Hartmut Scharfe, *Pāṇini's Metalanguage* (=Memoirs of the American Philosophical Society, volume 89). Philadelphia, American Philosophical Society, 1971, pp. 53.

This monograph is "... intended as a grammar of the metalanguage used in Pāṇini's grammar", in which "features in common with Sanskrit will receive a shorter presentation than those peculiar to this language (5b)". The work consists of eight chapters and two appendices. An introductory discussion on language and metalanguage (1-6a)¹ is followed by seven sections dealing with the following subjects (the headings are Scharfe's): Phonology (II, 6b-12b, subdivided into: The sounds, Consonants in final position, Consonants in initial position, Phonetic changes within a compound and a sentence, Phonetic changes within the word), Inflection (III, 13a-18a), Composition (IV, 18b-19b), Word formation (V, 20a-32b, subdivided into: The use of determinatives, The use of heterophones, A glance into Pāṇini's workshop), Syntax (VI, 33a-43b), Quotation (VII, 44a-45b), Non-technical formulations (VIII, 46a-47b). The two appendices are: Kātyāyana and Patañjali on Pāṇini's rule VI 1 67 (48), Is the text of the Aṣṭādhyāyī younger than the word lists (gana)? (49-50). Lists of references (51a-52a) and abbreviations (52b), and an index locorum (53) complete the monograph.

Pāṇini used Sanskrit as the medium for stating rules which describe Sanskrit usage. The question arises, to what extent Pāṇini found it necessary in formulating his grammatical rules to deviate from the Sanskrit usage for which he accounted and which he doubtless followed in his own speech. Scharfe attempts to answer this question. His major conclusion is the following. Although it is evident "... that the metalanguage has been modelled after the object language (Sanskrit)" and "even in its perfected state it has not severed all ties with the object language (5b)", nevertheless this metalanguage is indeed only modelled on Sanskrit, from which it differs in important respects.

I shall discuss three major parts of Scharfe's monograph: the evidence adduced to justify positing an indeterminate vowel ρ in the original text of Pāṇini's grammar; the claims made regarding the sounds used as markers (it) by Pāṇini; and the claims made concerning Pāṇini's metalinguistic use of cases. Scharfe's treatment of these subjects is such that a fairly detailed discussion is called for.

The phonology of forms in grammatical rules differs from that of normal Sanskrit in ways that both are obvious and have been noted before.² Consonant clusters occur which are not allowed in Sanskrit, and the rules of Sanskrit morphophonemics – rules

- This is translation of passages, not a theoretical discussion. References: Mahābhā-sya: Kiehorn's edition (volume, page, line); Ud(dyota): Rohatak edition; Kāśikā: critical edition (Hyderabad, 1967-70); Nyāsa and P(ada)M(anjarī): Varanasi edition.
- ² See Studies in Indian Grammarians, I (Philadelphia, 1969), 39b-40a. Henceforth this will be referred to by SIG-I.

which Pāṇini himself formulates in detail – are violated. For example, terms such as $cpha\tilde{n}$ (affix $\bar{a}yana$), $^3k-\bar{n}-it$ 'which has a marker k, n, $^*\bar{n}-n-it$ contain initial clusters which never occur at the beginning of Sanskrit words. $k-\bar{n}-it$ is a compound, and within a compound the normal morphophonemic replacements which occur across a $pada^4$ boundary should apply: $k-\bar{n}$ should yield $g-\bar{n}.^5$ Similarly, $\bar{n}-n$ should yield $\bar{n}-\bar{n}$. A pada-final c should be replaced by k (cf. $v\bar{a}k$, nom. sg. of $v\bar{a}c$ 'speech'). Yet the very first rule of the grammar (1.1.1: vrddhir $\bar{a}d$ aic) contains aic, with -c instead of -k. Scharfe mentions such features (9b-12b, especially 9b, 10a), but this is not new. He does, however, have something new to say in his section on sounds. In order to discuss what Scharfe says it is necessary briefly to describe Pāṇini's use of markers, which he calls it and later Pāṇinīyas also call anubandha. These are used, in general, essentially as are used superand subscripts in written grammars. A unit receives a special marker for the following reasons.

- (A) To indicate that it conditions or undergoes particular operations or belongs to a certain class. For example, the nominal endings ne, nasi, nas (dat., abl., gen. sg.) are marked with n. Before such affixes the -i, -u of certain bases ending in these vowels are replaced by guṇa vowels (7.3.111: gher n-iti [guṇah 108]): agnaye (< agne-e < agni-e, agni 'fire'), $v\bar{a}y$ ave (< ... $v\bar{a}y$ u-e, $v\bar{a}y$ u 'wind'), agneh, $v\bar{a}y$ oh (< agni-as, $v\bar{a}y$ u-as). The same endings receive an initial augment $y\bar{a}$ ($y\bar{a}t$) when they occur after feminine bases in $-\bar{a}$ (7.3.113: $y\bar{a}d$ $\bar{a}pah$): $a\dot{s}v\bar{a}y$ ai (< $a\dot{s}v\bar{a}$ - $y\bar{a}e$ < $a\dot{s}v\bar{a}$ -e, $a\dot{s}v\bar{a}$ 'mare'), $a\dot{s}v\bar{a}y$ ah (< $a\dot{s}v\bar{a}$ - $y\bar{a}as$ < $a\dot{s}v\bar{a}$ -as). The post-verbal affixes $\dot{s}ap$, $\dot{s}yan$ (as in $bh\dot{a}v$ -a-ti 'becomes, is', $d\dot{v}v$ -ya-ti 'gambles') are marked with \dot{s} to indicate that they belong to the class of items called $s\bar{a}v$ adh $\bar{a}t$ uka (3.4.113: tin- \dot{s} -it $s\bar{a}v$ adh $\bar{a}t$ ukam).
- (B) To distinguish homophonous units (viseṣanārtha). The ablative and genitive endings nasi, nas are homophonous (as) and share operations, as noted in (A). However, after a base in -a, nasi is replaced by at (puruṣāt < puruṣa-as, puruṣa 'man'), nas by sya(puruṣasya). They have to be distinguished in the rule (7.1.12: $t\bar{a}$ -nasi-nasām ināt-syāh) which provides for these replacements.
- (C) To allow reference to a group of units by means of a common referent ($s\bar{a}m\bar{a}nya-grahan\hat{a}rtha$). There are two feminine affixes i differentiated by accentual properties of bases formed with them. i_1 is itself low pitched and does not condition any special accentuation in the derivative which contains it; the feminine of $bh\dot{a}vat$ (pres. ptcple. of $bh\bar{u}$) is $bh\dot{a}vant\bar{i}$. i_2 is also low pitched, but the derivative formed with it has high pitch
- ³ Markers (it) appear in Roman type. Certain sounds which appear with items before they enter into grammatical operations are classed as it: a nasalized vowel (1.3.2: upadeśe'j anunāsika it), a final consonant (1.3.3: hal antyam) and others. All its are unconditionally deleted (1.3.9: tasya lopah). A final dental stop, s, m in items called vibhakti are, contrary to 1.3.3., not classed at it (1.3.4: na vibhaktau tu-s-māh). See "Pāṇini's use of the term upadeśa and the ekânta and anekânta views regarding anubandhas", appearing in the proceedings of the Ist International Sanskrit Conference.

 ⁴ A pada is an item terminating in a nominal or verbal ending (1.4.14: sup-tin-antam padam).
- Note that commentators make use of such morphophonemic replacements. For example, ksnu (3.2.139) is interpreted, for reasons not discussed here, as containing the marker g, replaced by k before s; Kāšikā 3.2.139: g-ic câyam pratyayo na k-it.
- In the following, I omit the use of its to close sets of sounds in the śiva-sūtras, thereby allowing the use of abbreviatory terms such as ac 'vowels'. The functions of markers are treated in G. V. Devasthali, Anubandhas of Pāṇini (Poona, 1967); markers used with verb roots are treated in B. Liebich, Zur Einführung in die indische einheimische Sprachwissenschaft, III. Der Dhātupāṭha (Heidelberg, 1920), pp. 35 ff. What Scharfe says about these (20b-26b) adds nothing. Indeed, Scharfe omits discussing an important use of anubandhas, given below under (D).

on its first vowel regardless of the accent of the original base; $a\dot{u}dap\bar{a}ni$ is the feminine of $audap\bar{a}na'$ who has come from Udapāna'. The accentual difference is indicated by markers: i_1 is ip, i_2 is in. The nominative singular ending su is deleted after items containing i_1 or i_2 : bhavanti, $a\dot{u}dap\bar{a}ni$. In order to refer to both affixes at once with a single term, Pāṇini marks them with n: nip, nin. He then refers to them by using the common referent ni (6.1.68: hal-ny- $\bar{a}bbhyo$ dirghat su-ti-sy aprktam hal). There is another feminine affix, i_3 . This is high pitched, so that the derivative formed with it is oxytone; $s\bar{a}rangi$ is the feminine of $s\bar{a}ranga$ 'spotted deer'. This affix is marked with ni for the same reason that nip and nin are so marked: so as to use ni to refer to it and the other affixes i in rules such as 6.1.68. However, if i_3 were simply ni, a rule which stated that an operation applied after a unit ending in ni would now apply only where i_3 occured. For there would now be a single unit ni distinct from nip, nin. In order to allow using ni to refer to all three affixes i, therefore, Pāṇini marks i_3 with a special ii: nis. This s serves none of the purposes served by other markers attached to i. Its sole purpose is avoid eliminating the common term ni (samany-grahanavighatartha).

(D) To prevent classing as it a final consonant which is part of a unit as used. The affix vat (as in brāhmaṇavat 'in the manner of a Brāhmaṇa') is marked with i: vati. If the affix were introduced as vat, -t could be classed as it, hence deleted (see note 3). Pāṇini could formulate special rules providing that the final consonants of certain units are not classed as it. He did just this for certain general classes (see note 3). In the case of vat, however, he would have been required to make a special statement for this unit, since vat is a taddhita affix and there are other taddhitas marked with t for accentual purposes (see note 9); he could not merely say that the -t of a taddhita is not classed as it. Hence, he marked vat with -i. The sole purpose of this marker is to protect the -t of vat from being classed as it and deleted (paritrānârtha).

Markers of types (A)-(D) all serve specific purposes. In other cases units appear in grammatical statements containing appended sounds which, at first sight, do not seem to have any such purpose. According to commentators these serve two ends.

- 7 i_1 and i_2 are affixes (3.1.1: pratyayah). An affix generally has high pitch on its first vowel (3.1.3: $\bar{a}dy$ -ud $\bar{a}ttas$ ca). However, nominal endings and affixes marked with p do not have high pitched vowels (3.1.4: anud $\bar{a}ttau$ sup-pitau). The first vowel of a unit containing an affix marked with \bar{n} or n is high pitched (6.1.197: \bar{n} -n-ity $\bar{a}dir$ nityah). I have simplified for the sake of presentation, and I omit other details of accentual rules.

 8 See, for example, Bhāṣya II.230.21-23 (regarding other affixes).
- ⁹ An affix marked with t has circumflex accent on its last vowel (6.1.185: t-it svaritam), contrary to 3.1.3 (note 7). However, a disyllabic item ending in yat has a high pitched first vowel (6.1.213: yato'nāvaḥ), excepting nāvyà 'which can be crossed by boat'; e.g., osthya 'located at the lips'.
- 10 PM 4.1.2 (III.262): jaso jakāro'sminn eva sūtre 'sandigdhôccāraṇârthah| anyathā hy aukārasyâv-ādeśe sandehah syāt: kim aukārasyôccāraṇam athâv ity asyêti. Kāśikā 1.1.11: ta-para-karaṇam asandehârtham. It is probable that this is not wholly acceptable. A sound i denotes, in Pāṇiṇi's system, only itself (1.1.68: svam rūpam śabdasyâśabda-samjñā). The term it, on the other hand, denotes i-vowels of all varieties (1.1.70: ta-paras tat-kālasya). In 1.1.11, then, it etc. may be used in order to refer to vowels of diffefent accentual varieties. I omit further details, noting only that whether the t of it

- (F) A vowel which occurs with a unit is said to occur only to facilitate pronunciation (uccāraṇârtha, mukha-sukhârtha). Here two types are to be distinguished.
- (F1) A consonant followed by a is used to refer to the consonant itself: ka denotes the sound k. This vowel occurs also in forms of the type $ka-k\bar{a}ra$ 'the sound k'. This is simply conventional Sanskrit usage, and there is no real question of considering a a marker.
- (F2) Vowels occur within grammatical units as they are introduced in the grammar, and such vowels can be considered used for ease of pronunciation. However, this is not the conventional usage of type (F1). The i of sic (s-aorist affix) and the u of suc (affix in forms such as dvis 'twice') are examples.

Consonantal markers of type (E) can be interpreted as serving different purposes (see note 10), but there is no doubt expressed in any commentary about these consonants being it. It is about type (F2) that there is controversy in the commentatorial literature. The basis for possible differences of opinion is, of course, that the original nasalization of vowels to be classed as it (see note 3) was lost early in the Pāṇinīya tradition. The controversy concerns the following points. First, is the vowel in question a marker which actually fills one of the functions noted under (A)-(D) or is it merely a vowel used to facilitate pronunciation? If the latter, does the vowel nevertheless have to be considered an it in order that it be deleted?

Consider a few examples. In varttika 4 on 3.1.44 (cleh sic) the i of sic is considered a marker which serves a grammatical purpose. The third singular agrist of man 'think' is amamsta. The ending ta is a sārvadhātuka which is not marked with p. Therefore, it is treated as marked with *n* (1.2.4: sārvadhātukam ap-it [n-it 1]). At the derivational stage amansta, then, the presuffixal base (anga) amans¹² occurs before an affix treated as marked with n. Before an affix so marked, the penultimate n of a consontant-final base is deleted if the latter is not marked with i (6.4.24: anid-itām hala upadhāyāh k-n-iti [na-lopah 23]); e.g. sras-ya-te 'falls' (< srans-yan-te). If sic were not marked with i, amans-ta would yield *amasta. Once sic is marked with i, however, the presuffixal base containing it is so marked and 6.4.24 does not apply to delete its penultimate n.¹³ In vt. 5 on 3.1.44 this reasoning is rejected. Pāṇini formulates a rule (1.2.14: hanaḥ sic [k-it 5]) whereby sic is treated as marked with k after the root han 'strike, kill'. This is done so that the -n of han be deleted before sic (by 6.4.37: anudāttôpadeśa-vanati-tanotyādīnām anunāsika-lopo jhali k-n-iti) in forms such as āhata (3rd sg. med.-pass. aor. $<\bar{a}ha-s-ta<\bar{a}han-s-ta$). The stage $\bar{a}han-s-ta$ is parallel to aman-s-ta. If 6.4.24 could apply to delete the n of amans, it would also apply to delete the n of āhans, so that Pāṇini would not have formulated 1.2.14. That he did indicates that 6.4.24 does not apply in such cases.¹⁴ Further discussion ensues which is too complex to summarize here. In the present context it will suffice to note that the Kāśikā on 3.1.44 explicitly says the i of sic is used only to facilitate pronunciation: ikāra uccāranârthah. Commenting on this, Haradatta notes that i is thereby considered not to be an it: na tvanubandhah (PM II.430). The Kāśikā on 7.1.58 also directly states that the i of sic is not an anubandha, since there is no operation associated with i-marking in the derivation

etc. is a true it is moot. Note also that Scharfe (13b) accepts without further ado the view that the -t of it etc. is used to avoid confusion: "The reason is evidently an intent to facilitate the inflection, or to avoid undesirable alternations by sandhi (as in I 1 11 ...)."

Pāṇimyas recognize nasalized vowels which are markers through the instruction given by teachers and by inspection of rules.

¹² An aṅga is defined as follows (1.4.13: yasmāt pratyaya-vidhis tad-ādi pratyaye' ṅgam): given a unit X after which an affix A is introduced, the unit Y beginning with X and followed by A is aṅga.

