abl.)	*galvóms*	≠	*pitŕ̥bhyas*
	acc.	*gálvas*	≠	*pitŕ̥ṇ*
	instr.	*galvomìs*	≠	*pitŕ̥bhis*
	loc.	*galvosù*	≠	*pitŕ̥ṣu*
Du.	nom.-acc.	*gálvi*	≠	*pitárā*
	gen.-loc.			*pit(a)rós*
	dat.-abl.-instr.	*galvóm*	≠	*pitŕ̥bhyām*

It is clear (1) that the Vedic curve is not "bilateral," but as to (2), the "endless disagreements" are a little less obvious: for example, Ved. acc.sg. *pitáram* superficially seems different from Lith. *gálvą*, but the accentual status of the ending is clearly the same (it is unstressed). Moreover, the alleged contrast in nom.sg. is fictitious: in *galvà* the last syllable of the stem (**-ḗh₂*) bears the stress, exactly as in *pitā́* (**pHtḗr* maybe < **pHtḗr-s*). A more conspicuous difference in endings' accentual status is dat.sg. (stressed ending in Ved. *pitré* vs. unstressed in Lith. *gálvai*). Indeed, there is no denying that the curves do look different. But is this sufficient grounds to deem them completely unrelated? Note that the very comparison in question is flawed, since the confronted stems differ in number of syllables. If we compare one-syllable consonant stems, such as Ved. *pā́d* 'foot', Gk. πούς 'id.' to Lith. *šuõ* 'dog' (~ Gk. κύων 'id.') and then again to Lith. *galvà*, we will see that their accentual curves are almost identical (at least in the forms with etymologically cognate endings):

		(O) Lith.		Lith.		Vedic	Greek
Sg.	nom.	*šuõ*	=	*galvà*	=	*pā́d*	πούς
	gen.(-abl.)	**šunès* (*šuñs*)	=	*galvõs*	=	*padás*	ποδός
	dat.	*šùni*	=	*gálvai*	≠	*padé*	ποδί
	acc.	*šùnį*	=	*gálvą*	=	*pā́dam*	πόδα
	instr.	*šuniù* < **šùn(į̂)ô*	=	*gálva*	≠	*padā́*	
	loc.	*šuny*[*jè*]	=	*galvái*[*p*]	≈	*padí*	[*ποδί]
Pl.	nom.	*šùnes*	=	*gálvos*	=	*pā́das*	πόδες
	gen.	*šunų̃*	=	*galvų̃*	=	*padā́m*	ποδῶν
	dat.(-abl.)	*šunìmus*	=	*galvóms*	≈	*padbhyás*	πο(σ)σί
	acc.	*šunìs* < **šùnîns*	=	*gálvas*	=	[*padás*] *púras*	πόδας
	instr.	*šunimìs*	=	*galvomìs*	≈	*padbhís*	
	loc.	**šunisù*	=	*galvosù*	≈	*patsú*	[*πο(σ)σί]
Du.	nom.-acc.	*šunì* < *šùnî*	=	*gálvi*	≈	*pā́dā*, *pā́dau*	πόδε
	gen.-loc.					*padós*	ποδοῖν
	dat.-abl.-instr.	*šunìm*	=	*galvóm*	≈	*padbhyā́m*	ποδοῖν

There are only two clear discrepancies between the Lithuanian and Vedic paradigms: dat.sg. and instr.sg., but what is important is that in Lithuanian consonant stems and *ā*-stems have exactly **the same accentual curve**. Given that, even in Jasanoff's framework, BSl. consonant stems and their accentual curves are traced back to PIE and are hence cognate with those in Vedic and Greek, it would be plain out illogical to deny the identity of the accentual curves of, say, Lith. *galvà* and Ved. *pā́d*.

