

# Perspectives on the Reconstruction of the Proto-Indo-European Accentual System

Ryan Sandell, UCLA

February 11, 2014

Research into the accentual behaviors of Indo-European languages and their proto-language remains a lively topic of research and discussion. See the recent papers in Keydana *et al.* 2013 for various treatments of the proto-language's accentual system. At the same time, knowledge about the prehistories of the accentual systems in particular branches is ever-advancing: see, e.g., Vine (2012) on Italic, and work by Olander, Jasanoff, and Kortlandt on Balto-Slavic (e.g., Olander 2009, Jasanoff 2011, Kortlandt 2006). Although a rough terminological consensus for the description of Indo-European accent and ablaut exists (i.e., the *-kinetic/-dynamic* accent/ablaut classes) precise theoretical agreement remains distant.

In this paper, I will argue that only a morphophonological approach, essentially as described in Kiparsky 2010a (more complete version online: Kiparsky 2010b), approaches descriptive and explanatory adequacy (in the sense of Chomsky 1965) in analysis of the position of the word ictus in Indo-European languages with “free” accentuation (e.g., Sanskrit, Lithuanian, Russian), and Proto-Indo-European itself. On the basis of Kiparsky's existing work (*op. cit.* and Kiparsky Forthcoming), I aim to lay out a research program for the investigation of outstanding problems in the accent systems (and related problems of morphophonological prosody) of Indo-European and its oldest daughter languages. As an example, I will offer a new analysis of the “proterokinetic” *i-* and *u-*stems (e.g. Ved. nom.sg. *agníḥ*, gen.sg. *agnéh*; nom.sg. *sūnúḥ*, gen.sg. *sūnvóḥ*), building upon Kümmel (2011)'s work on the inflection of those categories in Indo-Iranian.

In presenting a brief Forschungsgeschichte concerning the problem of the position of the Indo-European word accent, with particular attention to the works of Hirt (Hirt 1895), Pedersen (Pedersen 1926), Kuiper (Kuiper 1942), and Schindler (e.g., Schindler 1972, Schindler 1975), I draw attention to an issue, the importance of which has often been overlooked: what is the nature of the *synchronic* system that determines the position of the word ictus, when the position of the ictus is not obviously delimited by purely phonological factors? Independently, Dybo (1962) and Hill & Hill (1968) devised morphophonological accounts of Slavic and Cupan languages that exhibit ostensibly “free” accentuation: each morpheme bears underlying (lexically specified) accentual properties, which the phonological component of the grammar interprets so as to determine the position of the peak prominence in the word (i.e., the surface ictus). In Vedic Sanskrit, the leftmost underlying accent surfaces as the word ictus; in a sequence of morphemes without any underlying ictus, a default (phonological) ictus is assigned to the leftmost syllable (just as, e.g., in Finnish, the phonology always assigns the word ictus to the leftmost syllable). Thus: /aks-í-bhyám/ inst.du. ‘eye’ → [akṣíbhyām]; /bhū-am/ acc.sg. ‘earth’ → [bhúvam]; /bhū-bhyám/ inst.du. ‘earth’ → [bhūbhyám].

The essential behaviors of such morphophonological (“lexical”) accent systems will be illustrated with data from Modern Greek, Russian, Cupeño, and Japanese. Japanese and Salishan languages also nicely demonstrate the role of morphological headedness in the determination of word ictus, as argued by Revithiadou (1999). For example, in Japanese Noun-Noun compounds, the accent of the second member (provided that the second member has more than one syllable) surfaces as the word ictus (i.e., the location of the only or final high tone before a fall to low tone), or, if the second member is inherently unaccented, an accent is assigned to the second member (which is the head of the compound). Thus: /nise+karakása/ ‘paper umbrella’ → [nisekarakása]; /minami+amerika/ ‘South America’ → [minamiamerika].

Kiparsky (1973) and Kiparsky & Halle (1977) demonstrated that the accentual behaviors of Sanskrit and the externally reconstructable ictus of PIE are likewise susceptible to such a morphophonological analysis. I outline the analysis given in Kiparsky 2010a, and show that the analyses of Kim (2013) and Pronk (2013) reduce to the same basic claims. I then proceed to describe necessary areas of further research in this framework: ablaut patterns beyond  $*e/\emptyset$ , the nature of accentual dominance, and more detailed discussion of verbal accentuation comprise a few such topics. I conclude with a treatment in Optimality Theory (Prince & Smolensky 1993) of accent and ablaut in primary *i*- and *u*-stems, to exemplify a case in which the assumptions of a lexical accent system allow for a more coherent analysis than the previous alternatives. The principal issues to be addressed here include the absence of attested pristine “proterokinetic” accentuation or paradigms with thoroughgoing “proterokinetic” ablaut, and the gen.sg. in -s found in Indo-Iranian (Ved. *bāhóḥ* = Av. *bāzaoš* gen.sg. ‘arm’) and Italic (Osc. *medikeis* gen.sg. ‘quaestor’).