^{18 3.1.44} vt. 4: id-it-karanam nakāra-lopābhāvârtham.

^{14 3.1.44} vt. 5: na vā hanteh sicah k-it-karanam jñāpakam nakāra-lopâbhāvasya.

of forms containing this affix. It adds that the -i of tāsi (affix of the future type kartā 'will make, do') also is pronounced without nasalization and serves only to facilitate pronunciation: tāsi-sicor id-it-kāryam nāstīty uccāranārtho niranunāsika ikārah paṭhyate. This is of interest because the Kāśikā on 3.1.33 (sya-tāsī lṛ-luṭoḥ) says that tāsi is marked with i for the reason given in vt. 4 on 3.1.44 regarding amamsta; the deletion of n in mantā 'will think' 3rd sg.) is thereby prevented: id-it-karanam anunāsika-lopa-pratisedhārtham.¹⁵

The examples given bring into focus the differences of opinion regarding type (F2). A particularly interesting case is the affix thamu, used in forms such as ittham 'thus' (5.3.24: idamas thamuh). Unlike vati considered earlier, thamu belongs to the class of affixes called vibhakti (5.3.1: prāg diso vibhaktih). The final -m of a vibhakti is not classed as it (see note 3), so that the -u of thamu does not appear, at first sight, to be of type (D). Patañjali and later Pāṇinīyas nevertheless argue that u is indeed here used to protect the m of tham from being classed as it and deleted. Patañjali claims that, by so marking tham, Pāṇini indicates that 1.3.4 (see note 3) does not apply in the case of vibhaktis which are taddhita: ācārya-pravṛttir jñāpayati na vibhaktau taddhite pratisedho bhavatīti yad ayam idamas thamur iti makārasyêt-samjñāparitrāṇārtham ukāram anubandham karoti (Bh. I.262.22-23, ad 1.3.4). I do not discuss here whether this is justified.

As I have noted, the second point of controversy is whether vowels or consonants used only for the sake of pronunciation are to be classed as it in order to be deleted. The Kāśikā on 7.1.58 clearly states that the i of sic, $t\bar{a}si$ is not to be considered an it. The argument that a sound is not classed as it because there are no operations associated with this also appears in the Mahābhāṣya (e.g., I.262.24). Nāgeṣa, on the other hand, maintains that a sound used to facilitate pronunciation is to be classed as it: $ucc\bar{a}ran\hat{a}rth\bar{a}n\bar{a}m$ aptitvam asty eva (Ud. II.215).

There are good reasons for taking this stand. The sounds in question are not parts of items as actually used, and this is true of its. Further, markers are deleted by a rule of the grammar (see note 3), and there is no other rule whereby one could delete sounds used for ease of pronunciation; Ud. II.215: kim ca tad-abhāve [i.e., ittvâbhāve] uccāritasya nivṛttiḥ katham syāt ... The question now is whether, once the sounds in question are classed as it, operations apply which yield wrong results.

These operations concern only one marker: u. The sound a is used as a marker with consonant-final roots (e.g., $\bar{a}sa$ 'be seated', dupacas 'cook') in order to account for the proper distribution of parasmaipada and $\bar{a}tmanepada$ endings: $\bar{a}s$ is marked with a low pitched a, so that $\bar{a}tmanepada$ endings occur after it ($\bar{a}ste$ etc.) when an agent is signified; pac is marked with a circumflex vowel to show that both types of endings occur with it (pacati, pacate). a occurs also with affixes (e.g., akac, see below), where it is considered to be used for ease of pronunciation. However, there are no operations associated with a-marking which could apply here. This is true also of i. This anubandha is used with roots (e.g., dhivi 'nourish') to indicate that they receive the augment n after their last

- ¹⁵ Jinendrabuddhi notes that there is no internal conflict between the comments on 3.1.33 and 7.1.58; the former is Jayāditya's, the latter Vāmana's. Nyāsa 3.1.33 (II.410): nâsti virodhaḥ bhinna-kartṛkatvāt/ idam hi jayāditya-vacanam tat punar vāmanasya.
- ¹⁶ An interesting case concerns the unit asun, which replaces the final sound of pums 'man, male' before sarvanāmasthāna endings (7.1.89: pumso'sun). The replacement can be considered marked with u so that pumas be subject to n-infixation (7.1.70, see below): pumān (nom. sg.). Nyāsa 7.1.89 (V.633): ukāra ug-it-kāryârthah. However, if pums is itself considered derived from a verb through affixation with dumasun, itself marked with u, then the u of asun is considered used only to facilitate pronunciation; PM 7.1.89 (V.633): ukāra uccāranârthah ... pums-śabdasyôg-ittvān num sa hi pūño dumasun iti vyutpādyate.

vowel in all contexts (7.1.58: id-ito num dhātoh): dhinv. The only places where i can possibly be considered attached to affixes in order to allow certain operations are sic, $t\bar{a}si$, which were discussed above. In all these cases, as also in the type (D), we can speak of a neutral use of markers with respect to true grammatical operations.

Now, u is attached to affixes and this marking is associated with grammatical operations. A derivative base which contains such an affix receives the augment n after its last vowel before endings called sarvanāmasthāna (7.1.70: ug-id-acām sarvanāmasthane'dhatoh [num 58]). If the affix ends in at, the penultimate a of the base containing it is replaced by \bar{a} before the nominative singular ending su (6.4.14: atv-as-antasya câdhātoh [sau 13, upadhāyāh 7]). 17 For example, matup is marked with u and ends in at: gomān (nom. sg.) 'rich in cows', gomantam (acc. sg.), gomatā (instr. sg. without n since the ending \bar{a} is not sarvanāmasthāna). Concerning forms such as gomān, the following is to be noted. The nominative singular ending su (gomat-s) is deleted after gomat, since the base ends in a consonant (6.1.68). Nevertheless, gomat-Ø is eligible for the operations stated in 6.4.14 (gomat \rightarrow gomāt) and 7.1.70 (\rightarrow gomāt). For 1.1.62 (pratyaya-lope pratyaya-laksanam) provides that, when an affix is deleted (pratyaya-lope 'when there is zero replacement of an affix'), the operation which it conditions still takes effect (pratyaya-lakṣanam '[the operation] which has an affix as a characteristic [i.e., condition]'). There is another rule (1.1.63: na lumatângasya) which negates this; if an affix is deleted and the zero replacement is denoted by a term containing lu (e.g., luk), the operation which the affix would have conditioned on its presuffixal base (anga) does not apply. The nominative and accusative singular endings su, am are replaced by luk after a neuter base (7.1.23: sv-amor napumsakasya [luk 22]). The base gomat does not, therefore, receive the augment n when it is neuter, since the zero in gomat- \emptyset (< gomat-s/am) is a luk-replacement.

Let us now consider the affix āmu. According to commentators, this is marked with u for the same reason that nasi is marked with i: to differentiate it from a homophonous unit, the genitive plural ending ām. 7.1.54 (hrasva-nady-āpo nut [āmi 52]) lets ām receive the initial augment n after a base which ends in a short vowel (and others not important here): puruṣāṇām < puruṣa-nām < puruṣa-ām. āmu is affixed to certain units ending in the affixes tara, tama (5.4.11) to form indeclinables of the type uccaistarām 'quite high up'. At the stage uccaistara-ām, the -a of uccaistara should be deleted before am, which is a taddhita (6.4.148: yasyêti ca). The base which precedes am ends in a short vowel. Hence, unless the ām of uccaistara-ām is distinguished from the genitive ending ām, 7.1.54 could apply to yield *uccaistaranām. Therefore, āmu is specially marked. 18 Once this is done, one has to consider a possible problem. uccaistarām is an indeclinable (by 1.1.37), after which a nominative ending is introduced and deleted; see Issues in Linguistics (Kahane Festschrift, Urbana, 1973) 85-98. One might suggest that this item could receive the augment n, as in goman. This would result in a form *uccaistarān (< uccaistarānm, 8.2.23). This is, however, not possible. Since uccaistarām is classed as an indeclinable (avyaya), the nominative ending introduced after it is deleted by a special rule, 2.4.82: avyayād āp-supaḥ (luk 58). The zero replacement is luk; therefore, 1.1.63 applies, so that there is no possibility of introducing the augment n.

The same is true of forms derived with the affixes namul, tumun; e.g., pāyam pāyam (3.4.22) 'after repeatedly drinking', kartum (3.3.10) 'to do'. These post-verbal affixes

¹⁷ I omit discussion of 6.3.45.

¹⁸ PM 5.4.11 (IV.333): ud-it-karanam kim/ āmi sarvanāmnah sud ity atra sāmānya-grahanam mā bhūt ... paratvād yasyêti-lopam bādhitvā hrasva-nady-āpa iti nuṭ prasajyeta ... The argument depends on assuming that 1.4.2 operates everywhere in the grammar. This is, however, not justified; see Journal of Indian Philosophy 1.40-74 (1970). Hence, it is plausible to consider that the u of āmu is a marker of type (D).

are members of the krt class (3.1.93: krd atin). A unit ending in a krt affix which itself ends in m is classed as an indeclinable (1.1.39: krn m-ej-antah [avyayam 37]). The ending introduced after $p\bar{a}yam$, kartum is therefore deleted by 2.4.82. Consequently, 1.1.63 applies, so that the augment n cannot be introduced.

In such cases we may speak of the neutral use of a marker, whether this is considered necessary to protect a final sound from being classed as it (see note 18) or for the pronunciation of an item (namul, tumun): the sound in question is classed as it in order that it be deleted, but this does not provoke any grammatical operations. Particularly good examples of the neutral use of vowel its are the L-members (abstract symbols replaced by finite verb endings and participial affixes) lat, lan, lit, lin, lut, lun, lrt, lrn, let, lot. The vowels contained in these are classed as it, but there are no operations stated in the grammar associated with these particular markings in these units. Similarly, the u of inun is neutral. This is introduced after a root (3.3.44) to derive an item such as sāmrāvina 'shouting from all sides'. However, the item ending in -in is automatically followed by an (5.4.15), as shown. Since the item in -in never occurs immediately before a sarvanāmasthāna ending, 7.1.70 cannot apply. 19

Consider now a different type. A sound followed by the marker u is made a term which denotes a class of sounds (1.1.69); for example, ku denotes all velar stops (k, kh, g, gh, n). Recall rule 7.1.54, which applies in the derivation of puruṣāṇām. This should introduce the initial augment n. If the u of nut is considered an it, one might now say that nu could denote all dental stops, so that 7.1.54 would allow *puruṣa-tām etc.²0 However, Pāṇini himself shows that this is not so. His rule 6.4.3 (nāmi) states that the final vowel of a presuffixal base is replaced by a long vowel before nām (puruṣāṇām < puruṣa-nām). He could not have made this statement unless the term nuṭ of 7.1.54 denoted only the initial augment n.

From the above one can justifiably say the following. The markers i (hasi, vati), u ($\bar{a}m\mu$) are used to distinguish homophonous units and to protect final sounds from classification as it. These markers so used are neutral with respect to grammatical operations such as affixation and augmenting. The same can be said of sounds which are considered to have been used only to facilitate pronunciation.

With this background, let us now consider Scharfe's contribution. He notes the "remarkable vacillation" (8a) of vowels in units such as sic, suc and also the occasional lack of an ending in forms such as ka used to refer to sounds. He says (7a), "I have come to believe that the metalanguage had yet another sound which could only unsatisfactorily be presented [sic] in the Devanāgarī script: a very short vowel of an unspecified character which I write as a." Of this vowel Scharfe says (7b), "The question is whether we can call this sound a phoneme: its only function is to facilitate the pronunciation. It may well be that the author was not even aware that he used it". Scharfe continues (7b): "When Pāṇini's grammar was put down in writing, scholars were apparently uncertain as to how they should denote this sound. In many instances they did not write any vowel at all: k-n-iti (1.1.5), 1 n-d-rāḥ (5.1.3), ch-voḥ (6.4.19), h-m-y-anta (7.2.5), r-voḥ (8.2.76), n-noḥ (8.3.28), s-tuna (8.4.41) etc. The reason is evident – these combinations containing consonants other than stops could be spoken

¹⁹ The above discussion is not intended as complete (cf. note 17). I have not, for example, gone into problems associated with the u of the affix ghinun and discussed in the Bhāsya on 3.2.141.

Scharfe (8b) considers that if the u of tuk (final augment) were considered an it, this would allow adding an augment d, n etc. instead of t alone. He does not, however, fully discuss the question.

²¹ I have modified Scharfe's transliteration for typographic ease. I have also substituted Arabic for Roman numerals in references to rules given by him. These modifications will apply in subsequent citations from Scharfe.

without an auxiliary vowel; it is likely that Pāṇini himself pronounced them that way". Later (10a), Scharfe also mentions "some unusual initial combinations", including a "very peculiar feature": an initial cluster of stops, as in cphañ.

I think Scharfe's thesis can be summarized correctly as follows. To permit the pronunciation of certain items in certain environments an auxiliary vowel was used to break up consonant clusters. This vowel was of indeterminate quality, and Pāṇini himself was probably unaware he uttered it. The vowel was later represented in script by a, i, u. Nevertheless, there are clusters such as cpha \tilde{n} , where, to judge from the written text, no auxiliary vowel was used.

This last point introduces some confusion into the argument. There are additional weaknesses in Scharfe's thesis. Scharfe considers (8b-9a) that the u of an affix such as namul represents ∂ because, "None of the rôles of the determinative \tilde{u} seems rightly applicable ..." to it: "That would leave us with determinatives without indicative function." He nevertheless has to consider that the vowels of the L-members lat, lit etc. are anubandhas, not representatives of original a. As he says (26b), "Such an interpretation is not only excluded by the nature of /e/ and /o/ as long vowels, but also and mainly by the systematic way in which these vowels are used to differentiate the technical names for tenses and moods." Since there are no particular grammatical operations associated with the anubandhas a, i, u etc. of these affixes, Scharfe has here accepted the neutral use of vocalic markers. This means his argument concerning the u of namul is not valid. Consider also the following. According to the thesis as presented, the auxiliary vowel a - which Scharfe claims Pāṇini was possibly not aware of pronouncing - should occur only in very particular phonologic environments. Although Scharfe has not discussed the final vowels of units such as vati, I take it for granted he could not consider the -i of vati a representation of ∂ . The genitive singular of vati is vateh (5.1.18), a regular i-stem genitive. It would be absurd to claim that Pāṇini was not aware of the relation between the nominative vatih (5.1.115) and the genitive vateh. Now Scharfe (9a) considers the u of inun to represent original ∂ . The ablative of inun is inunah (5.4.15), a regular consonant-stem ablative-genitive of the type -duhah. According to Scharfe's thesis, one would expect instead a form *innah, since this ablative occurs in a phonologic environment which does not require the auxiliary vowel a. To keep this thesis intact one would now have to argue that scribes carried the u of inun over to the ablative inunah. But this is begging the issue. The major problem lies in the claim that a was a totally indistinct vowel and that Pāṇini probably was unaware he inserted it.

I consider Scharfe's suggestion that there was such a mysterious vowel ∂ recited in the text of Pāṇini's grammar to be unproved. Scharfe has taken the path of least resistance with regard to the materials by simply positing a new entity. A reasonably close look at these materials raises serious doubts about the validity of this proposal and the method by which Scharfe arrived at it. I claim no finality for the suggestions I have made above; a review is hardly the place to set forth a detailed discussion of all the evidence. I do think that the answer lies in the direction indicated.

