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The present monograph collects nineteen essays on the numerical systems of several African and Eurasian languages; most of these essays have already been published as separate studies in various journals of linguistics. The articles have been gathered in the present book which serves as the author's Habilitationsschrift at Brno university. B. divides his subject into three parts: A. Non-Indo-European numeral systems (viz. the Saharan numerals, the Nubian numerals, the Egyptian numerals, the Berber numerals, the Kartvelian numerals, the Uralic numerals, and the Altaic numerals, p. 1-140); B. the Indo-European numerals (p. 141-342), and C. Patterns of creating numerals (p. 323-337). The Indo-European numeral family thus forms the central part of the book, and its numerals are discussed in separate subchapters dealing with '1', '2', '3', '4', '5', '6', '7', '8', '9', '10', '100' and '1000'.

After every chapter and subchapter of the book, we find a separate bibliography of the works cited in that chapter. Since many of the works cited are mentioned in more than one (sub)chapter, the book could have numbered a few pages less if all the references had simply been given once, at the beginning or at the end of the book. The present repetition of references is probably due to the fact that many of these (sub)chapters have appeared in print before, and the reader cannot help but get the impression that the separate essays have been lumped together without much of a final redaction. This impression is strengthened by the lack of any introduction to the subject of numerals. The two-pages introduction (p. III-IV) which precedes the 'contents' does not discuss the history of scholarship in this field, nor does it give a satisfactory outline of the premises on which B. bases his analyses of the numerals. For instance, it appears from his discussion at various points that B. adheres to the Nostratic theory, but this is not made explicit in the Introduction. Another point in question are the typological observations which we can make when comparing the different ways in which the world's languages form their numerals. Throughout the book, B. mainly relies on two (well-attested) ways to form numerals, viz. the derivation from body parts, and the derivation from other numerals by means of simple arithmetic operations. Nobody will deny that these are the two most important origins of numerals cross-linguistically, but B. becomes explicit about them only in his very final chapter (see below); especially for students of Indo-European languages, where numerals have a notoriously unclear etymology, this would have been a welcome theme for an introductory chapter.

B. expresses the following two targets of his study (p. III-IV): (a) to apply the methods of comparative-historical linguistics to the etymological analysis of
numeral systems in selected language families; (b) to formulate some general rules of creation of numerals in confrontation with the 'transparent' numeral systems."

"What is behind this second aim only becomes clear when we read the final chapter called 'Patterns of creating numerals', which provides a short overview of different counting systems which exist in the world's languages. B. concludes this chapter with the observation (p. 336) that "the primary semantic motivation of numerals was based on body part names."

"This implies the counting of 1, 2, 3, etc. by means of fingers etc., as can be observed in different languages all over the world. B. proceeds with the assumption that "the higher numerals originate by means of elementary arithmetic operations combining them."

"This is another well-attested formation type of numerals, as in Latin duodeviginti '18', undeviginti '19', viginti '20', literally 'two-from-twenty', 'one-from-twenty', 'twenty'.

"It is obviously B.'s main aim to show that the Indo-European numerals have also been formed by the two processes mentioned, viz. the use of body part names to start counting, and application of arithmetic operations to derive other numerals from the former. For the numerals 4-6 and 8-10 ("7" is regarded as a loan from Semitic), B. offers the following etymologies: '4' *k'erot 'set of fingers' or *k'er-'span', derived from *k'et- 'to stretch'; '5' *penk'e 'keeps (hand in fist)' from a verbal root *penk- 'to handle' or 'to gather'; '6' *k'apeka (K indicating an unspecified velar) *g's-l)eks 'hand'; '7' *rektoh j '8'.

