Zbl 0743.01004

Gvozdanović, Jadranka (ed.)
Indo-European numerals. (English)
Trends in Linguistics, Studies and Monographs. 57. Berlin etc.: Mouton de Gruyter. x, 943 p. (1992).

This book is written for linguists, and many chapters can only be adequately understood by specialists in the language groups dealt with possessing at the same time a thorough training in comparative Indo- European studies. Nonetheless, it contains much material of interest for scholars interested in the fundaments of numerical thinking and practice, in particular as these thrive in "mathematically innocent" environments. 15 chapters deal with the forms and possible etymologies of cardinals, ordinals, collectives, distributives, approximatives etc. in the following language groups: Anatolian (Hittite etc.); Tocharian; Old Indian (Vedic, Classical Sanskrit); Middle Indo-Aryan (Pali, Prakrit, Hybrid Sanskrit, etc.); Modern Indo-Aryan; Iranian; Armenian; Thraco- Phrygian (treated as two unrelated groups, from each of which only one numeral is known); Greek (mostly Attic + Mycenaean); Italic (mainly Latin); Romance; Celtic; Germanic; Balto-Slavonic (no claim being made that Baltic and Slavonic Languages make up one group); and Albanian. Each chapter is written by a specialist. These chapters are preceded, firstly, by one written by the editor on general characteristics of numeral systems, formulated from a view-point of non-dogmatic generative grammar and suggesting (in other words) that phenomena like "bundling" of units into higher units and multiplicative composition of numbers are rooted in a universal human "number faculty", parallel to and interacting with the "language faculty". Secondly, by "some thoughts" by Werner Winter on Indo-European numerals, pointing out, among other things, that many living languages can put a single higher number into different words; attempts to derive an unequivocal set of numerals for Proto-Indo-European is thus as badly founded as the claim that numbers whose words are structures differently in later languages will have been outside the range which could/would be spoken of in the group of dialects from which the Indo-European languages radiated in some way. (These points are amply confirmed in later chapters.) General histories of mathematics (and older histories of the Indo-European language family) often tell that the family consists of two branches: those using (a cognate of) centum for 100 and those using a (cognate of) satem — the inference being that this number only entered the practice of early Indo-European after a first geographical split in the family. The actual point of view of linguists turns out to be different: both terms are regular descendants of a term meaning "ten decades"; only the Germanic forms containing an r ("HundeRt" etc.) are different, meaning, so it seems, "a count of decades". Since "a count" may have been of twelve instead of ten, this explains the well-established early meaning "120" of Germanic "hundred" (this inference, however, is not made in the book; indeed, only the chapter on Balto-Slavonic languages mentions the Germanic "Großhundert"). Much else for scholars interested in basic numerical thinking can be dug out from the book; but since it is written with impressive erudition in order to answer different questions, digging is required.

J.Høyrup (Roskilde)
Keywords: Indo-European numerals; numerals; Indo-European languages
Classification:
    ∗01A07 Ethnomathematics