Scharfe deals also with the organization of the sound list which preceeds Pāṇini's grammar (the śiva-sūtras) and about the sounds used therein as anubandhas (20a, 28b-30b). After listing the traditional catalog of stops in five five-membered groups (varga), Scharfe says (20a), "Pāṇini adjusted this purely phonetic scheme to the needs of his grammar; instead of reading the paūca-vargas horizontally and from left to right, he read them vertically from top to bottom, starting at the right side." Concerning the sounds used to close sets of sounds within the śiva-sūtras, Scharfe (following Breloer, see reference on p. 28b, note 45) accepts the following reasoning (29a). Many sounds were not used because of their susceptibility to contextual sandhi modifications: "He [Pāṇini] found, that many sounds are more or less disqualified due to their changes in sandhi: aspirate and voiced stops could not, in final position, be told from non-

aspirate and unvoiced stops; /h/ could not stand in any final position; vowels are too much subject to mergers in a sentence." The number of available sounds was further reduced, continues Scharfe, because t was chosen to form terms like at, at (denoting all short and long a-vowels respectively). Moreover (29a), "/n/ and /s/ are in Sanskrit subject to many sandhi changes".

This marks a definite retrogression in our knowledge of Pāṇini. The inquisitive scholar will ask why Pāṇini had to "read" the traditional sound catalog in the upsidedown fashion noted. Scharfe does not enlighten us on this, preferring to refer to antiquated studies which simply said what he repeats. A reason for Pāṇini's reorganizing the traditional sound catalog has been proposed (see SIG-I, §6), and the weaknesses of the suggestion which Scharfe accepts unquestioningly have been demonstrated (SIG-I, §5.1). Usual procedures of scientific discussion would require that Scharfe demonstrate in detail how the recent proposals are unacceptable and how the proposals he accepts avoid pitfalls encountered by others. This he does not do.²² He states baldly what he considers a truth. The arguments given concerning the sounds available to Pāṇini for use as markers are also far from satisfactory, as has been demonstrated before.²³ If Pāṇini had avoided using certain sounds as anubandhas merely because of their contextual replacements, we should not expect him to use s or s; cf. vit 'settlement' (nom. sg. of vis), dvit 'who hates' (nom. sg. of dvis). Yet Pāṇini did use these sounds as final markers; e.g., 8.4.53: jhalām jaš jhaši, 8.2.37: ekâco bašo bhas jhas-antasya s-dhvoh. It is true that h cannot stand in final position in Sanskrit. It is also true that pada-final c is replaced by k. Yet Pāṇini used c as a final marker in the śiva-sūtras and elsewhere. If Pāṇini's using t as a special symbol elsewhere in the grammar is the basis for his not using this sound as a marker in the śiva-sūtras, it is remarkable that k, c and others are used both in the śiva-sūtras and elsewhere as markers. In sum, I think the approach adopted by Scharfe is totally unacceptable. Scharfe has accepted this approach without question. But he has failed to demonstrate that he was justified in doing so.

The section on syntax is, in my opinion, the most important part of this monograph. It is in syntax that, according to Scharfe, Pāṇini has most significantly departed from normal Sanskrit usage. The section begins (33a): "Pāṇini has redefined the meanings of three cases, making them the basis of his syntax: the genitive (1.1.49), the locative (1.1.66) and the ablative (1.1.67). The nominative and the rare instrumental have values identical with those of the object language and, therefore, need no new definition. The meanings of the genitive, ablative and locative, though derived in some way from those these cases have in the object language, are so special and so technical, that new definitions were necessary." "The rôle of the genitive is defined" (33a) by 1.1.49 (sasthī sthāne-yogā), which Scharfe translates (33a), "A genitive is to be construed with a [supplied] sthane ('instead [of ...]', 'in place [of ...]')". (brackets and parentheses Scharfe's). He goes on to note (33b), "the technical use of the genitive is skillfully derived from the object language". Scharfe then tells us (33b), "The new value of the ablative is established by Pān 1.1.67 tasmād ity uttarasya 'When something is enounced in the ablative, it means (i.e. the procedure refers to) that which follows'. The technical locative has the opposite meaning: Pān 1.1.66 tasminn iti nirdiste pūrvasya 'When something is enounced in the locative, it means (i.e. the pro-

²² Scharfe does, however, refer to SIG-I in note 5 on page 20. Note that the explanation given by Scharfe (29b-30a) concerning the sounds used as final markers in the śiva-sūtras is remarkably similar – indeed almost identical – with the one given in SIG-I, 40-41, although Scharfe does not refer to this.

²³ See SIG-I, §§7-7.1. I hasten to add that I apologize to the spirit of Breloer for having missed one of his articles on the question discussed. However, I must also add that Breloer's arguments do not, I think, differ essentially from those considered in SIG-I, although Scharfe uncritically accepts Breloer's position without question.

cedure refers to) that which precedes'. It is mainly in the metalinguistic treatment of suffixes and augments, that these technical cases are important: a suffix A is added after a root X, an accretion B is added to a root Z before a suffix Y."24 Scharfe informs us (33b, note 11) that these translations are in accord with what is said in the Kāśikā, 25 but that he himself has a different interpretation of these rules. Scharfe approaches this second interpretation of 1.1.66, 67 circuitously. On page 36b, he translates a small part of a Mahābhāṣya passage in which a particular view is espoused. The Bhāṣya discussion concerns rules 3.1.68 (kartari śap [sārvadhātuke 67]), 3.1.69 (div-ādibhyaḥ śyan), and subsequent rules which introduce post-verbal affixes in the derivation of presential forms. 3.1.68 provides that sap is introduced after a root26 when this is followed by a sārvadhātuka ending which has been introduced to denote an agent. 3.1.69 introduces syan under the same condition after roots of the group div etc. The proposal is made²⁷ that syan and other affixes introduced by subsequent rules be made replacements of śap. 28 3.1.69 should then state: div-ādibhyaḥ śapaḥ śyan ('After div etc., śyan in the place of sap.'), with the substituend genitive (1.1.49) sapah. This genitive is obtained by letting the nominative sap of 3.1.68 carry into 3.1.69. In the latter rule, 1.1.67 applies to interpret the ablative div-ādibhyah: 1.1.67 serves to convert the nominative sap to the genitive sapah. Under this interpretation, then, 1.1.66, 67 serve to convert nongenitive forms to genitives. This entails reading 1.1.66 tasminn iti nirdişte pūrvasya şaşthī, 1.1.67 tasmād ity uttarasya sasthī, with sasthī understood as recurring from 1.1.49. Scharfe cites the Bhāṣya passage noted and approves of the proposal made therein: "This rule (tasmād ity uttarasya) states, that an element in the ablative determines the following element as the substituendum: properly marked by a genitive ending. This model changes the nominative sap to a genitive *sapah (36b)." Indeed, he takes pride in ostensibly following Patañjali and somewhat haughtily disagrees with another view (36b, note 24): "It is evident that I, in following Patañjali, do not agree here with..." However, a bit later (38) Scharfe modifies his view. He notes that interpreting 1.1.66, 67 as containing sasthi carried over from 1.1.49 is difficult: "sasthi would continue not in direct line from 1.1.49 to 1.1.66, 67 - it would have to jump over the rules 1.1.50-65, in which it has no place. Besides, it creates difficulties for the suffix rules, which can be disposed of only with highly sophisticated argumentations (38b)." Scharfe then considers the Pāṇinīya view, namely that in 1.1.66, 67 one is to understand kāryam

exception (apavāda) to 3.1.68.

²⁴ Emphasis Scharfe's. I have substituted Italics for the boldface of the original.

The Kāśikā glosses 1.1.66 as follows: tasminn iti saptamy-artha-nirdeśe pūrvasya kāryam bhavati nôttarasya. According to the Kāśikā, then, tasminn iti refers to what is denoted (artha) by any locative form (tasmin, loc. sg. of tad used as a variable). Further, the Kāśikā emphasises that an operation (kārya) applies to what precedes that which is denoted by a locative, not what follows it. This is in accord with what is said in the Bhāṣya. I do not think Scharfe has fully grasped what the Kāśikā is driving at. Certainly Scharfe's subsequent suggestions (see below) show a disregard for the subtleties of what the Pāṇinīyas say. He has also not understood the import of Pāṇinī's using iti in 1.1.66, 67, as is clear from Scharfe's discussion of quotation (44a-45b, especially 45a). I reserve discussion of this for another occasion.

 $^{^{26}}$ 3.1.68, 69 come under the heading of 3.1.1. (see note 7), so that śap, śyan are affixes. By virtue of the heading 3.1.2 (paraś ca), all affixes occur after units unless a particular provision to the contrary is made (e.g., akac, see below).

²⁷ Bhāṣya I.86.20 (and elsewhere): sab-ādesāh syann-ādayah karişyante. Scharfe cites four lines beginning immediately after this. He also does not consider the full context in which this claim is made. This is discussed in some detail in the paper, "On Pāṇini's metalinguistic use of cases", appearing in the Charu Deva Shastri Felicitation Volume.

²⁸ The finally acceptable view is that syan blocks the introduction of sap: 3.1.69 is an

'operation'. He says (38b), "kāryam offers no such problems [as does understanding sasthi to recur from 1.1.49], but it is arbitrary: it does not occur in any preceding rule, from where it could be taken to 'continue'. To me a metalinguistic genitive after 1.1.49 looks best for 1.1.66, 67, but this is not the place to go into so complex a problem." (bracketed suppletion mine, G.C.) In note 40 of page 38b, Scharfe suggests that 1.1.67 applies correctly in affixation rules, so that an affix is introduced as a replacement of zero. For example, 3.1.5 (gup-tij-kidbhyah san), which introduces san to form derived roots such as jugupsa 'shrink from', is translated by Scharfe as follows: "The suffix san [is added] after the [roots] ... [instead of what originally followed] (i.e. nothing)." He finds this "quite unobjectionable".

If I understand Scharfe correctly, his conclusions are the following. 1.1.49, 66, 67 define metalinguistic values of the genitive, locative, and ablative which, though they derive in some unspecified way from normal Sanskrit usage, are totally distinct from the values of these forms in the object language. pūrvasya, uttarasya of 1.1.66, 67 are substituend genitives; Scharfe considers this the best interpretation although he shrinks from discussing "so complex a problem". Finally, 1.1.67 applies in affixation rules: these affixes are introduced as replacements of zero.

A further conclusion reached by Scharfe is this: although Pāṇini does indeed use the case forms mentioned with the values they have in Sanskrit, this usage is not correct with terms proper to the metalanguage. Scharfe says (34a), "Such non-technical employment of the cases should not occur with technical signs; in fact, they are extremely rare: the locative matau 'in the meaning [of the suffix] -mat occurs twice..." In addition (35a), "When technical terms and works taken from Sanskrit are joined in one sūtra, we have a mixed syntax: cases following Pāṇini's metarules and cases following Sanskrit practice...." In the case of nouns borrowed from Sanskrit and given technical meanings, "they follow in their inflected forms freely the syntactic rules of the object language or the metalanguage (35a)".

I have noted that Scharfe has to admit of the nontechnical use of the locative in cases such as matau. His conclusions cause him other problems. I shall note a few of these with Scharfe's suggestions. 7.1.88 (bhasya ter lopah [pathi-mathy-rbhukṣām 85]) provides that the ti29 of the items pathin 'path', mathin 'churning stick', rbhuksin (a name) is replaced by zero (lopa) if these units are bha;30 for example, pathā (instr. sg.) < pathin-ā. bhasya is the genitive singular of the technical term bha. Nevertheless, 7.1.88 is readily understood only if bhasya is not interpreted as denoting a substituend (1.1.49). Speaking of this and another rule, Scharfe says (34b), "How would it be, if we applied the rule of the metalanguage? 'Disappearance of bha, for the last vowel plus any consonant that might follow'. ... We have in each sutra not one, but two genitives naming the substituendum; but the first ones (bhasya ...) are not precise." He then suggests interpreting 7.1.88 as stating, "Disappearance of bha [i.e. more precisely] for the last vowel plus any consonant that might follow", and says, "This interpretation avoids the assumption of technical terms being used in non-technical cases. But it implies, that Pāṇini used his technical genitive without the usual precision." Later on the same page (34b) Scharfe tells us, "These few non-technical cases of metalinguistic terms are best regarded as slips, violating the style and system of the metalanguage." Scharfe (34b) also considers slips the locatives in rules 1.4.105, 107.31 He says (35a),

ti denotes that part of a unit which begins with its last vowel (1.1.64: aco'ntyâdi ti).
 bha denotes a unit which occurs before a certain set of affixes beginning with a vowel or y (1.4.18: y-aci bham).

^{31 1.4.105:} yuşmady upapade samānâdhikarane sthāniny api madhyamaḥ, 107: asmady uttamaḥ. See IIJ 12.229 (1970). These rules are discussed in some detail in the paper, "On the interpretation of Pāṇini 1.4.105-108", appearing in The Adyar Library Bulletin. On upapada see IIJ 15,1 [1973] (review of Katre, Dictionary of Pāṇini, re p. 123),

"Two explanations are possible for these two locatives: yusmady upapade and asmady [upapade] might be taken as imitations of the locativus absolutus of the object language ('when yusmad resp. asmad is an upapada'), or the locatives denoting an upapada are extended incorrectly from that special metalanguage of the upapada section (3.1.92-3.4.117), where the locative has this special meaning ... – but then the word upapada would look rather superfluous."

The whole of a later section (VIII, 46-47) is devoted to nontechnical formulations. I choose one example from this section, concerning which Scharfe says (46a), "It is more difficult to find the reason for the formulation of..." The rule in question is 5.3.71: avyaya-sarvanāmnām akac prāk teh '(The element) akac (, classed as affix, is added to) indeclinables and pronominals (, and it occurs) before the ti (of these units, not after them)' see notes 26, 29. Scharfe's comment on this rule is (46a): "Would *avyaya-sarvanāmnām akac ṭau '|ak| is added before the last vowel of indeclinables and pronouns' be materially different? To me it appears more as a question of style, which stresses |ak| as an exception to |ka| taught in a previous rule, occurring only in a limited field. The statement that this |ak| is not suffixed but infixed before the last vowel, comes only as a corrective, an afterthought."

These then are Scharfe's conclusions regarding Pāṇini's use of the metalinguistic syntax he is supposed to have invented. According to Scharfe, Pāṇini sometimes violates the style and spirit of this metalinguistic syntax and makes statements which include mere afterthoughts, statements which could as well be expressed otherwise in terms of his own metalanguage. At the same time Scharfe accepts (47b) L. Bloomfield's opinion that Pāṇini's grammar is one of the greatest monuments of human intelligence. I find these two views hard to reconcile. I submit that Bloomfield was correct and that Pāṇini did not commit the blunders Scharfe finds it necessary to attribute to him.

Let us begin the evaluation of Scharfe's claims with a brief outline of some of the Sanskrit case uses for which Pāṇini accounts. ³² One use of the genitive is relevant in the present context. A genitive ending is introduced after a nominal base when there is to be denoted a relation which holds between what that base denotes and something else other than an action (2.3.50: saṣṭhī śeṣe); e.g., putrasya pitā 'father of the son', vṛkṣasya śākhā 'branch of a tree'. For the locative two uses are to be noted. A locative ending is introduced after a nominal base if a locus is to be denoted (2.3.36: saptamy adhikarane ca); e.g., grāme vasati 'is staying in the village'. Such an ending also occurs after a base if what is denoted by the latter is involved in an action which characterizes another action (2.3.37: yasya ca bhāvena bhāva-lakṣanam); e.g., brāhmaneṣv adhīyāneṣv āgatah 'He arrived while the Brāhmanas were studying'. For the use of the ablative only one rule need be considered. An ablative ending is introduced after a nominal base construed with certain items, among them words which denote directions (2.3.29: ... dik-śabda ... yukte [pañcamī 28]); e.g., pūrvo grāmāt parvatah 'The mountain is east of the village'.

Sanskrit is the language used by Pāṇini in his grammar. The student of this grammar is assumed to know Sanskrit, to have a full knowledge of the uses accounted for by the rules noted. Pāṇini does not have to describe to a student of his treatise the syntactic patterns the student knows. Now consider the following sentence types and examples.