Now let us compare the endings in **golHu̯eh₂* > *galvà* and a consonant stem, say, **pōds* 'foot':

		PIE		PIE
Sg.	nom.	**pōd-s*	=	**golHu̯eh₂-Ø* (?)
	gen.	**ped-es/os*	=	**golHu̯eh₂-es*
	dat.	**ped-ei*	=	**golHu̯eh₂-ei*
	acc.	**pod-m̥*	=	**golHu̯eh₂-m*
	instr.	**ped-eh₁*		?
	loc.	**ped-i*	=	**golHu̯eh₂-i*
Pl.	nom.	**pod-es*	=	**golHu̯eh₂-es*
	gen.	**ped-om* (Jasanoff: **-oHom*)	=	**golHu̯eh₂-oHom*
	dat.	**ped-bʰos* (→ **-mos*?)	=	**golHu̯eh₂-mos*
	acc.	**pod-n̥s*	=	**golHu̯eh₂-n̥s* (?)
	instr.	**ped-bʰi(s)* (→ **-mīs*?)	=	**golHu̯eh₂-mīs*
	loc.	**ped-su*	=	**golHu̯eh₂-su*
Du.	nom.-acc.	**ped-ih₁*	=	**golHu̯eh₂-ih₁*
	instr.	?		?

In the above table we just reproduced Jasanoff's reconstruction from his PIE "preforms" for *galvà* and used the standard PIE reconstructions from Kapović 2017: 71 for consonant stems[4]. In **golHu̯eh₂* the endings follow *-eh₂-* of the stem and contract with it. As can be seen, the endings themselves (perhaps, save nom.sg.) are exactly the same. This must mean that the accentual curves of consonant stems (be it in Vedic, Greek, or BSl) and *ā*-stems (in BSl) **do not warrant two different explanations**[5]. What Jasanoff does (following Kortlandt and Olander) is devise an extremely complex and highly irregular set of rules to explain a trivial identity of two paradigms.

That said, it should now be clearly seen that, given the segmental identity of the endings in question, the only real mismatch is found in the accentual behavior of dat.sg. **-ei*. Therefore, "gross differences" and "endless disagreements of detail" in the accentuation of mobile consonantal vs. *ā*-stems are definitely an overstatement. If they are the only foundation for Jasanoff's refusal to consider them together, the foundation is a shaky one.

De Saussure's original idea was that mobility in vocalic and *ā*-stems has emerged in analogy to mobile consonantal stems, such as Lith. *duktẽ* 'daughter'[6]. According to his theory, the stress pattern was copied from the mobile consonantal paradigm to the corresponding case forms in originally immobile paradigms of the other types. This scenario is, in and of itself,

[4] Some of Jasanoff's endings require commentary: (1) *ā*-stem gen.sg.: "the theoretically expected PIE ending would have been **-éh₂s*, but both Greek (*agathẽs*) and Lithuanian point to a laryngeal hiatus, suggesting that **-éh₂s* was replaced by **-éh₂es* in the protolanguage" (p. 133); (2) *ā*-stem instr.sg. *-ā* (acute) is to him an irregular (?) apocope from *-eh₂mi*: "Given the general parallelism of *i-*, *u-*, and *ā*-stems and the fact that *i-* and *u*-stems have instr. sg.'s in **-imi* and **-umi*, it is hard to believe that Proto-BSl. **gãlvān* could be anything but an apocopated form of **gãlvāmi* < **gʊ̀lHu̯aHmi*" (p. 156); (3) gen.pl.: he insists on **-oHom* and not **-om* for all stem types (p. 151).

[5] For more details see Дыбо 2003: 146; Дыбо 2014: 36; Kapović 2016: 200.

