



THOMAS BURROW

Ramsey & Muspratt

Thomas Burrow

1909–1986

THOMAS BURROW, Boden Professor of Sanskrit in the University of Oxford 1944–76, uniquely made an original and in many respects decisive contribution to both Indo-Aryan and Dravidian philology.¹ As research student and fellow at Christ's College, Cambridge, in the 1930s, he described, from recently deciphered administrative documents in Kharoshti script, the version of the Gandhari Prakrit language that was in use in Chinese Turkestan c. AD 300. His translation of the documents followed in 1940. While employed in the Department of Oriental Printed Books and Manuscripts, British Museum, 1937–44, he began to establish a systematic comparative historical philology of the Dravidian languages which, coupled with his equally pioneering descriptions of individual tribal languages, led to the magnificent *Dravidian etymological dictionary* (with M. B. Emeneau; 1961, rev. edn. 1984). At Oxford, he began a series of Sanskrit lexical, grammatical, and phonological studies which culminated in *The Sanskrit language* (in the series *The Great Languages*; 1955, rev. edn. 1973) and *The problem of shwa in Sanskrit* (1979) and on which, despite failing eyesight, he was actively engaged until his sudden death in 1986 aged 76.

Born on 29 June 1909, he was educated at Queen Elizabeth Grammar School, Kirkby Lonsdale, and Christ's College, Cambridge, where he read for the Classical Tripos until specialisation in Comparative Philology led him to study Indology under the tuition of E. J. Rapson, principal co-editor of the administrative documents from the kingdom of Shan-shan in Chinese

¹ I gratefully acknowledge bibliographical and biographical assistance from E. Tucker and G. R. Hart of Oxford. T. H. Barrett (SOAS) and R. Salomon (University of Washington, Seattle) kindly provided bibliographical data with reference to Niya Prakrit.

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Turkestan.² He was awarded First Class Honours in both parts of the Oriental Languages Tripos and studied for a year in London at the School of Oriental [and African] Studies, working on the Kharoshti script and Prakrit language of those documents and benefiting there from H. W. Bailey's expertise in dealing with the Iranian and other extraneous elements involved.

The results of this work appeared in articles from 1934, followed by *The language of the Kharoṣṭhi documents from Chinese Turkestan* (CUP, 1937), for which he had been awarded the Ph.D. degree of the University of Cambridge, and eventually by *A translation of the Kharoṣṭhi documents from Chinese Turkestan*, published by the Royal Asiatic Society (London, 1940, in the Forlong Fund series). Unique as is the survival of an ancient Indo-Aryan administrative archive, the purely Sinological relevance of its actual content has inhibited any serious attempt, from the Indological side, to improve upon these as yet provisional treatments of form and content. John Brough's description of the kingdom³ has, however, confirmed Burrow's readings and interpretation of some key passages. A Chinese rendering has been published on the basis of Burrow's translation; and his work has provided some 800 lexical attestations of the language for R. L. Turner's *Comparative dictionary of the Indo-Aryan languages* (London, 1966).

The morphology and syntax of these Prakrit documents were shown to have reached a stage of development that is scarcely attested in the other Indo-Aryan languages within India before the second millennium AD. Developments such as the loss of distinction between nominative and accusative, and the formation of a new synthetic preterite tense, could not have been suspected on the basis of literary texts in Gandhari Prakrit, which substantially retain the syntax of the sub-continent.

Oskar von Hinüber did not consider it appropriate to include the grammar of the dialect in his survey of recent research on the early Middle Indo-Aryan languages.⁴ It may be, however, that in spite of von Hinüber's view of the changes as 'Sonderentwicklungen, die durch Einflüsse aus zentralasiatischen Sprachen wie Sakisch oder Tocharisch erklärt werden können' (*Das ältere Mittelindisch im Überblick*, 67), Burrow's belief (*The language of the Khar. docs.*, vi) that 'There is no reason to impute this to the users of the language in

² *Kharoṣṭhi* inscriptions . . . discovered at the Niya, Endere, and Lou-lan sites 1906–7 (Oxford, 1920–9).

³ 'Comments on third-century Shan-shan and the history of Buddhism', *BSOAS*, 28, 3 (1965), 582ff. = *Coll. papers* (London, 1996), 276ff. Burrow's materials were also used by the Japanese and Chinese historians Nagasawa Kazutoshi, Enoki Kazuo, Ma Yong, and Lin Meicun for their comments on the history of the kingdom, and by the last-named for his Chinese version of the documents and for his study of 'A new Kharoṣṭhi wooden tablet from China', *BSOAS*, 53, 2, (1990), 283ff. (For references, see Brough, *BSOAS*, 33, 1 (1970), 39 = *Coll. papers*, 297, 351, and Lin, *op. cit.*, 290n.)