- (a) tasya₁ tasya₂ ... tat
- (b) tasmin tat
- (c) tasmāt ... tat

where, however, kumbha + acc. should of course be kumbha + gen. and *kumbhān kārah should be *kumbhānām kārah. The reader is asked to correct these inadvertent errors.

32 The following is a brief exposition of what is dealt with fairly thoroughly in the paper alluded to in note 27. Full textual evidence is given in this paper, so that I do not think it necessary to give citations here.

- (a1) mama pituh samipe devadattah 'Devadatta is near my father'.
- (a2) mama pituh sthāne'ham atra 'I am here in place of my father'.
- (b1) kūpe devadattah 'D. is at the well'.
- (b2) āgate devadatte gato'ham 'I left when D. arrived'.
- (c1) grāmāt pūrvah parvatah
- (c2) grāmād uttarah parvatah 'The mountain is north of the village'.

Note that two genitives occur in (a1), (a2): mama 'my', pituh 'of father'. Only the latter is construed with an item which fills the blank in (a). Let us call forms such as mama, pituh, which are respective values of tasya₁ and tasya₂ in (a), bound and unbound genitives respectively. Note also that (b1), when it has the meaning shown (and not '... is in the well'), does not convey where precisely Devadatta is relative to the well, whether to the east, west, north, or south of it.

Consider now the following grammatical statements.

(1) 1.4.80: te prāg dhātoḥ

(2) 1.4.105: yuşmady upapade samānâdhikarane sthāniny api madhyamah

(3) 6.4.34: śāsa [upadhāyā 24] id an-haloḥ

(4) 6.1.77: iko yan aci(5) 3.1.91: dhātoḥ(6) 8.1.28: tin atinaḥ

(1) is immediately understandable from one's knowledge of Sanskrit: they (the items classed as upasarga and gati by previous rules) occur before (prāk) a root (dhātu). The ablative dhātoh is construed with prāk in accord with the normal syntactic pattern accounted for by 2.3.29. (2) also is immediately understandable: the verb endings called madhyama occur when the L-member which has been replaced tentatively by any finite ending denotes the same thing (samānādhikaraṇa) as a potentially used (sthāniny api) cooccurring item (upapada) yusmad. The other sentences are not immediately susceptible of a unique interpretation: they are not really full sentences. (3) is like (a1), (a2) in that it contains both a bound and an unbound genitive. The relation signified by the genitive ending of śāsaḥ is obvious: a penultimate sound (upadhā) is part of a unit. However, (3)6.4.34 does not immediately tell the reader what relation holds between this penultimate sound of \dot{sas} ('instruct') and i (denoted by it). (4) is similarly incomplete. The rule does not directly state what relation holds between the vowels i, u, r, 1 (denoted by ik, gen. ikah) and their corresponding semivowels (denoted by yan). In both cases one could, from one's knowledge of Sanskrit, supply samipe, sthane as in (a1), (a2) or some other relational item in order to complete the sentences. There is an additional obscurity. The locative aci is immediately interpretable as denoting loci. It is also true that the only locatival relation which obtains between linguistic items is contiguity. However, one does not know from (4) whether the operation stated applies before or after contiguous vowels (ac). Rule (6) requires a suppletion in order to be fully understood. One could, then, understand either atinah pūrvas tin 'a form terminating in a verb ending (tin) and which precedes a form terminating in a nonverbal ending (has no high pitched vowel)' or atinah paras tin 'a form terminating in a verb ending and which follows ...'; cf. (c1), (c2). Similarly, one does not directly understand from (5) whether the units introduced by subsequent rules are to occur after a root or before a root.

Clearly, if a Sanskrit speaker were left to understand such rules without further rules to guide him in interpreting them, he would be at a loss. Pāṇini supplies such rules. (5)3.1.91 is stated in a section of the grammar headed by 3.1.1. Within this section another heading is in force, 3.1.2 (see note 26): a unit introduced and classed as affix (pratyaya) occurs after (para) that to which it is introduced. The ablative dhātoh is thus construed with the direction word para according to normal Sanskrit syntax. A rule such as 3.1.97 (aco yat) together with the headings and 1.1.72 (yena vidhis tad-

antasya) states that yat, classed as affix, is introduced after a vowel-final root (e.g., jeya 'to be conquered' < ji). The rule is understood as stating aj-antād dhātoh paro yatpratyayah. For the other cases in question, examples of which occur in all parts of the grammar and not in one circumscribed section alone, metarules are stated. 1.1.49 tells the student of the grammar that, where there is doubt about what he is to understand, a genitive is to be interpreted uniquely as denoting a particular relation: a unit is a substituend relative to another. 1.1.66 states that, when there is doubt about what is to be understood from a locative form, one should understand that locative as denoting that before which an operation applies.^{32a} 1.1.67 states that what is denoted by an ablative is that after which an operation takes place. In (3)6.4.34, then, one now understands sāsa upadhāyāh sthāne 'in place of the penultimate sound of sās' and an-haloh 'before an (aorist affix) and a consonant-initial unit' (e.g., asisat, sista). (4)6.1.77 is now unequivocally interpreted as providing that a vowel i, u, r, l is replaced by a corresponding semivowel before another vowel. (6)8.1.28 now unequivocally provides that a finite verb form has no high pitched vowel when it follows a nonverbal form.

I think it is clear from the above that 1.1.49, 66, 67 are brought into play as interpretive rules only in cases where forms cannot be uniquely interpreted and suppletion can yield several interpretations. Therefore, the partitive genitive śāsah of (3)6.4.34 is not interpreted by 1.1.49. Nor are the locative yuşmadi of (2)1.4.105 and the ablative dhātoh of (5)3.1.91 interpreted by 1.1.66, 67.

This is the way Pāṇinīyas since Kātyāyana have understood 1.1.49, 66, 67 to operate. These metarules come into play to supply a unique interpretation where rules leave doubt at to what one is to understand. They restrict what one is to understand by supplying items from one's knowledge of normal Sanskrit syntax.³⁸

Note further that these are metarules $(paribh\bar{a}s\bar{a})$. A metarule does not function independently. It functions in conjunction with other, operational, rules. Hence, if one ask, 'What of that which is denoted by $p\bar{u}rvasya$, uttarasya in 1.1.66, 67?' the answer is self evident. This has to be an operation $(k\bar{a}rya)$, since these rules have to do with the correct application of operational rules. Moreover, the genitives $p\bar{u}rvasya$, uttarasya cannot be interpreted here by 1.1.49. The operational rules with which 1.1.66, 67 apply show that substitution is not the only operation which is involved. The genitive ug-id-ac $\bar{a}m$ of 7.1.70 (see above) cannot be interpreted as denoting a substituend: it denotes units susceptible to an operation in a right context, namely the insertion of the augment n. 1.1.66 applies to interpret the locative $sarvan\bar{a}masth\bar{a}ne$. If $p\bar{u}rvasya$ of 1.1.66 were interpreted by 1.1.49, then, 7.1.70 would have to state a substitution. This is impossible.

The Pāṇinīya interpretation of 1.1.49, 66,67 is so clear and works so smoothly that I gladly dismiss Scharfe's tortuous thesis in favor of it. Scharfe's claim that understanding kāryam in 1.1.66, 67 is arbitrary results from a misunderstanding. One can make this claim only if one does not take into account the way in which metarules function in the grammar.

Let us now reconsider some of the problems which Scharfe has created and see how they disappear once 1.1.49, 66, 67 are understood in the Pāṇinīya way. In 7.1.88 bhasya is a bound genitive (cf. (a1), (a2), (3) above): bhasya teh 'of the ti of a bha'. Since bhasya is immediately and unequivocally interpretable as a partitive genitive, 1.1.49 does not apply to interpret it; this rule applies only to interpret teh. 1.4.105 is a restriction (niyama) on verb endings, whereby particular sets of endings (called prathama,

The wording of 1.1.66, 67 shows that the former applies to interpret a former denoting a contiguous locus (aupaślesikam adhikaraṇam).

³³ Note carefully that this does not mean these rules restrict the application of syntactic rules 2.3.50 etc.

madhyama, uttama) are allowed to occur only in given contexts. There is no question of contiguity between yuşmad and endings. Nor is there any question of a particular domain (vişaya) in which the restriction applies: it applies in Sanskrit pure and simple. Hence, the locative yuşmadi is interpretable only as a locative absolute (sat-saptamī). Further, upapada cannot here have its technical meaning; it means simply a cooccurring item. As for 5.3.71, the wording is not merely a stylistic variant, as Scharfe claims. This rule introduces an affix (pratyaya) ak. Normally, an affix occurs after the unit to which it is introduced (see note 26). Hence, Pāṇini had to formulate this rule as he did in order to have ak occur within indeclinables and pronominals; e.g., uccakaiḥ, not *uccaişak. Moreover, a bit of thought shows that a wording avyaya-sarvanāmnām akac tau is absurd. A ti is a part of a unit. How then can one speak of a whole unit occurring in contiguity with part of itself?

Finally, let us consider what Scharfe has to say about applying 1.1.67 in affixation rules. Not only is this not unobjectionable, as Scharfe would have us believe, it is absolutely undesirable. Once 1.1.67 is allowed to apply in affixation rules, 3.1.2 (see note 26) becomes superfluous; why state a particular heading whereby a unit is introduced after another unit if the same results can be gotten by applying a general metarule? Moreover, once one considers an affix a replacement of zero, as Scharfe suggests, a veritable Pandora's box of problems is opened. Nothing is obviously not a sound. Now, for reasons not considered here, Pāṇini has to state a rule whereby a substitute (ādeśa) is treated as having the value of its substituend (sthānivat) except with respect to operations which would then be conditioned by an original sound (1.1.56: sthānivad ādeśo'nal-vidhau). Consider the derivation of dīvyati 'gambles'. The ending ti is allowed to occur after the root div (div-ti), which is then followed by syan (div-ya-ti); then the -i- of div is replaced by i; div-ya-ti. If, now, ya has replaced zero, div-ya-ti can be treated as though it were div-ti. ti is a sārvadhātuka affix and the base to which it has been introduced has a short penultimate vowel. Therefore, the rule (7.3.86: pug-antalaghûpadhasya ca [sārvadhātukârdhadhātukayoh 84, gunah 82]) can apply whereby i, u, r, I of a presuffixal base with a short penultimate vowel is replaced by guna before a sārvadhātuka or ārdhadhātuka affix: div-ti → dev-ti. In addition, v is deleted before a consonant such as t (6.1.66; lopo v-yor vali): $dev-ti \rightarrow de-ti$. This and other equally undesirable results cannot be avoided, except through extremely tricky arguments which are ultimately unacceptable, once one takes the step Scharfe has taken.

I am, it is obvious, convinced that Scharfe's thesis regarding Pāṇini's syntax is unacceptable and that Scharfe has not thought through the problems involved. His proposal involves so many problems, some of which he does not mention or consider in any depth, that it must be rejected. The Pāṇinīya point of view, on the contrary, involves none of these problems. The Pāṇinīya interpretation also does not assume, as Scharfe assumes erroneously, that the syntax of grammatical statements is radically different from that of the Sanskrit which Pāṇini describes.

I have considered three major parts of Scharfe's monograph. I have done this in order to present Scharfe's views in detail and as faithfully as possible and also to discuss questions which Scharfe has omitted although he should have taken them into consideration. There are other parts of Scharfe's monograph open to serious doubts. However, the sections dealt with in this review are sufficient both to present Scharfe's attitudes and conclusions and to justify my opinion of his work. Scharfe's conclusions are interesting and challenging. They are also based on an insufficient consideration of materials which call for a great deal more depth and subtlety than is demonstrated by Scharfe.

It is to be hoped that in his next work on Pāṇinian grammar Scharfe will be less amenable to allying himself with an *ekadeśin* and that he will make far less use of the *sthāli-pulāka-nyāya*.

A. D. H. Bivar, Catalogue of the Western Asiatic Seals in the British Museum. Stamp Seals II: The Sassanian Dynasty. London 1969. 145 S (davon 4 Zeichentafeln), 32 Phototaf.

Mit diesem Buch hat B. eines der großen Desideraten, die Publikation der bedeutenden Sammlung säsänidischer Siegel des British Museum erfüllt und darüber hinaus wertvolle und anderweitig nicht leicht erhältliche Informationen zum Gegenstand gegeben. In der Einleitung gibt B. nämlich einen ausgezeichneten allgemeinen Überblick über die Studien säsänidischer Siegel, dies in wissenschaftsgeschichtlich sinnvoller Verbindung mit der Geschichte der Londoner Sammlung. Dann spricht er über die Klassifikation, chronologische und paläographische Fragen, über die Siegelformen, die ikonographischen Inhalte und über literarische Nachrichten über den Gebrauch der Siegel. Ein kurzer, aber sehr nützlicher Part über die mineralogische Seite und eine gute Bibliographie schließen sich an. Der Katalog umfaßt rund 800 Siegelsteine, gibt eine sorgfältige Beschreibung mit allen nötigen Grunddaten über Steingattung (erstmals mineralogisch genau untersucht), Abmessungen und Literaturhinweise, dazu kurze Bildbeschreibung und die Transliteration der Legenden. Die 32 Tafeln sind von bester Qualität für den, der um die Schwierigkeiten gerade bei sāsānidischen Siegeln weiß. B. fügt einen Index der Inschriften an, eine Tafel der Tamgas, die als Beizeichen figurieren, Konkordanzen zwischen seinem Katalog und den Inventarnummern des Museums, ferner einen Gesamtindex für das Buch. Vier Zeichentafeln geben die Hauptformen der Siegel.

Das Buch hat schon von seiner Anlage und seiner genauen Ausführung her alles mitbekommen, was es unentbehrlich macht. Wenn verschiedene Dinge der Kritik offen sind, so ist das in erster Linie Schuld der Wissenschaftslage, kaum des Autors. Daß die Klassifizierung angreifbar ist, sieht jedermann; B. stütz sich auf die im British Museum seit Thomas (1852) übliche. Da ich gleichzeitig an einem neuen natürlich rekonstruktiven Schema gearbeitet habe, das jetzt erschienen ist (Der säsänidische Siegelkanon, Braunschweig 1973) kann ich als befangen gelten, im übrigen entfernt sich mein Schema nicht in allen Punkten, stimmt sogar oft mit jenem von B. überein, versucht es vielmehr vom Inhalt her nach der Regelmäßigkeit der Bildkomposition zu durchdringen, die erkennbar ist. Die äußerlichen Klassifizierungszeichen, je zwei Großbuchstaben und eine Nummer (z.B. BL 6) sind nicht unbedingt praktisch. Sehr wertvoll sind die Datierungen. Sie zeigen, daß bei allen mit den säsänidischen Siegeln Befaßten im allgemeinen doch ein gutes gleiches Zeitgefühl herrscht. Da genaue Angaben aus Grabungen fehlen, wird nur die Bildanalyse eines Tages weiterhelfen, wie ich in meinem eigenen Buch gezeigt habe. Die Aufteilung der Bilder auf die Tafeln ist übersichtlich und splendid. Was stört, ist der "unendliche Rapport" der Anordnung, in der die verschiedenen Gruppen fast fugenlos ineinander übergehen. Kleinliche Ausstellungen sind hier nicht am Platz, einige Anmerkungen, die vielleicht nützlich sind, seien aber auszugsweise notiert.