[6] But first, de Saussure needed to account for lateral mobility in these consonantal stems, cf. gen.sg. (OLith.) *dukterès*, acc.sg. *dùkterį*. To do that, he posited a retraction from the medial syllable, since he thought that the original accent was **duktèrin* on the basis of Ved. *duhitáram*, Gk. θυγατέρα. This retraction rule was later elaborated by Pedersen and is referred to as "Pedersen's Law." The secondary lateral mobility of *duktẽ* was supposed to have served as the source of analogy for other stem types. As Dybo points out, had de Saussure looked for a source of analogy in one-syllable consonantal stems, such as *šuõ* 'dog', he would not have been led astray by the imperfect correspondences between the accent curves of Lith. *duktẽ* and Ved. *duhitā́* Дыбо 2003: 152 and the entire problem could have been solved right away.

somewhat credible, when only consonantal and *ā*-stems are compared: the curves are the same. Of course, such a massive analogy would hardly be conceivable, but let's assume it is and take this reasoning a step further. If it were a matter of just matching up the slots in two paradigms and copying the stress case form by case form, the material shape of the endings would be of little importance. Thus, we would expect all target paradigms, e.g. those of *o*-stems and *ā*-stems, to behave in the same manner, just copying the accentual curve from the source (consonantal stems). But this is obviously not so. Let us compare the two curves:

		Lith. *o*-stems		Lith. *a*-stems
Sg.	nom.	*vařnas*	≠	*galvà*
	gen.	*vařno*	≠	*galvõs*
	dat.	*vařnui*	=	*gálvai*
	acc.	*vařną*	=	*gálvą*
	instr.	*varnù* < **vařnô̂*	=	*gálva*
	loc.	*vařnie*	≠	*galvái*[*p*]
Pl.	nom.	*varnaĩ*	≠	*gálvos*
	gen.	*varnų̃*	=	*galvų̃*
	dat.	*varnáms*	=	*galvóms*
	acc.	*varnùs* < **vařnô̂s*	=	*gálvas*
	instr.	*varnaĩs*	≈	*galvomìs*
	loc.	*varn*[*uo*]*sù*	=	*galvosù*

These curves are clearly not identical. However, they only differ in cases where the endings are different. Analogy cannot explain this. Jasanoff's theory ignores the well-observable fact that the same endings tend to behave accentologically in the same way in different stem types: e.g. all acc.sg. forms are enclinomena, having the same ending **-ṃ* (**-m*); on the other hand, gen.sg. *galvõs* and *vařno* have different endings (cf. gen.sg. **-ed* vs. **-es* in **u̯ornoh₂-ed* and **golHu̯eh₂-es*, etc.), hence in no way should their accentuation be expected to match (only loc.sg. may be somewhat problematic).

Another important point deserves mention. In his treatment of the accentuation of Vedic consonantal stems, Jasanoff seems to ignore the existence of a paradigmatic distribution among them. Unlike Greek, Vedic has several immobile non-derived consonantal nouns, e.g. *śvā́*, gen. *śúnas* 'dog', **nā́*, gen. *náras* 'man', *gáuḥ*, dat. *gáve* 'cow' and some more Дыбо 2003: 138, Kapović 2015: 212. In Greek all cognate nouns are mobile, but in Lithuanian there is at least one immobile one: nom.pl. *dùrys* (AP 2), gen. *dùrų* 'door' ~ PSl. *dvь̀rъ* (AP b), corresponding to Ved. *dvār-* (which may be mobile or immobile). Analogy could hardly adequately explain this. However, immobile Ved. *śvā́*, in fact, corresponds to mobile Lith. *šuõ* 'dog', so one of them may be secondary[7]. The fact remains, though, that mobility is not an immanent property of consonant stems, and that definitely undermines the assumption of a one-to-one link between stress and stem type.

[2] Jasanoff (like Olander, but unlike earlier Kortlandt) rejects the analogical scenario triggered by Pedersen's Law (but not Pedersen's Law itself). He wants to produce a theory whereby mobility is explained phonologically, at least in part, unaided by implausible wholesale paradigmatic analogies.

