

## Prepositions, particles, etc.

An important advantage of the *Dictionary* is its careful and thought-out treatment, as well as its rational presentation of modal words such as prepositions and particles which are decisive for understanding the “logic” of the poets. In order to illustrate how Grassmann treats such small words, let us cite the item about *á* ‘towards something/someone’, used when the directional sense is “towards here”, i.e. seen from the terminal:

column 168–171 *á*:

... The basic notion is “on”, related first of all to a limit or surface, to the immediate proximity. Therefore it conveys the meaning of the adverb of the direction “up this way, near to; hither” (i.e. moving to the immediate proximity of the speaker), or “upwards, up to; towards” (moving to the immediate proximity of the imagined object). Therefore it functions as a preposition with a following ablative “up to, as far as”, while it only emphasizes the meaning of the cases if it is used as a preposition with preceding accusative, ablative, locative. However, this word order is not unchangeably fixed in both cases. It connects words as a connecting particle in the meaning of “and”, i.e. “attaching oneself to the expressed one arriving at this, stepping hereto”. Finally, it serves to emphasize the preceding accented word in the sense that its notion is valid in its full contents, in its just proper meaning. Thus it is realized as:

Word of direction with the verbs: xxx xxx xxx xxx xxxxxx xxx xxx. [“xxx” suggests omission by the article’s author, as above in 1; here, the verbal roots are listed to which *á* is added.]

- Prepositions with preceding accusative: (1) ‘up to’ (of space) xxx xxx xxx xxx [the occurrences are omitted by the author]; (2) with an abstract noun: ‘towards, aiming at (expressing the goal)’ xxx xxx xxx; (3) connected with *ánu* ‘along, after’, see under *ánu*.
- Preposition with following ablative: (1) ‘up to, as far as’ (of space) xxx; (2) (of time) xxx xxx; (3) ‘for, for the sake of’ xx; (4) ‘hither from ...’ xx.
- Preposition with preceding ablative: (1) ‘hither from ...’ (of space) xxx xxx xxx; (2) ‘from’ (of space) xxx xxx; (3) ‘originated from ...’ xxx; (4) ‘(to make) of ...’

---

monosyllabic, and used as a genitive. There is an echo of the lost genitive form \**sb<sub>2</sub>-úén-s* behind the tradition (cf. Gotō in [Witzel and Gotō 1987, 814]). The form “*súr*” Grassmann cites is related, e.g., to the genitive *súr-as*, and besides this dative *súr-é* with legitimate accent. They are mixed formations of *suur-* as an artificial weak form of *súvar*, and a normal genitive ending *-ás*.

xxx; (5) ‘from (the heart)’ xxx; (6) ‘away from ...’ xxx; (7) ‘before, above (others)’, i.e. ‘in higher, superior grade to others’ xxx xxx; (8) ‘towards ...’ against the expected word-order xxx; (9) *ádhi á* ‘from ... hither’ see under *ádhi*.

- Preposition with preceding locative: (1) denoting the place in which something exists, or at which something reaches (in case of verbs of motion), thus ‘on, at, in, by, to’ xxx xxx xxx xxx xxx; (2) ‘in the case of’ (some action), or ‘in’ (some state) xxx xxx; (3) of time: ‘on, in’ xxx; (4) *antár á* [‘mid in ...’], *sácā á* [‘together with ...’], see under *antár* and *sácā*.
- Preposition with adverbs that stand for case-forms: xxx. Combinations with other prepositions, see under the cases.
- Conjunction ‘and’ (1) between two jointed words: xxx xxx; (2) after the last element in case of multiple enumeration: xxx; (3) after the word (or words) in the jointed part which is identical with that in the first part according to wording or meaning, for example xxx xxx; (4) at the end or before the closing verb of the jointed part: xxx xxx.
- Emphasizing particle (1) after words of number or grade in order to express that the number or grade is reached completely: xxx; especially in the formula *trís á divas* ‘three times each a day’ xxx xxx; (2) thus after adjective or adverb which can be emphasized in order to express a really high grade, ‘really’: xxx xxx; (3) beside substantive and adjective in the sense of ‘representing oneself really as such’, ‘really as, really like’: xxx xxx; after verbs: xxx xxx.