Tf.4, BA 7: ein Gryllus, hat nichts mit Hephthaliten zu tun!; Tf.11, DJ 5 muß um 90° nach links gedreht werden: Tierkampf, wobei der Löwe über dem gefallenen Buckelochsen steht. Tf.11, DM 3 ist kein Dämonenkopf, sondern nach Parallelen mit Übergangsstil ein frontaler Löwenkopf. Tf.13, EG 5 ist ein Flügellöwe, kein Greif; EG 14: Flügelpferd, kein Greif; Tf.16, EO 3: Flügelzebu, kein einfacher Stier; Tf.20 GC 1 und 2: Eberkopf (nicht Bärenkopf);. Von den unsicheren Tieren der Gruppe GI sind vermutlich: 1 Tapir, 2 Esel, 3 Wolf, 4 Bär?, 5 Flügellöwe, 6 Löwe, 7 Leopard, 8 Löwe, 9 Flügellöwe, 10 Zebu, 11 Pferd mit (Kunst-?)reiter; Tf.22, HE 2: Rabe, HE 4: Ente; Tf.23, HG 6: römisch, 3. Jh.: Adler mit gespreizten Flügeln, möglicherweise noch jünger (byzantinisch?), aber nicht modern! Tf.24, JA 3: Vogel über Beute; muß um 180° gedreht gesehen werden; Tf.25, KC 1: Flügelzebu mit Fischschwanz (nicht: "locust"); LA 13: keine Pflanze, sondern Blüte auf Flügeln mit Tierköpfen

(links: Gazelle; rechts: Kranich o.ä.); Tf.27, NA 2: Altar zwischen zwei Kreuzen, NB 4 ist um 180° zu drehen, desgl. NB 6, beide wegen des üblichen Tamga-Aufbaues; ND 1: um 180° drehen! (Binden stehen aufwärts!) Zur Bibliographie S. 38: Hans Henning sind Vornamen, von der Osten ist der Hauptname; ferner: Jänichen (nicht Jännichen).

Bilddeutungsdifferenzen sind besonders bei dem oft minutiösen, aber stark vereinfachenden Schnitt provinzieller Arbeit fast Selbstverständlichkeiten, gegen die nur die Aufstellung langer Degenerationsreihen von bester höfischer Arbeit bis zum provinziellen Schnitt hilft. Auch das wird sich eines Tages einpendeln. Bestimmte Typen werden aber dennoch immer unklar bleiben. In den Lesungen ist B. genau und vorsichtig, er macht keine Versuche, einen Befund zu pressen oder in eine bestimmte Richtung zu dirigieren. Über Fälschungen sind wir nicht immer einer Meinung. So halte ich Tf. 3 AE 5, 6, 7 für sichere Fälschungen, desgleichen BH 1, aber das verschlägt nichts. Das Buch ist ein äußerst wertvoller Beitrag zum Thema und trägt, wie ich inzwischen mit Freude sehe, als Anstoß zur Katalogisierung anderer Bestände beispielhaft bei. Auch den Sammlern wird es sehr willkommen sein. Auch wenn die erkennbare Dynamik des Themas und der Elan des Autors durch die britische Kühle sichtlich gebremst werden, ist die Wissenschaft B. in jedem Fall zu großem Dank verpflichtet.

Vienna Robert Göbl

- J. Gonda, The Vedic God Mitra (= Orientalia Rheno-Traiectina XIII). Leiden. Brill, 1972. VIII + 147 pp.
- 1. For studying a single god of the Vedic pantheon various ways are open. In the case of Mitra the problem is in part lexicographical (where do the texts refer to god Mitra, where is *mitrá*, m.n. an appellative noun and what exactly does this mean?) and in part mythological. In this new book of the distinguished Nestor of Vedic studies the lexicographical aspect has to a large extent been eliminated as this will be dealt with in a separate paper "Mitra and mitra".

As for the mythological aspect at least two basically different approaches are possible. One can either start from the supposition that mythology in general has a systematic character, or study and interpret the data without any initial working hypothesis, collecting all textual evidence and building up, step by step, a coherent picture of the god. In both cases text-interpretation is (or should be) the basis on which all conclusions must be founded. In both cases, too, one has to face the fundamental difficulty that there does not exist such a thing as "objective" text-interpretation. The mass of textual data has to be grouped and to be put into some order, which, again, is likely to reflect upon the interpretation of individual passages.

The notion of system was introduced, as far as I am aware, by cultural anthropologists, and monographs such as, e.g., Schärer's book on the Dayak religion have shown how a religion can be described as a coherent system of notions. The semiotic analysis of texts, as applied to the Rigveda by, e.g., B. L. Ogibenin, Struktura mifologičeskix tekstov "Rigvedy" (Vedijskaja kosmogonija), Moscow, 1968, also operates with binary oppositions and the construction of a structural model of Vedic mythology, and leads to results which do not appear to be appreciably different from those of the structural approach in general. In case one rejects the idea of a mythological system as a starting-point for the interpretation of individual gods, the coherence between the various utterances of the texts has to be constructed in a more intuitive way. In either case the risk of misinterpretation, inherent in any attempt of modern man to understand how the Indian theologians of the second and first millennia B.C. conceived their world,

cannot be ignored. The history of Vedic Studies in the Western world, indeed, produces eloquent testimony to it.

Gonda's book, which has grown out of a paper read on a congress of Mithraic studies, keeps in general the second course, although he fully recognizes the opposition between Varuna and Mitra. His general approach may be considered well-known from his auvre. As he is wary of general working hypotheses, the emphasis in this work is on a complete collection of the references to Mitra culled from all Vedic texts. His conclusion can be summarized in the following quotation (p. 106): "After reconsidering all relevant Vedic - that is, not only the Rgvedic - texts I have arrived at the conclusion that the assumption of the mere meaning "Contrat (contract)" and the conclusion that Mitra essentially is the god in charge of contracts are nowhere self-evident or a necessity. At the risk of undue repetition I add that I am under the impression that there is no place where this translation is, by exclusion of all other interpretations, the only possibility. The texts moreover do not to my knowledge furnish us with a clue to the relations, historical or other, between a basic "contract" and the variety of the god's functions and activities". He further states (p. 109) 'that the Mitra of the Vedic texts - who "does not possess any individuality on the physical side" - rather is the god who, while maintaining the rta... puts things right, regulates the contacts between men and between men and the divine powers, and exhibits benevolence and active interest. Whereas Varuna, the representative of the static aspects of kingship, is a guardian of that rta, his companion and complement Mitra, being no less concerned with it and no less its promoter, is rather its maintainer, the one who keeps its manifestations in the right condition, who redresses if something has gone wrong, who adjusts, restores, appeases, stabilizes, the god also who unites men'. Cf. further p. 112: "As far as the Veda is concerned there is a god Mitra and an appellative mitram which expresses the main idea the god stands for, viz. the maintenance, without wrath or vengeance, of right, orderly relations, manifestations of which were, first and foremost, the active benevolence and willingness to help and redress"; p. 113: "This essentially beneficent and benevolent power, energy and all-pervading essence makes its existence and influence also felt in a considerable variety of natural phenomena".

Gonda, accordingly, rejects a theory which is nowadays widely accepted, viz. that Mitra is the personification of a social notion "contract", which is supposed to have been the primary meaning of the word *mitrám*. For this meaning he substitutes "maintenance of orderly relations", "the active benevolence and willingness to help", etc., which actions and properties are considered to be functions of the god, rather than social phenomena.

Every worker in the field of Vedic (and Old Iranian) religion will no doubt warmly welcome the appearance of this almost exhaustive and up-to-date collection of the relevant Vedic material. To those scholars who have up to now followed Meillet's lead, this book is a serious challenge. The circumstance that Gonda emphatically states (p. 98) that he has "found no Vedic texts which should or might put us on the scent of such a contract in connection with the name of the god Mitra" imposes on every scholar who endorses Meillet's view the obligation to reconsider the whole Vedic evidence in the light of the interpretation that Gonda here offers of it.

2. The very exhaustiveness of this collection, however, has also caused some inconveniences. As is well known (and stressed by Gonda, p. 49 ff.), it is in many Rigvedic passages hard to decide whether the poet means the appellative noun *mitrám* or the name of the god Mitra. Besides, an exact determination of the meaning and the usage of *mitrám* is of direct importance for the interpretation of the god. A discussion of all this material, however, has been reserved for a separate paper "Mitra and mitra", to which the author frequently refers. Considerations of space have, no doubt, made it necessary to split up this study into two publications. For the reader, however, this

separation has the inconvenience that he is often compelled to postpone his judgment until the justification of Gonda's view has been published.

A second difficulty with which Gonda had to cope was the fact that "for reasons of space and in spite of the drawbacks of monographs dealing with one single member of the pantheon" (Preface, p. VIII) the character of Varuna could not systematically be discussed. This limitation must have been the more painful to him since he rightly states "that the pair of gods represents in a complementary way the two-sided aspect of the idea they stand for" (p. 40, cf. p. 15). In other words, it is in this case not even a single god but only one aspect of a dual deity that could be described in these 138 pages. Varuna is only mentioned "as far as his relations to Mitra may require" (Preface, p. VIII). In some cases, however, the complementary character of their relation may not explicitly have been stated in the text but nevertheless throw an instructive light on Mitra (see below).

The limitation makes itself further felt in the fact that, although Varuṇa and Mitra are the most important members of the group of Ādityas, this characteristic group of the Devas is but seldom mentioned in this monograph (p. 129). In this connection it may be remarked that Mitra's relation to the western quarter in ASPaipp. XVII.41.7 pratīcyai diše, varuṇāyā 'dhipataye, pṛdākave rakṣitre, mitrāye 'ṣumata etam pari dadhmaḥ (quoted p. 83) is in line with the Vedic system of classification in which the Ādityas as a group are constantly associated with the western quarter. The Śaunaka reading (á)nnāyé 'ṣumata (XII. 3.57) need not represent the original version.

Also the wider context of the whole pantheon might finally have been of some importance for the interpretation of such passages as MS. I.8.6 (123,10f.), KS. VI.7 (57,9f.): yát sádhūmam jyótis tád vaiśvadevám, yál lóhitam tád vārunám, yát suvárnam tád bārhaspatyám, yán ná lóhitam ná suvárnam tán maitrám "The light that is enveloped in smoke belongs to the Viśve Devāh, the blood-red light to Varuna, the golden-coloured to Brhaspati, that which is neither red nor golden-coloured belongs to Mitra". At any rate, in a more structural approach than Gonda's it might have been observed that Varuna and Brhaspati sometimes seem to stand for the cosmic moieties (e.g., JB. I. 180 and 181) and that the Mitra aspect of the dual deity, accordingly, was considered to belong to neither of the moieties. In passing it may be observed that this fits in very well with the tentative characteristic of Mitra given in IIJ, V. p. 53 as "the link that connects both cosmic moieties". As for Mitra's association with Brhaspati in the ritual (Gonda, p. 82f.), Mitra may here represent the dual godhead, Varuna being considered too inauspicious for this purpose.

The general character of this book is clearly defined in the following words of the Preface (p. VIII): "It will mainly consist of a (nearly) complete collection and, as far as may be desirable, thorough interpretation of the relevant Vedic text places". "Speculation concerning that on which the texts are silent has wherever possible been dismissed". Again, on p. 105f., after quoting from a work with a characteristically structural approach, the author concludes with the words: "I for one would prefer relying on textual evidence to mere linguistic suppositions and prehistoric speculations, however natural they may seem to prejudiced minds". It is entirely in keeping with this basic principle that questions to which the texts do not give an answer are left open, although they are sometimes pointed out.

Such a question, which has constantly been ignored by former scholars is: How can the fact be accounted for that in the Rigveda hardly any traces are found of the current identification of Mitra with day, and of Varuna with night, which is so well known from the brāhmaṇas? On p. 37 Renou's reference to "cas rarissimes ... où le Rgveda distingue entre Mitra et Varuṇa" is quoted without comment but on p. 107 n. 1, in an incidental remark in a foot-note, this is stated to be, indeed, a fundamental problem. The author here sums up his objections to a book by Duchesne-Guillemin, the first of which are: "In my opinion the term Contract should in any case be avoided; the silence

of the Rgveda about the "day-night opposition" etc. of Mitra and Varuna should first be explained. ..." Needless to say, I fully agree with Gonda (cf. III, p. 211, V, p. 51). The crucial point is, however, how such an explanation can be given on the basis of the explicit textual evidence. If there is a silence on the part of the Rigvedic poets, the question arises as to what was the character of this collection of hymns. A century ago such sharp-sighted scholars as C. P. Thiele and Auguste Barth were fully aware of this basic problem and the latter concluded that "it is evident that a literature such as this will only embrace what is within the scope of a limited horizon, and will have authoritative weight only in regard to things in a more or less special reference, and the negative conclusions especially which may be deduced from such documents must be received with not a little reservation" (The Religions of India, 3rd ed., Preface, p. xv; cf. p. 18 = Quarante ans d'indianisme I, pp. 5, 29. Cf. also, e.g., Ogibenin's recent remark on the "positivistic" character of the Rigveda in Struktura mifologičeskix tekstov "Rigvedy", p. 77 n. 1). Many students of the Veda have been struck by the "one-sided" or deviating character of the theology as presented by the Rigvedic poets. Attempts to explain it in terms of an evolution in post-Rigvedic religious thought fail to convince (see III, III, p. 211). On the other hand, stating that the testimony of the Rigvedic hymns has a special character is one thing, explaining it another. The need for a better insight into the special nature of the Rigveda as a whole, in order to understand the reasons of its reticence in certain matters, has more than once been stressed in recent times but the progress made since Barth wrote the words quoted above is not impressive. It will be the task of a future generation of Vedic scholars to tackle this problem.

Since Gonda does not take up a position in such disputes there is sometimes inevitably some vagueness in this book. Thus he writes on p. 42f. as follows: "As I cannot enter into a discussion of Varuna's nature I must limit myself to the remark that I do not feel inclined to think, on the strength of texts such as KB. 18,9 "the sun, having entered the waters, becomes Varuna", that there was a more or less exclusive, original or fundamental association of that god with night or the nocturnal heaven. It would rather appear to me that this relation, like that of Mitra with light, is one of the expressions of the complementary character of the duality Mitra-Varuna. It is, to wind up with, perfectly clear, on the one hand, that both gods, guardians of the rta, are quite naturally conjointly concerned also with the light of heaven, which is a manifestation of universal Order, and, on the other, that their functions do not coincide". In general I agree with Gonda. However, a foot-note to the words "association of that god with night or the nocturnal heaven" attributes a different view to me. I may, therefore, be permitted to observe that I am afraid that Renou's statement (Etudes védiques et pāṇinéennes XV, p. 8), to the effect that I am inclined "à relier Varuṇa au ciel nocturne comme conception fondamentale", does not give a quite accurate view of what I attempted to do in my paper in III, VIII. What I there tried to demonstrate is that Varuna is one of the gods of the nether world and, as such, god of the waters and the nocturnal heaven.

Anyway, if the functions of the two gods do not coincide (which is beyond question), it may be asked in which respect Varuna's function differed from Mitra's with regard to, e.g., sunrise and sunset. If they actually were two aspects of one and the same deity, one is led to surmise that the function of the one was determined by the other's, and that Mitra's function cannot be fully understood unless it is contrasted with Varuna's. Gonda, indeed, describes their functions in terms of contrast on p. 34, where he follows Lüders in considering Varuna a denizen of heaven, while suggesting that Mitra may have been associated with earth. If so, Varuna would have been a god of both day-time and night-time sky. On p. 41 the admittedly difficult stanza RS. V.62.8 is, indeed, explained as saying that Varuna in day-time ascends to the top of the cosmic axis. This, however, is not the author's final conclusion for on p. 113 n. 4 he returns to the

problem of Varuna's relations to the night in the words: 'I have no doubts about the correctness of Bergaigne's formulation (o.c. III, p. 119): the rôle of the 'president' of the night "semble donc bien n'avoir été assigné au couple qu'à cause de Varuna auquel il appartient en propre".' Since, then, Varuna was a denizen of heaven and a "president" of the night, he must apparently have been a god of the night-sky. As for V.62.8 quoted above, here Mitra's function may just as well have been transferred to Varuna as Varuna's was to Mitra in the passage commented upon by Bergaigne (viz. V.62.1). In the same way the fact that, as a rule, Varuna is only conjointly with Mitra said to give rain (Lüders, Varuna, pp. 715, 719) may indicate that this was properly a function of Mitra alone (see IIJ, V, p. 47f., where attention is drawn to Varuna's rôle as detainer of water). With regard to Gonda's book, however, it should be stressed that, although the reader may sometimes be in some uncertainty as to the author's views about Varuna, this is only a peripheral point in his approach and does not confuse the issue of his study of Mitra.