The predictive power of Jasanoff's theory can be evaluated by comparing the outcomes of his three phonological rules with the corresponding attested forms (for Lithuanian) or "quasi-attested" (for Proto-Slavic). We give all same-paradigm forms (as predicted by the laws; "+" means that the law applies) arranged in a single table; correct vs. incorrect outcomes are given in different columns. We only give *ā*- and masculine *o*-stems[8]:

[7] We used *šuõ* in our tables above to show the mobile accentual curve, because it has more attested segmentally archaic case forms (such as nom.pl. *šùnes*). Even if mobility is secondary in this noun, it makes no difference for the curve, since we could have used e.g. *dantìs* 'tooth' (corresponding exactly to Ved. *dan*, gen. *datás*).

[8] Refraining from taking up Jasanoff's derivations for the other base types and genders, I will just note that some of his insights (not directly relevant to the main issue) are very enlightening, e.g. the "chain shift" whereby PSl. AP b neuters became masculine, while AP b masculines acquired mobility (p. 165).

	PIE	SPL	PVDL	-V̌N(C)	Lithuanian			Proto-Slavic	
					correct	incorrect		correct	incorrect
nom.	*golHu̯éh₂				> galvà		||	*golvà	
gen.	*golHu̯éh₂es	+			>	**gálvos	||		**gôlvy
dat.	*golHu̯éh₂ei	+			> gálvai		||	*gôlvě	
acc.	*golHu̯ā́m				>	**galvà	||		**golvọ̀
instr.	? (see below)				—			—	
loc.	*golHu̯éh₂i				> galvái[p]		||	*golvě̄	
nom.	*golHu̯éh₂es	+			> gálvos		||	*gôlvy	
gen.	*golHu̯éh₂oHom	+	+		> galvų̃		||	*golvъ̀	
dat.	*golHu̯éh₂mos	(?)[9]			> galvóms		||	*golvámъ	
acc.	*golHu̯ā́s				>	**galvàs	||		**golvy̏
instr.	*golHu̯éh₂mīs	(?)			>	**galvómis	||	*golvámi	
loc.	*golHu̯éh₂su	(?)			>	**galvósu	||	*golváxъ	
nom.	*u̯ornós				>	**varnàs	||		**vornъ̀
gen.	*u̯ornóh₂ed	+			> vaũno		||	*vôrna	
dat.	*u̯ornṓi				>	**varnuĩ	||		**vornù̯
acc.	*u̯ornóm			+	> vaũną		||	*vôrnъ	
instr.	*u̯ornoh₁				>	**varnù[10]	||	—	
loc.	*u̯ornóï	+			> vaũnie		||	*vôrně	
nom.	*u̯ornéi				> varnaĩ		||		**varnı̀
gen.	*u̯ornóHom	+			>	**vaũnų	||		**vôrnъ
dat.	*u̯ornómos	+			>	**vaũnams	||		**vôrnomъ
acc.	*u̯ornóns			+	> varnùs		||	*vôrny	
instr.	*u̯ornṓis				> varnaĩs		||	*vornù̯	
loc.	*u̯ornóišu	+			>	**vaũn[uo]su	||		**vôrně̋xъ

As we can see, the error rate is fairly high: about half the forms are predicted incorrectly. In fact, the predicted accentual curves do not even resemble the attested ones. But these sound laws are not designed to act flawlessly in all forms. Rather, they are meant to have deformed the once-columnar stress and triggered a large-scale restructuring of it. Where they do apply and produce the "wrong" form, it is corrected by a set of analogies. Conversely, in many instances where they do not apply, the forms are altered by "*Systemzwang*" (e.g. p. 157).

As an aside, one is tempted to ask: why does Jasanoff formulate two separate phonological rules (retraction: "SPL" and advancement: "Proto-VDL") instead of just one? Why not just say something like: "a word-internal short open syllable loses its stress in words with three syllables and is transferred to the last syllable otherwise"? It turns out that the number of syllables can change between the retraction and the advancement. This is how Lith. instr.sg. *gálva* is explained: the inherited form **golHu̯éh₂-h₁* was replaced by **golHu̯éh₂-mi*, underwent analogical (!) "SPL", then (irregular?) apocope to **gǒlHu̯aHm*, and that's why it "resisted analogical Proto-VDL and remained barytone" (p. 156). Needless to say, this sort of reasoning raises numerous questions of methodological nature.[12]

[9] Despite the correct outcome, Jasanoff treats this and some other developments as analogical (p. 152), to justify the massive workings of analogy in other parts of the system.