For elaborating categories such as ‘preposition, particle, adverb, conjunction’, further considerations and precisions might be necessary. For a dictionary, still, Grassmann’s arrangement is absolutely substantial: preposition (governing the case), conjunction (small words for junction of words, sentences, or parts of a sentence, etc.), and particle (small words which express the speaker’s attitude to the whole contents of a sentence), in addition, preverb and adverb. His verification and representation of the internal (meaning) and external criteria (case government, word order) are rational and compact. Here we have what remains as probably one of the best descriptions in this field even today. The works of Delbrück (1842–1922) are an irreplaceable basis in descriptive and comparative syntax, i.e. the philological, comparative and historical syntax in Indo-European languages. Delbrück [1888] often summarizes Grassmann’s descriptions about prepositions in the RV, saying “I have nothing substantial to add to what Grassmann writes”, and describes the findings from the prose literature of the Veda. Delbrück tries to treat the prepositions in connection with verbs as much as possible. In this sense, the basic meaning emerges more clearly in Grassmann’s *Dictionary*.

One weaves the logical parts of a sentence with the help of prepositions and connecting particles (conjunctions). With the help of the modal particles the speaker adds

his own attitude to the contents expressed in his speech, or “wraps” his sentence’s substance. The same is applicable to the modal categories of the verbs. Grassmann is engaged in this domain with special intensity and shows his strength for providing rational and compact layout. This is due to his efforts to understand and reproduce an old foreign literature. It is very impressive that we feel as if there were nothing foreign in Grassmann’s interpretation. It is as if Grassmann tried to understand the thinking and expressions of old Indian folk as his own language. He wanted to understand the RV in its entirety. For this, he did not use a poetic intuition or veil, but analyzed the expressions into their elements on various levels and constructed the thus-gained results in a clear structure. Grammar, which is not contained in school books, but in our brains, plays the decisive role. It reminds me of the method of Aristotle, but in the modern world. He has, in short, utilized all the methods of philology in an ideal way. Grassmann was conscious of the importance of providing accurate translations first, before attempting expositions of the contents and its background. His *Dictionary* is still an exemplary work on a closed text. His arrangement and the whole edifice of the work have a universal value.<sup>8</sup>

## Abstract language and German

I do not know to what extent our logic itself depends on our mother tongue, and in some cases, also on other languages one can control if necessary. What Grassmann uses in his analysis seems to be an abstract language, as if, for example, a stranger would formulate something precisely with the most extreme intensity, but at the same time, completely. He does not avoid problems with German expression. His *Dictionary* is his message to the following generations showing how our brain should struggle and understand an appearance, an object in the aggregate. I am completely persuaded that Grassmann thought the human brain to be equipped commonly and universally since the time of the Rigveda, at the latest.

However, I must immediately add that the enterprise was made possible by German in a direct way. The fact that German preserves an old structure of the Indo-European languages and its word formation (root-suffix-ending, composition, preverbs

---

<sup>8</sup> Bartholomae was one of the best Indo-European linguists of all time and one of the best specialists in the field of Iranian studies. His *Dictionary of Old-Iranian* [Bartholomae 1904] registers the form under each meaning with its occurrence. Grassmann’s principle, first the meaning with numerals, then the occurrences cited in the frame of forms with the figure of the meaning, is far more expedient. Bartholomae decided on his system probably because of the relatively small corpus of Old-Iranian texts. The inventory of the forms is important and makes things clearer. It is a desideratum to remodel the dictionary of Bartholomae after Grassmann’s principle.

and prepositions, which can also be laid on each other), the genus of nouns, relatively free word order, and the usage of modal verbs – all of this favours the literal reproduction of the original text of the RV. In extreme cases, it is possible to transport the wording of the Rigveda into German and only then try to understand it. This possibility favoured the *Dictionary*. The philology of the RV is still today strongly impressed by the German language and its way of logical representation. Also, Grassmann played an important role here, alongside the *Petersburger Dictionary* by Böhlingk and Roth (1855–1875), which was also a basis for Grassmann. With this reservation, one can say that the *Dictionary* is a most excellent exemplar in the analysis and representation of a closed corpus. It remains for us an active and irreplaceable instrument.