In strict adherence to his principle Gonda does not try to make light of features of Mitra which are seemingly abstruse and do not fit in with his picture of a beneficial god. One of the most striking is "the curious relation of the god with secretion, the anus and excrements" discussed on p. 124f. It is, indeed, frankly stated that within the framework of this study no explanation of this aspect can be given. Nor can the theory that Mitra is "Contract" account for it. It may here be added that in a review-article on the Indo-Iranian god published in this journal this very aspect of Mitra was quoted as a proof of the correctness of the theory that Mitra is basically the god of deliverance from the bonds of the nether world. See IIJ, V. p. 50f. Since this theory was not a mere speculation on the "original character" of the god but an interpretation of the textual evidence, the question may be raised whether the later Purānic equation of Mitra to Vișnu's fontanelle (Gonda, p. 124) was still based upon an association of Mitra with the notion of moksa. As for the connection of Mitra with defecation it may be noted that the prototype of the words avaggatir apanah quoted from Mhbh. XIV.42.34 can be found in ávān prānáh of the Satapatha Brāhmana (see A. Minard, Trois Énigmes II, p. 335f.). For the word apana- G. W. Brown's almost forgotten paper in JAOS, 39 (1919), especially p. 111, is still of importance.

3. For few Vedic gods the theory of a personification of an abstract idea may seem more attractive than for Mitra. This theory, first proposed by Meillet in the *Journal Asiatique* 1907, II, pp. 143-159, has been a central motif in discussions of the last few decades on Mitra. Gonda's objections to the manner in which this personification is sometimes conceived (p. 104) would seem fully justified.

What philological research can achieve and, at the same time, what its limitations are, is most clearly demonstrated by the case of Vrtra. As Renou has pointed out in detail (Vrtra et Vrbragna, p. 97), it can be shown how the Vedic neuter word vrtram, plural vrtrani "obstruction, resistance" is only in the latest portions of the Rigveda used as a masculine nom. sing. Vrtran. From a philological point of view it is important to establish this shift from a neuter word to a masculine. For the historian of religion, however, nothing has changed except that the nameless old cosmogonical dragon (dhi-) who impersonated the power of resistance has now received a proper name "Resistance".

Gonda (p. 104) objects to Meillet's "attempt to vindicate, on the strength of sociological considerations, the basic meaning "contract" which I cannot find in the texts, and in the second place, the suggestion that this explanation, again under the influence of sociological considerations of a general character, should be based on an etymology which linguistically speaking is only a possibility and from the philological point of

¹ Similarly Gonda, p. 34.

view not convincing". See also his remark (p. 105 n. 1) on Meillet's "preposterous line of reasoning".

Here a few words, of a strictly philological character, in defense not so much of Meillet's theory as of Meillet himself, may not be out of place. Unlike Gonda, Meillet dealt with "Le dieu indo-iranien Mitra". Three years before the publication of his article Bartholomae had completed his Altiranisches Wörterbuch; in which (col. 1183) he gave for the masculine word $mi\theta ra$ - in Avestan the meanings "Vertrag, Abmachung, Kontrakt". In Zarathustra's Gathas, where the god Mibra is never mentioned, it occurs only once in Y. 46.5b urvātōiš vā huzāntuš miθrōibyō vā, where all translators from Bartholomae to Humbach have translated "Freundschaftsbündnisse", "(Freundschafts) Verträge", etc. Lommel's warning, however, should be noted: "Die rechtlichen und soziologischen Begriffe sind schwer genau zu bestimmen" (Die Gathas des Zarathustra, 1971, p. 136). Although in the late Vendidad $mi\theta ra$ - is unquestionably a masculine word, the gender of the Gathic word $mi\theta r\bar{o}iby\bar{o}$ is open to doubt. Its plural form has a counterpart in RS. I. 170.5b mitrāṇām, which is a neuter word. It was not illegitimate to assume, on the basis of the purely philological evidence of the Avesta and the Veda, a Proto-Indo-Iranian neuter word *mitrám "contract" and a proper name *Mitrás derived from it, whatever the merits or demerits of the linguistic and other arguments which Meillet put forward in support of his theory.

It was, however, a prehistoric reconstruction and as such open to revision. Gonda combats it in the following words (p. 114f.): "The masculine name should not, in my opinion, be regarded as having developed, in India, from the neuter – which is foreign to the Avesta –, but rather as a counterpart of the Greek δαιτρός which does not denote "any man who carves and portions out" but "der Vorschneider", beside δαιτρόν "one's portion", from which it has in all probability not developed. That means that, if I am right, Mitra, bearing the masculine name, was the dispenser of active benevolence par excellence". This line of argument is perfectly clear. On the one hand, there can be no reasonable doubt about the Proto-Indo-Iranian origin of the god *Mitrás. His occurrence in Kurtiwaza's treaty of c. 1380 B.C. testifies to his early worship. On the other hand, if mitrám is limited to Old Indian the supposed personification of mitrám to Mitrás could only have taken place in India – which is plainly unacceptable. Therefore, *Mitrás must have been an independent formation of Proto-Indo-Iranian.

For any prehistoric reconstruction the crucial point is obviously how to evaluate the masculine gender of $mi\theta ra$ -"contract" in the Vendidad. If one considers this inherited, the question arises how in Avestan the meaning "dispenser of active benevolence" has developed to "contract" or "religiöse Verpflichtung, Bündnis". If, on the other hand, one does not attach such an importance to the gender in this comparatively late text, it is possible to derive the name *Mitrás from *mitrám, the more so as in the Rigveda the neuter again shifts to a masculine (see below). These, however, are considerations which lie outside the scope of Gonda's book, from which the discussion of prehistoric reconstructions is strictly excluded (see p. 4 n. 2, p. 115 n. 1).

4. There can be no doubt about Mitra being a beneficent god. The only questions that remain open are whether this was also a specific function of his, and whether the texts actually call him so. As far as the appellative noun mitrám is concerned, there is ample room for different interpretations. On the one hand this is due to the general uncertainty as to where the texts refer to the god and where to a "friend" (as Geldner translated the word in many passages). On the other hand this is the result of fundamental difficulties inherent in the process of "Deutung" (interpretation) so eloquently described by Oldenberg, Vedaforschung (1905), p. 30. In general that procedure is the better applicable, the less there are cultural factors involved. This is particularly true of words relating to religion, where in the interpretation of a single word a general view of the religion in its entirety can be more or less implied. As for the appellative noun

mitrám, it is obvious that a decision about its meaning (e.g., "contract" or "friendship") is bound to have consequences for one's ideas about Mitra. Gonda's study of this problem is to appear separately. What follows are personal reflections of this reviewer, here inserted as an excursus.

If one limits oneself to the Vedic evidence, leaving aside all etymological speculations and the Avesta, there is, apart from interpreting all occurrences of mitrá, a possibility of attempting a more formal analysis of the ways in which mitrá is used, as distinct from, e.g., sakhyá "friendship". The compounds and derivatives mitrín and mitréru (Mayrhofer, s.v.) do not prove much, but mitradrúh is interesting. It occurs in MS. IV.3.4 (43,12) apám phénena śiro 'chinat, tád vá enam ánvavartata mitradrúg asíti, TB. I.7.1.7 apám phénena śira údavartayat, tád enam ánvavartata mitradhrug íti. It has long been compared to Avestan miθrō.zyam(ca) miθrō.drujimca (Y. 61.3, Yt. 10.82) "the infringer of the contract and the man false to the contract", cf. Parthian drwxtmyhr "committing a breach of contract" and Pahlavi miθrāndružān "covenant-breakers" (Gershevitch, Hymn to Miθra, pp. 113, 153).

More instructive is mitrám dhā, without Old Iranian parallels and mostly occurring in the later portions of the Rigveda. It shows that, although a god can be said to be a sákhā as well as a mitrá of the devotee, the abstract noun mitrám differs from sakhyám "friendship" in that it is established. It is said to be concluded with another person or god in VIII.96.6c indrena mitrám didhişema girbhíh "we wish to make a mitrám with Indra by means of words of praise", X. 108.3c mitrám enā dadhāma "we will make a mitrám with him" (viz. Indra)". Cf. also IV.33.10cd té rāyás pôşam drávināny asmé dhattá rbhavah kṣemayánto ná mitrám "(give) us increase of wealth, riches, make, O Rbhus, a mitrám like people who are longing for peace!" In these passages "to conclude an alliance" and "to contract a (specific form of) friendship" are both possible. Renou translates "contracter un pacte"; Gonda prefers the latter meaning and has his doubts about other translations (p. 106, n. 6).

The incidental use of a plural form in I.170.5ab tvám išise vasupate vásūnām tvám mitránām mitrapate dhésthah (to Indra) "Thou, O lord of the goods, hast power over the goods (and) over the mitrás, O lord of the mitrá(s), being the best establisher (of them)" gives no clue to the exact meaning. In view of the repetition of tvám and the normal construction of dhéstha and déstha with an accusative the genitive mitráṇām can (but need not) primarily be construed with isise. Renou, EVP, X, p. 56 renders: "ô maître de pactes, tu es celui qui conclut au mieux les pactes". Otherwise Gonda, p. 106 n. 6: "O lord of friendship, thou givest most friendships". It should be noted that this plural, a hapax in the Rigveda, is reminiscent of $mi\theta r\bar{o}iby\bar{o}$ in Zarathustra's Gāthās but that, on the other hand, also sakhyá- is once used in the plural. In my interpretation of I.170.5 an accusative mitráni must be understood before dhésthah, cf. the parallel passages IV.41.3a indrā ha rátnam váruņā dhésthā "ye, O Indra and Varuņa, are the best givers of wealth", VII.93.1d tá vájam sadyá ušaté dhésthā (to Indrāgnī) "ye, the best bringers, at once, of prizes to him that desires them". This parallelism is complete in the first case: just as we find in the Rigveda ratnadhá and ratnadhéya by the side of rátnam ... dhéṣṭhā, so mitradhá and mitradhéya are found in the Atharvaveda. Cf. AS. II.6.4 mitrénā 'gne mitradhá yatasva "O Agni, occupy thy proper position as a establisher of mitrám, together with Mitra" (and the curious and isolated passage KS. XXXVII.10: 91.6 mitradhā no mitre dadhātai "the establisher of mitrám must establish us in mitrám"; corruption of no mitram?), ASPaipp. III.33.5 mitrenā 'gne mitradheyam yatasva, for which the Yajurvedic recensions read mitradhéye yatasva "occupy thy proper place in the establishing of a mitrám". This much would seem apparent from these passages that mitrám had a cosmic significance: Indra presides over them as over the wealth he produces, and he and Agni establish the mitrá(s), alone or with Mitra.

When surveying all the Rigvedic passages where *mitrá* is used as a (masculine or neuter) appellative, one is led to conclude, first, that this had something to do with a

peaceful existence. Cf. IV.33.10 (to the Rbhus) té rāyás pósam drávināny asmé dhattá rbhavah kṣemayánto ná mitrám "Give ye us, O Rbhus, increase of wealth, riches, and establish mitrám like people longing for peace", II.4.3 agním deváso mánuşişu vikşú priyám dhuh kşeşyánto ná mitrám "The gods have installed Agni (as a) friend among the clans of men, just as those who wish to live in peace (establish) a mitrá". In the latter passage a person may be meant (see below for the first verse of this hymn). Geldner translates "Mittler". It may, indeed, be surmised that the constantly recurring phrase mitrám ná (mitró ná, mitrá iva) "like a mitrám/Mitra" is due to Agni's function as an intermediary between god and men (see also Gonda, p. 48). In this connection the expression jáne mitró ná (see, e.g., Geldner ad II.6.7, X.68.7) might deserve a closer examination in the light of jána "foreign people" (Caland, translation of PB. XVI.6.8, K. Hoffmann, MSS. XI, p. 89 n. 13, Renou, Etudes sur le vocabulaire, p. 34, Minoru Hara, Pratidānam, p. 256ff.). Be that as it may the formal parallelism between agnim dhā "to install the fire" and mitrám dhā may have been the direct cause for the introduction of the simile mitrám ná in those passages where agním dhā was used. In these passages, to which the following observations will be limited, the god Agni gave the abstract noun mitrám, too, a personal character. The fact should be stressed, however, also in view of Thieme's valuable remarks in Der Fremdling im Rgveda, p. 141, that this shift, from the abstract relation that was established to the person (mitráh) with whom it was established, is an exclusive peculiarity of the Vedic poetic language. Only within the circles of these poets mitrám has been re-interpreted as the accusative of a masculine noun mitráh (cf. vrtrám > Vrtráh).

As for the meaning, here the same dilemma recurs that was noted above: was the *mitráh* a "friend" (thus Geldner) or rather an "ally" (thus, e.g., Oldenberg, SBE, 46, pp. 202, 209, Renou)? The association of *mitrám* with peace (see above) and the fact that in classical Sanskrit this word is the technical term for a king's ally (e.g., Hillebrandt, *Altindische Politik*, p. 145f.) are in favour of the second alternative. So is also the expression *mitrám dhā* which shows that a formal act was needed to establish this relation, whereas for *sakhyám* "friendship" no corresponding term occurs (otherwise Gonda, p. 112).

The shift referred to above is clear in II.4.1 huvé ... agnim ..., mitrá iva yó didhiṣáyyo bhūd devá ådeve jáne jātávedāḥ "I call on Agni ..., who desires to be installed just as an ally (desires an alliance to be concluded with him), the god among godly people, the wise one". With this verse cf. stanza 3 quoted above and, e.g., VIII.23.7a-8d agnim vaḥ pūrvyám huve ... mitrám ná jáne súdhitam rtávani "I first call on your Agni ... who is well-installed among people living in accordance with the Universal Order, like an ally (with whom an alliance has been well-concluded)". In the latter verse the interpretations vacillate between the abstract and concrete meaning of mitrá/Mitrá (e.g., Renou, EVP, XIII, pp. 68, 151).

In several other passages the agni sudhita "bien place", "bien mis en place" (Renou) is likened to a mitrá conceived as a person, the tertium comparationis being sudhita "well-installed"/"well-concluded". Cf. IV.6.7cd ádhā mitró ná súdhitah pāvakò 'gnir dīdāya mānuṣiṣu vikṣū "The pure Agni is now burning among the clans of men, well-installed like an ally (with whom an alliance has been firmly concluded)". Geldner's translation "wohl aufgenommen wie ein Freund" disregards the technical meanings both of agnim dhā and of mitrán dhā (cf. Renou, EVP, XIII, pp. 11, 98). Similarly V.3.2cd añjánti mitrán súdhitam ná góbhir yád dámpatī sámanasā kṛnóṣi "They anoint thee, who art well-installed like an ally (with whom an alliance has been firmly concluded), with milk as thou makest husband and wife unanimous" (otherwise Thieme, Der Fremdling, p. 139, Mitra and Aryaman, p. 85, Renou, EVP, XIII, pp. 20, 106, Gonda, p. 48), VI.15.2ab mitrám ná yám súdhitam bhrgavo dadhúr "Whom the Bhrgus have well installed (súdhitam dadhúr) like an ally (firmly connected by an alliance)", VIII.23.8bc (yám kṛpā sūdáyanta it), mitrám ná jáne súdhitam ṛtāvani (see above). Only

once, in the last book, is the conventional phrase used in a different way, cf. X.115.7cd (hymn to Agni) evá 'gnír ... vásu stave ... nrbhih, mitráso ná yé súdhitā rtāyávo dyávo ná dyumnair abhí sánti mánusān "Ainsi Agni est-il loué ..., lui le Vasu, ... par les seigneurs, / qui, tels des alliés (au contrat) bien conclu, fidèles à l'Ordre, dépassent en éclats les humains comme les cieux (dépassent la terre)" (Renou).