[10] This outcome superficially matches the correct form (with de Saussure's Law), but the laws also predict ***kelmù* (instead of *kélmu*).

[11] With de Saussure's Law (regularly from **varnȏs*)

[12] Jasanoff's two-layered sound law is in striking parallel to Olander's formulation: "...words originally accented on a final short or hiatal structure became unaccented. Assuming that short vowels had a high tone (accent) on the only mora, and hiatal structures had a high tone on the last mora, we may say that a high tone became low in the last mora of the phonological word" (Olander 2009: 3). This lengthy "rule" is reducible to

[3] Two kinds of analogies are at play in Jasanoff's derivations: one may be termed "systematic" (affecting sizable groups of forms and treated as part of the reconstruction "modules"), and the other, "individual" (repairing the wrong outcomes on a case-by-case basis). The first one can be exemplified by the derivation of dat.pl. forms (see above for full derivations): **golHu̯aHmȯs*, **mn̥timȯs*, **u̯ornamȯs* instead of the regular **gŏlHu̯aHmos*, etc. by analogy to a longer **golHu̯inamȯs* (a derived stem). Without attempting to evaluate such cases statistically (they are much too numerous), suffice it to say that this method has no obvious advantages over de Saussure's, Pedersen's (and others') massive analogies.

Analogies of the second kind are even more abundant, e.g. gen.sg. **galvā́s* > Lith. *galvõs* is said to have replaced the regular **gŏlHu̯aHas* by analogy to other stem types. Interestingly enough, this is not the case in gen.sg. **u̯ŏrnoHat* > *vařno*, which therefore (!) "must be original" (p. 143). Obviously, most, if not all, such arbitrary explanations could apply virtually anywhere and are of little value. A logical consequence of this approach is the fact that no two segmentally identical endings can, in this theory, yield different regular reflexes, hence one of the two forms, e.g. gen.sg. *galvõs* and nom.pl. *gálvos* must inevitably be declared analogical. Such and similar "bifurcations" should be postulated with caution, but here they are part of the theoretical apparatus.

It is also worth noting that, for many case forms, in order to obtain the right outcome by sound change, bold assumptions are made. For example, PIE loc.sg. **golHu̯éh₂i* is said to be disyllabic and escape retraction because "syllable-final sequences of the form **-VHi/u-* were realized as **-VHi̯/u̯-* in Balto-Slavic, thus blocking SPL" (p. 137), yet loc.sg. **u̯ornóï* is considered trisyllabic (p. 143) in view of Gk. nom.pl. *oĩkoi* vs. adverb (loc.sg.) *oíkoi* 'at home' (p. 13). Without such ad hoc adjustments, the sound laws would produce much less than half of the desired outcome.

[4] Jasanoff's treatment of nominal derivation is based on two system-wide mutually independent non-phonological changes. First, the PIE system got completely rebuilt: all suffixes became recessive (in the BSl. sense), i.e. all derivatives of stem-stressed bases were now stem-stressed, and those of end-stressed bases were end-stressed (analogically?). Then the entire set of suffixes got unpredictably split into recessive and dominant ones. Just how is a mistery to Jasanoff, but not quite: "It is unclear what made a given suffix 'opt' to be dominant or recessive. In Slavic, at least, there is a discernible tendency for noun-forming suffixes (e.g., post-Dybo's Law **-ĭ́na*, **-ĭ́ca*, **-ъnikъ́*, **-ъstvȯ́*, **-otā́*) to be dominant and for adjectival suffixes (e.g., **ˋ-ъskъ* : **-ъskā́*, **ˋ-ъnъ* : **-ъnā́*, **ˋ-ę̆nъ* : **-ę̆nā́*, **ˋ-ovъ* : **-ovā́*) to be recessive. But there are exceptions in both directions" (p. 176, fn. 121). In reality, there is no such discernible tendency. Here is the quantitative distribution of the main reconstructed PSl. suffixes: out of about 20 (both one-morpheme and two-morpheme) noun-forming suffixes 12 or so are dominant, and out of about 10 adjectival ones 5 are dominant (Дыбо 1981: 199). Some suffixes oscillate, so there may be a tilt in one or the other direction, but "exceptions" is clearly not what we are dealing with here. Hence, Jasanoff's theory fails to account for the most conspicuous trait of BSl. accentuation, the dichotomy in the properties of derivational morphemes[13].