"Henning's translation of *sl)eks as 'the breadth of four fingers', which he posits on (as per Henning 1942: 235, footnote 2), F 732 vitasti '12 fingers', F 733 disti '10 fingers', F 734 uzasti '8 fingers'. Since vitasti and disti represent regular verbal abstracts in *-ti from the respective PIE roots *tew- 'to stretch' and *dek- 'to show', uzasti may well contain a derivative *h 2okti-b- to the root *h 2ok-'to reach', corresponding to Skt. āṣṭi- 'reaching'. The semantic motivation is obvious: vitasti is the space between a stretched out thumb and little finger, disti are the ten fingers which we use for indicating, and we can accordingly translate uzasti as 'the breadth of four fingers' (which he derived from PIE *h 2oktoh as the dual of the PIE preform of Av. āṣṭi- (Henning 1948). Yet the meaning 'breadth of four fingers' is not secured for Av. āṣṭi. The form only occurs in the compound āṣṭi masah 'as large as an āṣṭi', which the Pahlavi translation of Nirukta 13.30 does not specify any further, and in uz-āṣṭi 'breadth of eight fingers' (Frahang-i āṣṭ 734). The latter form appears in an enumeration of length measures: F 731 pāśam '16 fingers' (as per Henning 1942: 236, footnote 2), F 732 vitasti '12 fingers', F 733 disti '10 fingers', F 734 uzasti '8 fingers'. Since vitasti and disti represent regular verbal abstracts in *-ti from the respective PIE roots *tew- 'to stretch' and *dek- 'to show', uzasti may well contain a derivative *h 2okti-b- to the root *h 2ok-'to reach', corresponding to Skt. āṣṭi- 'reaching'."

"Leaving aside the criticism on details, B.'s book shows the merit of bringing together an enormous amount of evidence on numerals, their relations and developments in many languages. These data, rather than suggesting unwarranted reconstructions, inspire one to ponder about the different possibilities that languages have with numerals, and how the different numeral systems came about. It must be regretted that B. does not elaborate more on this theme, which apparently was his main interest (p. 336 "The creation of numerals confirms more than any other human activity that man is a creature of himself.") B. has some very interesting remarks about the distribution of the vigesimal counting system in Indo-European languages, which automatically lends one to the question why different languages have different systems such as binary, ternary, quaternary, quinary, decimal, or vigesimal.

"English is not B.'s native language, and this may account for the sometimes strange syntax and choice of words in B.'s text. Usually these errors are not disturbing, but one item should be mentioned. When B. speaks about a 'most probable cognate' form of a word, he quite consistently writes 'most helpful'. This is probably no more than an innocent error in the translation from Czech to
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English; but unintentionally, its frequent occurrence never tires of reminding us that it is not the cognate which is hopeful, but only the author.

Michiel d e V a a n

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Hiermit werden die Schwarzweißaufnahmen sämtlicher bis anno 1934 veröffentlichten Manichaica der Berliner Turfansammlung und der Petersburger Krotkow-, Koxanovski- und von Oldenburg-Sammlungen vorgelegt und zum ersten Mal seit Salemann1 in kontrollierbarer Form gesammelt. Die Auswahl ist sinnvoll und homogen: Sundermanns Photo Edition enthält mit wenigen Ausnahmen2 mittelpersische und parthische Fragmente im manichäischen Alphabet. Außerhalb der gewählten Grenzen stehen zwei Gruppen von Fragmenten: (1) die „Londoner Hymnenrolle“, die zwei parthische Hymnen in chinesischer Transkription enth-

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1 Manichaïsche Studien 1, Mémoires de l’Académie Impériale des Sciences de St.-Pétersbourg, Ville série, VIII:10, Saint-Pétersbourg 1908.
2 Fragmente in: Sogdisch (M14, M115, M133, M583, So18120, MIK III 4981a und f; S4, L73, L74, L75, L77, L117), Sogdisch und Parthisch (M132a, M596c), Mittelpersisch und Sogdisch (M309a), Sogdisch und Uigurisch (So14411), Mittelpersisch, Sogdisch und Türkisch (M172), Parthisch im sogdischen Alphabet (So18120), Mittelpersisch in türkischer Runenschrift (Mainz 172, 402a und b).