That in all these passages the phrase mitrám dhā actually underlies the simile is shown by a few other instances where the non-compound hitá is used alone in a simile to denote a firm, reliable person. It proves that the procedure expressed by dhā was an indispensable condition for someone to become a mitráh. Cf. I.166.3cd ukṣánty asmai marúto hitá iva purú rájāmsi páyasā mayobhúvah "the refreshing Maruts, like firm (mitrás), sprinkle for him the many regions with milk", IV.57.1ab kṣetrásya pátinā vayám hiténe 'va jayāmasi "We will be victorious with the lord of the soil as with a firm (ally)". Therefore, X.7.5 dyúbhir hitám mitrám iva ..., bāhúbhyām agním āyávo 'jananta can hardly mean anything else but "Day after day the Āyus have generated Agni, like a firm ally, with their arms" (otherwise Gonda, p. 50). If so, Renou's translation of hitámitra as "avec qui on forme alliance" (see Gonda, p. 106 n. 6) is unobjectionable.

This excursus was an attempt to arrive at some greater certainty about the meaning of mitrám by starting from mitrám dhā. Its result confirms Renou's translation "conclure une alliance", and "allié (par pacte)" for mitrá (e.g., EVP, X, pp. 21, 70). A few words may finally be added on súmitradhā. There is a vacillation among scholars as to whether Rigvedic sumitrá, durmitrá and amítra are karmadhārayas (pw.: "ein guter Freund") or rather bahuvrihis. Debrunner, following Thieme, finally decided upon bahuvrīhis (Nachträge on Altind. Gramm. II/1, p. 268, 19 and II/2, p. 814), which is indeed most probable (cf. Old Persian hamiçiya- "rebellious, coniuratus"). A quite different case is, anyway, the Yajurvedic compound súmitradha. It occurs in a formula addressed to Soma during the ritual of its purchase, viz. mitró na éhi súmitradhāḥ (KS KKS TS) or súmitradhah (MS VS). As is apparent from the accent, this cannot mean "gute Freunde machend" (pw.; not recorded in PW. and Wackernagel-Debrunner), as this would have been *sumitradha. It is, accordingly, a determinative compound of su- and mitradhá (also attested in KS., see above) and the formula means: "Come to us as Mitra, well-concluding alliances" (Otherwise, Keith, transl. of TS. I.2.7.1, VI.1.11.1 and Gonda, p. 60). Soma, when purchased, is at first the inauspicious Varuna: like Agni, Soma comes from the nether world to the world of men and thus fulfills, as an intermediary, the characteristic Mitra-function (see III, V, p. 53). This, however, involves the necessity of converting him into Varuna's auspicious aspect, impersonated by Mitra.

5. A few marginal notes may conclude these reflections on the problem of Mitra, which were inspired by Gonda's thought-provoking book.

On p. 52 there is a brief reference to Varunic features of Agni. Cf. also p. 6 and p. 46 n. 2 with the reference to Renou's distinction between "Agni varunien" and "Agni solaire" in EVP, XIII, p. 106. In this connection Agni úpanaddha is of some importance, because he is identified with Varuna (see Hillebrandt, Vedische Mythologie II², p. 60). On p. 68 this is rightly paralleled with the sóma úpanaddha. As for the relevant feature of the rite described by Gonda, I do not think this is Mitra's conjuring effect on the wrath of another deity. As is apparent from the ritual of the somakráyana, the central motif is that Soma is Varuna (that is, respresents the Varuna-aspect of the world he comes from) as long as he is tied up. Cf. MS. III.7.8 (85,18) váruno vá esá etárhi varunadevatyò yárhy úpanaddhah, AB. I.30.26 varunadevatyo vā esa tāvad yāvad upanaddhah. He must first, by being untied, be transformed into the Mitra-aspect of that world. Cf., e.g., MS III.7.8 (86,7) várunam vá enam etát sántam mitrám akah, KS, XXIV.6 (96,2), 7 (97,9), KKS, XXXVII.7 (201, 21/234, 21), 8 (202, 11/236,10) mitram evainam kurute, KS. XXIV.6 (96,17) yan mitram karoti, KKS. XXXVII.7 (201,21/21/21)

235,16) yan maitram karoti, TS. VI.1.11.2 yád vāruņám sántam maitrám karóti.

The same is true of Agni, cf., e.g., TS. v.1.5.3; 6.1.1 vārunó vå agnír úpanaddhah, AB. III.4.6 sa yad Agnir ghorasansparśas tad asya vārunam rūpam, tam yad ghorasansparśam santam mitrakrtye 'vo 'pāsate tad asya maitram rūpam "Agni's being dread of contact constitutes his Varunic form. That they make him who is dread of contact to Mitra as it were and meditate on him constitutes his form as Mitra". The form mitrakrtya in this quotation is probably a gerund like pumskŕtya; see Debrunner, Altindische Grammaţik II/2, p. 786 (also Gonda, p. 45. Otherwise Wackernagel-Debrunner, op. cit., III, p. 117). It should be noted that the mythological idea which underlies this ritual may have been expressed by the Rigvedic poets in, e.g., I.75.4b ágne mitró asi priyáh "O Agni, thou art the dear Mitra" and perhaps in I.91.3c (hymn to Soma) śúcis tvám asi priyó ná mitró "Thou art pure like the dear Mitra". See also above, p. 230.

In conclusion the question may be raised what alliance Soma was considered to conclude when during the ritual of the somakráyana he was addressed with the words mitrá na éhi súmitradhāḥ "As Mitra, effectively concluding an alliance, come to us". It may be called to mind that W. Brede Kristensen has stressed the cosmic aspects of the alliance (see IIJ, V. p. 53 with references) and that in the Rigveda the waters and Dhiṣaṇā are said to make the alliance effective (I.96.1c ápaś ca mitrám dhiṣáṇā ca sādhan, cf. III.5.3d? Otherwise Gonda, p. 112 n. 7). Does the Yajurvedic formula refer to an alliance between the Varunic nether world and the upperworld? See above, p. 225. Needless to say that such a suggestion is alien to the spirit of Gonda's book.

P. 117: Gonda is, I think, fully right in questioning Zaehner's contention that in the tenth book of the Rigveda Yama has replaced Mitra. Such evolutionistic explanations often miss the point. It would seem to be a natural consequence of Mitra's nature that he has no place in the realm of the dead and the dark side of the nether world. Yama, as the deified ruler over the dead, here complements Varuna. In later times he even takes over the place that was Varuna's. In this connection it is interesting to observe that in Bharata's Nāṭyaśāṣtra III.26, 38, 61 Mitra is called upon together with Yama and is localized in the South. The only explanation for this grouping would seem to be that here Yama is, indeed, the successor to Varuna. To the same conclusion points the parallelism between Mitra and Vivasvat in the Vāṣtupuruṣa as summarized by V. S. Agrawala, Matsyapurāṇa — A Study, p. 347 (with diagram). Elsewhere in the Nāṭyaśāṣtra, however, as in the adhivāṣana of the theatre (III.6), Mitra is mentioned conjointly with Agni.

P. 131: In connection with Gonda's suggestion that the cakra mentioned in Mhbh. I.218.34 as Mitra's weapon (mitra's ca kṣuraparyantam cakram gṛḥya vyatiṣṭhata), is the sun, the well-known passage of Garuḍa's stealing the Some may be of some importance: Mhbh. I.29.2 sa cakram kṣuraparyantam apaṣyad amṛtāntike, paribhramantam aniṣam tīkṣnadhāram ayasmayam.

A rare slip of the pen occurs on p. 54 n. 5, where the words mitrāṇām pūjayitaḥ (Sāyaṇa's gloss on the vocative mitramahaḥ X.37.7) is translated "worshipped (honoured) by friends" instead of "O worshipper of friends!"

All in all, this exhaustive collection of all the relevant material will be welcomed by every worker in this field. It will no doubt stimulate the discussion and may even ultimately lead to a more profound reflection on the basic methodological differences which are the cause of the somewhat chaotic character of present-day disputes on the nature of god Mitra.

A. J. Alston (tr.), *The Realization of the Absolute*. The "Naiskarmyasiddhi" of Śrī Sureśvara. Translated by A. J. A. London, Shanti Sadan, 1971. xvi + 269 pp. £2.00.

Sureśvara's Naişkarmyasiddhi is one of the most popular Vedānta texts. Potter's Bibliography of Indian Philosophies lists five editions (Nos. 2393, 2394, 2396, 2398 and 2399) to which one must add a recent edition by Swami Satchidanandendra Saraswati: Naishkarmya-siddhi of Sri Sureśvaracarya with the Kleśapaharini by Swami Satchidanandendra Saraswati (Adhyatma Granthavali), Holenarsipur, Adhyatma Prakasha Karyalaya, 1968. The edition generally used is Hiriyanna's revision of Colonel G. A. Jacob's edition (Bombay Sanskrit and Prakrit Series XXXVIII, Bombay, 1925). It contains Jñānottama's Candrikā, a very good introduction and many useful notes at the end. Hiriyanna has consulted four unpublished commentaries: Citsukha's Bhāvatattvaprakāśikā, Jñānāmṛta's Vidyāsurabhi, Akhilātman's Naişkarmyasiddhivivaraṇa and Rāmadatta's Sārārtha. Hiriyanna's notes often quote from these commentaries. Especially interesting are his quotations from the Sārārtha. As far as I know, neither this commentary nor the three others have as yet been edited.

The Naişkarmyasiddhi has only recently been translated into English. In 1933 Ras-Vihari Das published his Essentials of Advaitism, Sureśvara's Naişkarmyasiddhi explained in English (Punjab Or. Series No. 21, Lahore). This publication, which is only known to me from F. Otto Schrader's review of Hacker's Untersuchungen über Texte des frühen Advaitavāda (ZDMG, 101, 1951, pp. 418-424), seems to give an analysis rather than a complete translation. Alston's translation appeared first in typescript form in 1959. In 1965 S. S. Raghavachar published a translation accompanied by the Sanskrit text (Naişkarmyasiddhi of Śri Sureśvarācārya. English translation by S. S. Raghavachar, University of Mysore, Mysore). In his Untersuchungen über Texte des frühen Advaitavāda 1. Die Schüler Sankaras (Wiesbaden, 1951), Paul Hacker has made a very thorough analysis of the doctrines of the Naiskarmyasiddhi. In the course of his study he translated many verses of the text and one can only regret that he has not published a complete translation. Hacker's work is of fundamental importance for a better understanding of the Naiskarmyasiddhi. Alston has made much use of Hacker's study, to which he often refers in his notes. In his introduction Alston also mentions Saccidānandendra Svāmin's 'profound and critical treatment' of the Naişkarmyasiddhi in his Vedānta Prakriyā Pratyabhijñā (Holenarsipur, 1964), pp. 210-276. I have not been able to consult a copy of this work.

The Naiskarmyasiddhi is a very interesting text. For the non-specialist in Advaita Vedanta it has the great advantage of being a short work and not a commentary. Indian scholars have praised its style, but not without reservations. Hiriyanna has noticed two defects: repetition of thought and argument, and the use of a rather large number of un-Paninean forms. Satchidanandendra Saraswati mentions the ruggedness of the style and the occasional grammatical and metrical difficulties. However, Jñānottama's commentary and Hiriyanna's notes are very helpful in understanding the text. Raghavachar's translation is very useful, although from a stylistic point of view it is much inferior to Alston's supple English. Moreover, Raghavachar has closely followed Jñānottama's interpretation, so much so that his translation is sometimes no more than a paraphrase of the latter's commentary. 'Alston's revised translation has taken Raghavachar's interpretation into account, but one has the impression that he could have derived more help from it. His translation is extremely readable but sometimes too free. In several instances there is no doubt that Alston has misunderstood the text. His revised version is a great improvement. However, there are a few places in which his original translation seems preferable. One must hope that a Vedanta specialist will critically examine Raghavachar's and Alston's translations. I have read Alston's translation with great pleasure and I only venture to make a few criticisms in

order to draw the attention of more qualified readers to this new translation of a famous work. The remarks which follow enumerate a number of passages which I believe have not been entirely correctly translated by Alston. Wherever Raghavachar's translation seems to me to be essentially correct, I have refrained from further comment. In each case I have given first the Sanskrit text and, following that, Alston's revised translation. R. refers to Raghavachar's translation, Alston-I to the first edition of his translation, and Hacker to his *Untersuchungen*.

- I.63 karmaprakaraṇākānkṣi jñānam "The kind of knowledge (i.e. erroneous) which leads to action". R. "The knowledge that belongs to the context of action".
- I.86 na hy ekatra pramāṇatām / vastuny aṭanti māṇāni "Fot the different texts do not attain authority in relation to one and the same object". Māṇāṇi = pramāṇāṇi. R. "The several modes of valid knowledge ...".
- I.96b kārakādyātmadarśinam "the one ... possessed of the means to action (a body etc.)." R. "one who ... sees factors involved in action as the Self itself".
- II.14c drstvā sādhāraṇam deham "Seeing what a contemptible object the body is". R. "Seeing that the body is the common possession of you and the dogs".
- II.20 Intr. dehādikāryakaraṇasamghāta "the individual personality, with all its effects and instruments from the body up". R. "the complex aggregate of effects and instruments that is the body etc.". For the expression kāryakaraṇasamghāta see Olivier Lacombe, L'absolu selon le Védânta (Paris, 1937), p. 125, n. 1 and p. 129.
- II.40 draştāpi yadi drśyāyā ātmeyāt karmatāṃ dhiyaḥ | yaugapadyam adrśyatvaṃ vaiyarthyam cāpnuyāc chrutiķ - "If the Self, which is the seer, could become the object of the intellect, which is already an object for the Self, neither could really be an object (because there would then be no subject). And, the statement in the Veda 'there is no break in the sight of the Seer' would be rendered vain". Alston-I translates 40c: "both would simultaneously be subject, and hence neither could really be an object". R. follows the commentary: "If the seer were to be objectified by the intellect, which itself is the seen in relation to the seer, then both the seeing self and the seen intellect, should simultaneously be both seeing and seen. As both are seers, there should be no object of seeing. And śruti would be useless in that case". The difficulty arises from the fact that the statement in 40d does not follow logically from 40c: "they would simultaneously" not be an object (both being subjects)". One must add before d, as does the commentary drśyadrśyatve cātmanah "the self being the object of (his own) object". By becoming an object the self ceases to be a seer and, consequently, the sacred text (: na hi drastur drster viparilopo vidyate) would become meaningless. I suggest translating c as follows: "at the same time (the Self and the intellect) would be subject (and the Self would be the object of its own object, the intellect)".
- II.41 nāluptadṛṣṭer dṛṣyatvam dṛṣyatve draṣṭṛtā kutaḥ | syāc ced dṛg ekam nirdṛṣyam (or ekā nirdṛṣyā, cf. Hiriyanna's ed., pp. 239-240) jagad vā syād asākṣikam' "The one of uninterrupted vision cannot ever be an object; if it were an object, how could it be the Seer? If it were (to become an object) then the Seer would be the one seen or else the world would be devoid of a Witness". Much better is Alston-I: "How can the one of uninterrupted vision ever become the object, or how can the object become a seer? In the latter case only a seer would exist with no object to see; in the former case the world would be without a witness". For ab I propose: "The one of uninterrupted vision cannot be an object, for how can the object be a seer?"
- II.42 Alston's translation omits ārtam which refers to Bṛhadāraṇyaka Up. III.7.23: nānyo 'to 'sti draṣtā ... ato 'nyad ārtam.
- II.58 eşa sarvadhiyām nṛttam aviluptaikadarśanah | vikṣate 'vikṣamāno 'pi nimiṣat tad dhruvo 'dhruvam "This (Self) is the one unbroken witness of the dance of every intellect. Verily, itself eternal, it views the passing without the act of looking as if through half-closed eyes." Nimiṣat qualifies nṛttam. R. 'the insentient dance'. (cf.