To Jasanoff, "*métatonie douce*" (i.e. cases where circumflex appears "instead" of the expected acute) is again mostly a matter of analogy: it "spread as a derivational marker to related nominal and verbal categories where it had no phonological basis" (p. 83), e.g. *stõtas* 'stature' : *stóti* 'to step up'. The chaos and overwhelming lack of motivation in derivatives brought about by this conception of metatony is probably, among other things, what prevents Jasanoff from attempting to delve into the system of BSl. (or PIE) morphological derivation (see e.g. Николаев 1989 for material and explanations, as well as Дыбо 2014 for metatony in Vedic and Greek).

[5] As we saw above, Jasanoff's "Proto-Vasiľev-Dolobko's Law" figures only once in the table for nouns, since it applies only when four or more syllables are present (the only such form is **golHu̯éh₂oHom*), though it is used extensively in verbal paradigms. Hence, nouns and verbs are treated by Jasanoff in two fundamentally different ways. It is easy to see why. In Jasanoff's conception of PIE, nominal stems could be either root-stressed or end-stressed. An example of the former, **u̯ŏ́rneh₂* 'crow' > Lith. *várna*, PSl. **vŏ́rna* requires no special treatment, since its stress remains intact. Only end-stressed stems come out mobile, so, logically, the needed phonological mechanism is mostly provided by retractions. But the very dichotomy of

a much simpler one: namely, that the last mora in a word-form just loses its stress (Jasanoff notices this too, p. 113), but Olander needs it in order to incorporate in it his ad hoc assumption on the accentuation of hiatal structures in PIE endings, without which his theory would fall apart.

[13] A similar theory of BSl. derivation is proposed by Kortlandt, who explains dominancy by a complex set of very specific retractions and Hirt's Law (Kortlandt 2009: 118). For criticism, see Ослон, Ринкявичюс 2011: 118.

immobile (i.e. "barytone") vs. mobile (i.e. "oxytone") nouns is not a problem for Jasanoff, since it is present in Vedic and Greek and therefore must be assumed for PIE. In the verb, however, no such dichotomy is at hand in either Vedic or Greek. This makes Jasanoff's task trickier: he needs to derive two accentual paradigms from one.

To him, PIE verbal accent depended solely on segmental structure, cf. **u̯édʰeti* vs. **supéti*. Since mobility is the desired outcome, the stressed syllable must be medial, so, for "SPL" to work in the case of **u̯édʰeti*, another syllable (a particle or prefix) needs to be added before the stressed one, which will also provide the context needed for "Proto-VDL". So far so good, but not for **supéti*, where Jasanoff has to arbitrarily move the stress to the first syllable ("thematic barytonization"). This yields mobility for most verbs of these types, but not for all. Some immobile cases are predicted correctly, e.g. *pȃdǫ*, inf. *pȃsti* 'fall' (AP a), where the stressed syllable is long (or closed by a laryngeal), but a host of others remain completely unaccounted for, to name a few: **pâsǫ*, *pȃsti* 'graze', **prę̑dǫ*, *prę̑sti* 'spin', **gry̑zǫ*, *gry̑zti* 'gnaw', etc. These verbs are declared to be analogical: "it is clear that morphology has, so to speak, trumped phonology" (p. 188). It gets even worse with sonorant-final stems, where mobility and immobilty are represented more or less equally. To explain away the divergent cases, he usually declares them "unoriginal" (and hence uninteresting to the Indo-Europeanist). But here Jasanoff acknowledges his theory's weakness more explicitly: "A full account of the circumstances that determined whether a present of the form **CVR-e/o-* would come out mobile or immobile in Slavic has yet to be written" (p. 189).