### The decisive year of 1875

I would like to add some closing comments on the epoch we have been dealing with. I have not checked, nor am I informed about the question how much Grassmann owed to the *Petersburger Dictionary* [PW] (cf. contribution of Ms. Kozińska in this volume). The 7th and last volume (*ś, ś, s, h*) of the PW was printed on 7 August 1875, and has a preface dated 4 August 1875; the preceding volume (*y, r, l, v*) was printed on 8 December 1871. Grassmann's *Dictionary* has a preface dated 18 August 1872 and afterword, 8 August 1875. One may, however, safely assume from the friendship between Roth and Grassmann, which is attested by the afterword of the *Dictionary* and the letters [Petsche 2009, 167–185], that Grassmann was substantially informed of the whole material which the *Petersburger Dictionary* includes for the RV. Grassmann consulted the PW thoroughly, but he decided always for himself, as he himself says in the preface (p.V). He trusted only in his own reasoning. He did not rely on the Padapāṭha ('reading in words', i.e. segmentation into words of the RV-text, which is transmitted in contentious reading for recitation not separated word by word), by Śākalya, maybe about the sixth century B.C., nor the commentary of Sāyaṇa (fourteenth century A.D.). Grassmann profited, it is safe to assume, extensively from these traditional Indian contributions, but judged always only for himself.

The year of 1875, in which the PW and the *Dictionary* were completed, is thus an important date for the history of Indology. The next year, 1876, in which the 1st volume of Grassmann's translation of the Rigveda was published, is a revolutionary year which opened the way for the modern comparative Indo-European grammar with the monumental works of Leskien (the sound-change operates mechanically), Osthoff (the existence of PIE sonant \**r*), Brugmann (the existence of PIE nasal sonants \**ŋ*,



\**m*, and Brugmann's law, cf. 1.1), Verner (Verner's law in Germanic), Sievers (foundation of Phonology), Winteler (the description of Swiss German dialect), etc. (cf. "The *annus mirabilis* 1876 and posterity" by [Hoenigswald 1978], and [Schmitt 2009, 15ff.]). Grassmann's efforts in philology and linguistics seem to have been somewhat independent of the very active scholarly mainstream. How would it have been if Grassmann had written a grammar? But he lived perhaps a little too early to take on this task with his customary precision.

## Freguglia, Paolo; Prof. Dr.

**Educational background:** Study of mathematics and physics (Laurea in Matematica (1971), Sapienza University of Rome); Study of philosophy at Pontificia Universitas Gregoriana of Roma.

**Current position:** Full Professor, Dept. of Pure and Applied Mathematics, University of L'Aquila, Italy.

**Main research interests:** History of mathematics (algebra and geometry in the XVI and XVII century and in the XIX and XX century [geometric calculus]); Logic and foundations (modern aspects of syllogistics, inductive statistics, analysis of Peano's school contributions to foundations of mathematics); Mathematical models in physics (geometrical optics and beam dynamics) and in biology (geometrical and dynamics models in evolutionary theories).

**Selected publications:** Dall'eredità grassmanniana alla teoria delle omografie nella scuola di Peano. *La Matematica nella società e nella cultura. Journal of Unione Matematica Italiana*. 1 (2008), with C. Bocci. // Calcolo geometrico e numeri ipercomplessi: origini e primi sviluppi ottocenteschi. *Bollettino dell'unione matematica italiana*. A, 8, 7–A (2004). // *Geometria e numeri. Storia, teoria elementare ed applicazioni del calcolo geometrico* (book, 2006), with a contribution by A. Bazzani.

**Address:** Via Panoramica, 233, I – 58019 Porto S.Stefano GR, Italy.

**E-mail:** paolo.freguglia@technet.it or fregugli@univaq.it.

## Gotō, Toshifumi; Prof. Dr.

**Educational background:** Study of Indology, Indo-European linguistics, Indo-Iranian philology, Dr.phil. in Indo-European linguistics (Erlangen).

**Current position:** Professor in Indology and History of Indian Buddhism at Tōhoku University, Sendai, Japan.

**Main research interests:** Indo-European studies, the extension of Indo-European speaking people; historical grammar of Old Indo-Iranian, especially in the verb; religion and Weltanschauung in the Veda, Avesta, and Buddhism.

**Selected publications:** Die "I. Präsensklasse" im Vedischen (1987). Vasiṣṭha und Varuṇa in RV VII 88 (2000). // "Purūravas und Urvaśi" aus dem neuentdeckten *Vādhūla-Anvākhyāna* (Ed. Ikari) (2000).

**Address:** Department of Indology and History of Indian Buddhism, Graduate School of Arts and Letters, Tōhoku University, Kawauchi 27–1, Aobaku, Sendai, 980–8576, Japan.

**E-mail:** gotop@sal.tohoku.ac.jp.