⁴ *Das ältere Mittelindisch im Überblick* (Wien, 1986).

Central Asia, because with them it was a stereotyped official language, whereas the phenomena observed are those of normal linguistic change' represents the truth of the matter. The particularly striking formation of an active preterite from the passive participle is paralleled in Khotanese Saka, and there is at least partial collision of the direct cases in Tocharian. Since, however, both phenomena recur in the modern Dardic of the north-west, perhaps the decisive factor was an exposure to Iranian influence in Gandhara. This was the case with regard to lexical borrowing, as has recently been confirmed by Dieter Weber in *Languages and scripts of Central Asia*, ed. by Akiner and Sims-Williams (London, 1997), p. 31.

From 1938, Burrow was able to devote much of his time to Tamil and the other major Dravidian languages. Excused military service on grounds of impaired vision, and given custody of the South Asian books that had been evacuated from the British Museum, he proceeded avidly to study both texts and lexica. As noted by Emeneau, who worked with him at Oxford in 1956–7, one of his great assets was a prodigious and tenacious memory.

Like Turner in the field of the modern Indo-Aryan languages in 1914, Burrow had encountered a language family that had yet to be subjected to Neo-grammarians scrutiny, and where comparison with Tamil forms had consistently passed for historical linguistics. His 'Dravidian studies' (*BSOAS*, 1937–48 = *Collected papers on Dravidian linguistics*, Annamalainagar, 1968) examined the most basic sets of vocalic and consonantal correspondences in order to establish the actual direction and relative chronology of change.⁵

Building on the pioneer work of Gundert and Kittel, he also tackled the problem of identifying Dravidian loanwords in Sanskrit, a problem bedevilled by the pan-Indian tendency to adopt Sanskritised forms in lieu of or alongside inherited vocabulary, and by the impossibility of identifying with certainty the ultimate source of the bulk of the shared vocabulary. Some 500 lexical items were examined, together with considerations of methodology, in articles from 1945 onwards, and eventually incorporated in the Burrow–Emeneau *Dravidian etymological dictionary (DED)* (Oxford, 1961), and its *Supplement* (Oxford, 1968). There were some additions in 1970 and 1983, and numerous retractions in the revised edition (*DEDR* (Oxford, 1984), Appendix). The material has been used and evaluated in M. Mayrhofer, *Kurzgefasstes etymologisches*

⁵ Bhadriraju Krishnamurti, 'Comparative Dravidian studies', in *Current trends in linguistics*, 5 (1969), 309ff. includes a detailed account of Burrow's contribution: 'his lucid and definitive statements . . . constitute the beginning of a true comparative phonology for Dravidian'. He reviews Burrow's contribution to the question of Dravidian–Uralian affinity ('Drav. studies IV'). Otto Schrader had culled a common stock of 70 basic words connected with human physiology (30% of all such vocabulary in the Kannada dictionary): Burrow, from first-hand knowledge, found 72 words, retaining only 17 of Schrader's equations.

Wörterbuch des Altindischen (KEWA) (Heidelberg, 1956–76) and *Etymologisches Wörterbuch des Altindiarischen (EWA)* (Heidelberg, 1986–).⁶

The retractions (in cases where the word was later deemed to be of Indo-Aryan or other extraneous origin) draw attention to the large measure of uncertainty that still remains, in the absence of any large-scale investigation of the shared vocabulary. One of them, Tamil *pacantu* (*DEDR* 4054 and App. 46) was evidently unmasked only at the last moment as the common Urdu word *pasand*. It was decided, for example, that Tamil *cūṭakam*, Gondi *sūra* ‘bracelet’ (App. 39) must stem from Prakrit *cūla(a)*, and not vice versa: but such questions might better have been left open. The original Prakrit, rather than Sanskrit provenance of Indo-Aryan loans in Dravidian was long overlooked, so that Telugu *mēna* and Tamil *maittuṇaṅ*, *maccīṇaṅ* (designating a relation by marriage) had not been recognised as stages in the Sanskritisation, as well as in the assimilation, of a loan from Prakrit *mehuṇa* (< *maithuna*). Indeed the presentation in 1984 (*DEDR*, App. 53) still appears to misread the situation, by giving precedence to the mock-Sanskrit form *maittuṇa-*, although this is not known ever to have taken on the meaning that developed in Prakrit.