Jasanoff's treatment of Slavic verbs in **-i-*, inf. *-iti* goes along the same lines. The distribution of AP *b* and AP *c* is not explained but said to be the outcome of some unpredictable split, even though accentual inheritance is an obvious and fundamental property of these verbs, which can in no way be due to analogies (see *Лашин* 2016 for material and issues). We should note, though, that Jasanoff's explanation of *poluotmetnost'* (p. 214) is quite ingenious. All in all, it is evident that Jasanoff's theory does not really tackle the issue of paradigmatic accentual distribution in the Balto-Slavic verb (i.e. different accentual types within the same morphological type), which he considers secondary and unimportant.

In conclusion, I would like to remark that, despite its imperfections, the theory laid out in the book under review is highly interesting in many respects. Building on an overtly "Indocentric" premise, shared by some other eminent scholars, it goes much further than its recent predecessors. Kortlandt's very intricate theories, recently collected in Kortlandt 2009, while offering astute solutions to some particular problems, mostly fail to show the big picture. Olander's theory (Olander 2009) (termed "quite inadequate" by Kortlandt 2007: 233), generally approved of but not accepted by Jasanoff, is not free from internal inconsistencies (e.g. in that it rules out circumflex case endings and has to use analogy to derive them, see Ослон 2010: 145). Neither of these theories, as Jasanoff points out, has much to say about the verb. He himself attempts to solve the same basic problem (i.e. that of derivation and not of reconstruction), but, for him, the verb is no less important than the noun. In fact, Jasanoff's approach to the noun is not too different from Olander's and comparable to it in predictive power. However, Jasanoff meticulously and exhaustively explores the possibilities of accounting for the variegated Balto-Slavic verbal stress based on the postulated non-paradigmatic columnar stress assumed for the PIE verb, setting up a valuable thought experiment which yields, as should be apparent from the above assessment, an unmistakably negative result. It is simply unable to explain most of what goes on in the Balto-Slavic system. Now we can clearly see that Balto-Slavic stress cannot be traced back to the widely accepted simplistic accentual reconstruction of PIE. There are simply too many oppositions on the "receiving end," so additional variables must be brought into the picture. A complex interplay of some sort of accentual properties of individual morphemes must have been in place to give birth to the attested systems (including Vedic and Greek). It is this realization that underlies the "Tonological Hypothesis," so rashly rejected by Indocentric accentologists[14].

This notwithstanding, Prof. Jasanoff's work is admirable in that it covers an astonishingly vast range of issues, while faithfully adhering to a rigorous theoretical framework. Arguable as that framework may be, the book will definitely prove of immense use to

[14] It may be that part of the problem lies in a somewhat supercilious attitude of many "Western" scholars towards accentological literature published in languages other than English, German or French, particularly in (and not just on) Balto-Slavic languages. Most of the copious accentological work published in Russian is completely ignored by Jasanoff (e.g. the comprehensive volume *Дыбо* 2000), not to mention the recent voluminous ground-breaking study Kapović 2016 written in "BCS", which, by the way, contains a section (ibid.: 195) on BSl. mobility with much the same observations as presented in this review (but with more detail). Note, however, that the English-language article Dybo, Nikolayev, Starostin 1978 on the "Tonological Hypothesis" is not mentioned either.

its supporters and opponents alike. After all, it will probably help clarify just how much of the debate around the moot issues of Balto-Slavic and Indo-European accentology really boils down to the operation of "Teeter's Law."

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