Jñānottama: nrttam nimiṣaj jaḍam). Hiriyanna quotes from the Sārārtha the gloss nimiṣat = pariṇāmi.

II.63d nagesu "mountains"; R. "trees on the banks".

II.69 śabdādyākāranirbhāsāḥ kṣaṇapradhvaṃsinīr dṛśā / nityo 'kramadṛg ātmaiko vyāpnotīva dhiyo 'niśam - "The one motionless Self, not subject to sequence or succession in time, the eternal Seer, constantly pervades, as it were, the flickering modifications of the mind, which in turn illumine the forms of material objects". R. "The one, eternal and non-successive seer, through his consciousness, pervades as it were, all the perishing functions of the mind always which take up forms of objects like sound and colour". Alston does not translate dṛśā. Hiriyanna quotes from the Sārārtha: śabdādyākārena nirbhāsanta iti śabdādyākāranirbhāsāh tattadviṣayākārā vṛttīḥ - "They appear in the form of sound, etc. The functions of the mind appear in the form of sound, etc., they take the form of their objects". This gloss shows clearly that nirbhāsa means 'appearance', not 'illumination' or 'reflection'. According to Hacker the relation of the Self to the mind is similar to that of the mind to the objects: "der die Formen der Objekte erleuchtende oder reflektierende Innere Sinn ist seinerseits Objekt der Erhellung durch den Ätman (śabdādy-ākāra-nirbhāsā ... bhāsyā II 91)". (p. 45). However, the mind transforms itself in the forms of the objects but the Self does not transform itself into the mind.

11.94 yadyad visesanam dṛṣṭam nātmanas tad ananvayāt — "No qualification seen anywhere belongs to the Self, for it conforms to no limitations". R. "Nothing that appears as qualitatively determining the Self, does really belong to the Self".

Neither translation renders ananvayāt correctly. Hacker explains very well: "er [i.e. der Ātman] ist eigenschaftslos (nirvišeṣaṇa), denn alle individuellen Qualitäten haften ihm nicht dauernd und durchweg an (ananvaya)" (p. 39). One may suggest the following translation: "No qualifications seen anywhere belong to the Self, for they are not permanently associated with it".

III.6 Intr. nihsamdhibandhanam mithyājñānam – "erroneous knowledge which consists in connecting what are not connected". R. "false knowledge, attaching itself fast". Hacker renders niḥsandhibandhana as "feste Verknüpfung" (p. 58).

III.6d jñātmanā tyājayed vacaḥ — "One should give up the words through (awakening to) the Self as knowledge". R. "The words of the scripture set it aside by focussing on the Self of the nature of the pure consciousness". Alston has not seen that vacas is the subject: "The words of the scripture make one give up (ignorance) by means of the Self, the knower". See also Hiriyanna's quotation from the Sārārtha (p. 257).

111.73 bhrāntiprasiddhyānūdyārtham tat tattvam bhrāntibādhayā / ayam nety upadiśyeta tathaivam tat tvam ity api — "When a man wishes to dispel the erroneous notion of another, he first conforms his speech to that erroneous notion as if it were a fact, and then he says 'it is not so'. The same is the case with 'that' and 'thou'." R. "When something is the object of an illusory apprehension, it is first of all referred to as it is known under the illusion and then its real nature is taught by the removal of the illusion by saying 'This is not so'. So is the case in 'That thou art' also".

111.79 samsāritādvitivena pāroksyam cātmanā saha / prāsangikam viruddhatvāt tattvambhyām bādhanam tayoh - "'Being the transmigrant' and 'not-being-immediately-evident' are only accidental characteristics of the Self, since they are in mutual contradiction. They are therefore both negated, (the first) by 'that', and (the second) by 'thou'." - R. "Being in bondage is contradicted by being one without a second. Being mediate and indirectly presented is contradicted by self-hood. The two terms 'That' and 'Thou' intending a unitary import sublate by implication these contradicted meanings". Alston follows Hacker in interpreting prāsangika as 'accidental' (cf. Hacker p. 81: 'zufällig'). However, Jñānottama explains prāsangika by nāntarīyaka, 'inherent', a meaning which is not to be found in the Petersburg Dictionaries. However, it is given by Monier-Williams with a reference to Wilson's dictionary: 'inherent',

'innate'. See also Āpte's *The Student Sanskrit-English Dictionary*, 2nd ed., 1922: prāsaṅgika 2) 'connected with', 'innate'. Jāānottama mentions a variant reading prāsaṅgikaviruddhatvāt which seems preferable.

III.88 Intr. abhyupagame 'pi ca prasamkhyānaśatenāpi naiva tvam sambhāvitadoṣān mucyase — "And even if it were admitted (that the Self was really known to be connected with pain), then not even by a hundred acts of symbolic meditation could you escape from the defect that would arise". R. "If the fact of misery etc. are admitted to be established by other means of knowledge, a hundred meditations even cannot bring about emancipation from evil". Alston renders sambhāvita wrongly and Raghavachar omits it. Sambhāvitadoṣa is the defect imputed to the Self by considering it as duḥkhita.

III.90 Intr. tac [i.e. prasamkhyānam] cānuṣṭhīyamānam pramitivardhanayā paripūrņām pramitim janayati na punar aikāgryavardhanayeti / yathāsesāśucinīde strīkuņape kāminīti nirvastukaḥ puruṣāyāsamātrajanitaḥ pratyaya iti - "When properly performed it [i.e. meditation] generates perfect knowledge and does so by improving on such knowledge as already exists, and not through merely improving the mind's powers of concentration. It is not to be compared with the purely imaginary notion, arising through subjective mental activity, that the body of a woman, that receptacle of every impurity is a charming object of desire". Alston follows R. in taking the sentence beginning with yathā as illustrating aikāgryavardhanayā. Alston-I, however, agrees with Hacker, p. 99: "es erzeugt durch Vermehrung der Erkenntnis vollendete Erkenntnis, nicht aber bloss durch Vermehrung der Konzentration'. Eine solche Wiederholung von Denkakten ist nach Ansicht des Opponenten sogar imstande, einen festen Glauben zu erzeugen, dem überhaupt keine Wirklichkeit entspricht, z.B. entsteht durch intensives Denken eines Mannes an eine Frau, die doch in Wirklichkeit nur 'ein Leichnam, voll von aller Unreinheit' ist, die Vorstellung, sie sei begehrenswert". Hacker is undoubtedly right. The opponent maintains that prasamkhyāna leads to a more perfect knowledge but not to increased concentration. It is even capable of producing a wrong notion, not based on reality, as for instance the notion of a 'charming woman' with regard to a corpse full of filth. Alston-I correctly remarked that "prasamkhyāna on the holy sentences yields 'improved' knowledge of reality in the same way, with the difference that this variety of 'improved' knowledge happens to be true". See also Jñānottama: loke bhāvanāpracayasyāvastuny api pratyayadārdhyahetutvadarsanāt -"one sees that in ordinary life repeated acts of imagination produce a firm notion even with regard to something devoid of reality". The Kleśāpahārinī relates vathāśesāśucinide to aikāgryavardhanayā: aikāgryavardhanāyām nidarsanam 'yathāsesāsucinide'.

IV.56 vāstavenaiva vṛttena nirunaddhi yato bhavam / nivṛttim api mṛdnāti samyag-bodhah pravṛttivat — "Through knowledge of reality he brings empirical being to an end. Right-knowledge destroys the path of renunciation as surely as it destroys the path of action". R. translates vāstavenaiva vṛttena by 'in reality'. Hacker is more precise: "Weil die rechte Erkenntnis bloss dadurch, dass sie Wirklichkeit geworden ist, das Werden verhindert, zerdrückt sie die Werkenthaltung ebenso wie die Tätigkeit" (p. 105).

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A. S. Acharya, Barkur Kannada (= Publications of the Centre of Advanced Study in Linguistics, University of Poona, series major, no. 1; Linguistic Survey of India series, 6). Poona, Deccan College, 1971. 102 pp. Rs. 10/-.

The present volume is a study of a Dravidian dialect spoken around the small town of Barkur, in Udipi taluk, South Kanara district, Mysore state, on the west coast of India.

Although Kannada is the main language of Mysore state, Tulu is the principal mother-tongue in South Kanara district; and the Barkur area, Acharya tells us in his preface, is something of a linguistic island. Data was collected during a two-month period, principally from a single educated Brahmin speaker. The data presumably reflect informal speech; but since the informant no doubt knows formal Literary Kannada too, we might wish that Acharya had given us a little sociolinguistic commentary. One wonders, too, what the non-Brahmin speech of Barkur may be like.

However, Acharya's description is purely descriptive, and follows a classic pattern of taxonomic structuralist linguistics: the divisions are (1) Phonology, (2) Morphology, (3) Texts, and (4) Vocabulary. The focus is on the word, rather than the sentence, to such an extent that even the rules of external sandhi are given, not under Phonology, but as a section introducing the Texts; and there is no explicit analysis of syntax. It appears that more monographs on this same model may be forthcoming: nine titles are announced in the "Linguistic Survey of India series", including two others by Acharya himself (although the present work is no. 6 in the series, it is apparently the first one published). This is a little discouraging: Acharya is careful, systematic, and thoroughly competent within the framework of his model; but this is a model which was taught at Deccan College in the 1950's. Since then, linguistics has changed, in India and around the world. Considering the skill and energy of the authors in this series, it would be a pity if we were to receive from them only relatively superficial descriptions.

A look at the Barkur vowels, as presented by Acharya (pp. 1-5) will illustrate what I mean. The system is said by him to have short and long vowels in eight qualities: $i e \varepsilon a \circ u i$. Is this really an important departure from the five-vowel system of the Dravidian literary languages? An examination of Acharya's data suggests that it is not: thus, most of his occurrences of ε occur before a syllable containing a low vowel (εle 'leaf', $p\varepsilon:te$ 'market'), and e generally occurs elsewhere (εu 'ant', $\varepsilon:ti$ 'blow'). There are indeed some surface contrasts of ε with ε , e.g. ε herge 'outside' vs. herge 'childbirth'; but the alternative form herige and the stem heri 'to give birth' (pp. 100-01) suggest underlying forms /herage/ 'outside' vs. /herige/ 'childbirth', with lowering of ε when a low vowel follows.

Similarly, o generally has a low vowel in the next syllable (ole 'oven', ko:te 'fort'), as compared with o (kodī 'give', o:li 'palm leaf'). Of the exceptions, some are like toli 'to wash', cf. toli 'to step'; but it is noteworthy that although no Barkur verbs end in e, Literary Kannada has such verbs, including tole 'to wash'. It is evident that Barkur shows the same metaphony, lowering e o to e o respectively, as do many other Kannada dialects: first tole becomes tole, then a separate change of final e to i (only in verbs, for Barkur) results in toli 'wash'. Other surface occurrences of Barkur o in examples like kolke 'third crop' vs. kolke 'a hook' can be understood in the light of the corresponding Literary forms kolake and kolike, kolike respectively. And metaphony is not merely a historical explanation here: Literary Kannada, showing the underlying 5-vowel system, is undoubtedly in the active repertory of Acharya's educated informant, and in the passive repertory of even illiterate Barkureans.

What of Barkur i i:; also absent in Literary Kannada? Acharya notes that i never

¹ An example like *etta* 'where' (p. 1) evidently requires a special explanation; but it should not obscure the marginal nature of the e- ε contrast in this dialect.

Cf. W. Bright, "Dravidian metaphony", Language 42 (1966), pp. 311-22, esp. pp. 317.
 Cf. W. Bright, "Phonological rules in Literary and Colloquial Kannada", JAOS, 90

^{(1970),} pp. 140-44. An example like Barkur *koda* 'he cannot give' (cf. *koda* 'pot') requires a special explanation: I suspect that low vowels in the inflectional endings of verbs do not cause metaphony in this dialect.

occurs initially, but an inspection of his data reveals even stronger restrictions. In word-initial syllables, short u, e.g. in uri 'fire', occurs to the exclusion of short i (except in some Sanskrit loanwords with t- in the original). In medial syllables, short i occurs to the near exclusion of short u, as the counterpart of Lit. Ka. u (Barkur elibi 'bone', Lit. elu(bu); of Lit. Ka. i, with which it sometimes varies freely (he:lida ~ he:lida 'he said', Lit. he:lida); and of Lit. Ka. a (entidi 'what', Lit. enthadu). In a few cases, however, medial u occurs after an initial syllable containing u (kurule 'young plantain plant'), and in future forms like ma:d-uv-a 'doing' (participle). Finally, short I occurs as the wellknown Dravidian "enunciative vowel", corresponding to Lit. Ka. u (no:vī 'pain', Lit. no:vu), but Barkur has final u in two kinds of examples – namely in nouns of the shape CVCV (suru 'beginning', magu 'child'), and in 3rd person neuter verb forms of the future tense (ma:du 'it may do', cf. ma:di 'do!'). All this is to say that the superficial difference between I and u is largely predictable if Lit. Ka. forms are taken as basic, as is the case in many other Kannada dialects.⁴

Acharya's description of the morphology of nouns and verbs is as rigorously taxonomic as his phonology, with abundant use of zero allomorphs. E.g. ma.du 'it may do' is analysed as ma.di 'do', plus a zero variant of the future (otherwise -p, -b, -v), plus -u '3sg. neuter'; one wonders if a preferable analysis would not be as ma.d-uv-u with a rule contracting uvu to u. Much reference is made to free variation of allomorphs; thus the accusative of adi 'it' is said to be $adinna \sim adanna \sim adi$; little attempt is made to describe such phenomena in terms of general phonological rules (such as a frequent change of medial a to i), and no clue is given as to the possible sociolinguistic background of such variation

Apart from such matters of presentation, Acharya's description presents some interesting data. Although noun morphology seems much like that of other colloquial Kannada dialects, here Archarya muddies the waters by positing a 'comparative case morpheme' -iginta (with other allomorphs, p. 25) which is clearly a combination of the dative case suffix with a postposition inta. The verb morphology shows full paradigms for present, past, future (usually translated with 'may') and negative. In the future, there are some interesting stem-formations in -p, -b which are not used in Lit. Ka.: e.g., from barī 'come', bappa 'he may come'; from tinnī 'eat', timba 'he may eat'. The corresponding 3sg. neut. forms, where one would expect *bar-uv-u etc., are bakkī 'it may come', tingī 'it may eat'.

Various inconsistencies are discoverable in Acharya's description. Thus verbal nouns like *ma:di:di* 'doing' are treated along with derivative and compound nouns (p. 16), though they are best understood as a type of non-finite verbal form, built in fact on participles (pp. 42-3). In describing the participles themselves, Acharya holds (p. 43) that they are formed by adding -a to a past stem (*ma:did-a* 'done'), to a future stem (*ma:duv-a* 'doing', evidently taking the place of a PRESENT participle), and to a negative GERUNDIAL; but why not recognize a negative STEM in *ma:dad-a*?

An "Assertive" form like *tarkī* 'one should bring' is treated as a "finite verb form" though it makes no distinction of persons (pp. 42-3); but this looks like a reduced combination of verb plus impersonal "modal", perhaps indeed *be:kī* 'it is required' (p. 47).

Misprints are more numerous in this volume than they have been in some other linguistic publications from Deccan College; but most will be self-correcting for the

⁴ Cf. W. Bright, "The enunciative vowel", International Journal of Dravidian Linguistics, 1 (1972), pp. 26-55, esp. pp. 44-5. The long i of Barkur is more unusual. It apparently results from two phonological rules: (1) contraction of uva to i: in forms like ma:duva 'doing' (participle) + $-di \rightarrow ma:di:di$ 'doing' (verbal noun); and (2) contraction of i with the a of anni 'to say', e.g. e:li 'get up!', e:li:ndre 'if one says "get up!"

specialists who will use this monograph. The work stands as a valuable collection of data from a Kannada dialect which, though spoken in the interestingly multilingual South Kanara district, retains most of the characteristic features of colloquial Kannada as used elsewhere.

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