## References

- CHOMSKY, N. (1965). *Aspects of the Theory of Syntax*. Cambridge, MA: MIT Press.
- DYBO, V. A. (1962). O rekonstrukcii udarenija v praslavjanskom glagole. *Voprosy Slavjanskogo Jazykoznanija* 6, 3–27.
- HILL, J. H. & HILL, K. C. (1968). Stress in the Cupan (Uto-Aztec) Languages. *International Journal of American Linguistics* 34, 233–241.
- HIRT, H. A. (1895). *Der Indogermanische Akzent: ein Handbuch*. Strassburg: Karl J. Trübner.
- JASANOFF, J. H. (2011). Balto-Slavic Mobility as an Indo-European Problem. In: *From Present to Past and Back: Papers on Baltic and Slavic Accentology* (SUKAČ, R., ed.). Frankfurt.
- KEYDANA, G., WIDMER, P. & OLANDER, T. (eds.) (2013). *Indo-European Accent and Ablaut*. Copenhagen: Museum Tusulanum.
- KIM, R. (2013). Metrical Grid Theory, Internal Derivation, and the Reconstruction of PIE Nominal Accent Patterns. In: *Indo-European Accent and Ablaut* (KEYDANA, G., WIDMER, P. & OLANDER, T., eds.). Copenhagen: Museum Tusulanum.
- KIPARSKY, P. (1973). The Inflectional Accent in Indo-European. *Language* 49, 794–849.
- KIPARSKY, P. (2010a). Compositional vs. Paradigmatic Approaches to Accent and Ablaut. In: *Proceedings of the 21st UCLA Indo-European Conference* (JAMISON, S. W., MELCHERT, H. C. & VINE, B., eds.). Bremen: Hempn.
- KIPARSKY, P. (2010b). Compositional vs. Paradigmatic Approaches to Accent and Ablaut. URL [http://www.stanford.edu/~kiparsky/Papers/ucla\\_IE\\_09.submitted.new.pdf](http://www.stanford.edu/~kiparsky/Papers/ucla_IE_09.submitted.new.pdf).
- KIPARSKY, P. (Forthcoming). Accent and Ablaut. In: *Handbook of Indo-European Studies* (WEISS, M. & GARRETT, A., eds.). Oxford: Oxford University Press.
- KIPARSKY, P. & HALLE, M. (1977). Towards a Reconstruction of the Indo-European Accent. In: *Studies in Stress and Accent*. Los Angeles: University of Southern California.
- KORTLANDT, F. (2006). Balto-Slavic Accentual Mobility. *Baltistica*, 359–69.
- KUIPER, F. B. J. (1942). Notes on Vedic Noun Inflection. *Medelingen der Koninklijke Nederlandse Akademie van Wetenschappen, Afdeling Letterkunde* 5(4), 161–256.

- KÜMMEL, M. J. (2011). Zum „proterokinetischen“ Ablaut. Preprint-Version des Vortrags bei der Arbeitstagung „Das indogermanische Nomen“, Erlangen.
- OLANDER, T. (2009). *Balto-Slavic Accentual Mobility*. Berlin: Mouton de Gruyter.
- PEDERSEN, H. (1926). *La cinquième déclension latine*, vol. XI of *Det Kgl. Danske Videnskabernes Selskab. Historisk-filologiske Meddelelser*. København: Andr. Fred. Høst & Søn Hof-Boghandel.
- PRINCE, A. & SMOLENSKY, P. (1993). Optimality Theory: constraint interaction in generative grammar. Tr-2, Cognitive Science Center, Rutgers University.
- PRONK, T. (2013). On Indo-European Tones, Accentuation, and Ablaut. In: *Indo-European Accent and Ablaut* (KEYDANA, G., WIDMER, P. & OLANDER, T., eds.). Copenhagen: Museum Tusulanum.
- REVITHIADOU, A. (1999). *Headmost Wins: Head Dominance and Ideal Prosodic Form in Lexical Accent Systems*. PhD Dissertation, Leiden University.
- SCHINDLER, J. (1972). L'apophonie des noms racines indo-européens. *Bulletin de la Société de Linguistique de Paris* 67, 31–8.
- SCHINDLER, J. (1975). Zum Ablaut der neutralen s-Stämme des Indogermanischen. In: *Flexion und Wortbildung. Akten der V. Fachtagung der Indogermanischen Gesellschaft. Regensburg, 9.-14. September 1973* (RIX, H., ed.). Reichert: Wiesbaden.
- VINE, B. (2012). PIE Mobile Accent in Italic: Further Evidence. In: *The Sound of Indo-European. Phonetics, Phonemics, and Morphophonemics*. (WHITEHEAD, B. N., OLANDER, T., OLSEN, B. A. & RASMUSSEN, J. E., eds.). Copenhagen: Museum Tusulanum.