In 1949, M. B. Emeneau of the University of California at Berkeley, following his own extensive fieldwork on four non-literary Dravidian languages (Kota, Toda, Koḍagu, Kolami) had made the proposal that Burrow should collaborate with him on an etymological dictionary, which would facilitate research on Dravidian comparative linguistics by making available to other scholars Burrow’s collections of material from literary sources, as well as Emeneau’s unpublished vocabularies. Seeing, however, that the finer details of phonology, and eventually the rudiments of morphology, would only be worked out when all the available evidence was collected, Burrow also turned to fieldwork. Of this aspect of Burrow’s work Emeneau wrote:

In another phase of his Dravidian scholarship he was a pioneer. Up to 1940 the tribal languages of India had been investigated in the main by civil servants and missionaries, with the exception of my own professional work in the 30s on several languages that were easily accessible to investigation. Beginning in 1950, Burrow used a new operational method. He teamed up with the late Sri Sudhibhushan Bhattacharya of the Anthropological Survey of India . . . , whose collaboration was indispensable on all levels, but especially as interpreter. In a succession of fieldtrips in the 50s and 60s in Central India, in country usually very inaccessible, they investigated a number of Dravidian tribal languages that had been previously only badly known or not even known at all. This resulted in joint publication of two books and numerous articles. This type of joint research has since then been normal. . . .⁷

⁶ Cf. also notably Mayrhofer’s reviews of *DED* in *Kratylos*, 6 (1961), 154ff. and *DED(S)* in 13 (1968 [1969]), 208 ff.

⁷ *IL*, 47 (1986), unpag.

For *The Parji language* (1953) and *The Pengo language* (1970), Burrow and Bhattacharya had recorded virtually unknown dialects from the hinterland of the Eastern Ghats, offering basic and interim grammar, vocabulary, and sets of texts, adequate for the immediate purpose of lexical comparison and for establishing the connection of Pengo with the Gondi group and the independent status of Parji within the Kolami–Gadba group. These and other publications and their fieldnotes cover Koṇḍa, Kui, Kuwi (of the Gondi group) to the north, Maṇḍa (allied to Pengo), Gadba to the east, and Kolami to the west.

The Burrow–Emeneau etymological dictionaries amply achieved their objective, so that in Dravidology ‘there has hardly been an article or publication since 1961 which has not liberally drawn on the materials collected and organized in this work’ (Bh. Krishnamurti). They are rather of the genre of comparative dictionaries, since the aim was to make Dravidian etymology possible by scrutinising and (so far as possible) verifying all the available lexical material and grouping like with like: there are over 5,500 lemmata, supported by data drawn from up to twenty-eight Dravidian languages and by the attestation of loans into ancient and modern Indo-Aryan. The cross-referencing (also to the *Comparative dictionary of the Indo-Aryan languages*) and indexing, including a compressed but highly useful index of English meanings, are all that one could wish for, and misprints are virtually unknown. Since the individual languages have sorely lacked dictionaries on historical principles, *DEDR* is an important tool for literary as well as linguistic research.

Meanwhile, Burrow was making a large and potentially equally important contribution to the historical phonology, morphology, and semantics of Sanskrit. The originality of his approach made his work both stimulating and often controversial: rightly so, for Sanskrit grammars and lexica had remained static for half a century, often reflecting an uneasy interim compromise between Indian traditional opinion and European philology. Two newly discovered languages, Hittite and Tocharian, had shown little sign of supporting the view of the Indo-European parent language that had been reconstructed in their absence, from the languages—such as Sanskrit—that had achieved the most sophisticated level of grammatical refinement. He introduced this new evidence, together with the ‘laryngeal’ theory, to a very large Anglophone audience, via the Philological Society (“‘Shwa” in Sanskrit’, *TPS*, 1949) and his book *The Sanskrit language* in Faber and Faber’s widely read series *The Great Languages* (London, 1955, 1959, 1965, rev. edn. 1973).

In so doing he was one of the first Sanskritists to accept that there is Indo-Aryan support for the postulation of a ‘consonantal shwa’ (or ‘laryngeal’ *h*) in the parent language, to whose influence had been ascribed *inter alia* the

existence of radical long vowels and the voiceless (and some of the voiced) aspirate consonants, points which, though hardly proven or provable, remain standard doctrine.⁸ He refused to accept the postulation of a ‘vocalic shwa’, and this view, unusual at the time, has since been firmly endorsed by Mayrhofer in 1981 and 1986.⁹ It led him, however, with perfect consistency, to deny the strict identity of, for example, Sanskrit *pitṛ* and Greek *πατήρ* as manifesting such a vowel in the root syllable.

Virtually no scholar was then prepared to support this assault on one of the longest standing axioms of Indo-European Comparative Philology. Though Burrow repeated the thesis in *The Sanskrit language*, his prediction¹⁰ that ‘the rewriting of all our handbooks of IE comparative grammar . . . as far as ə is concerned is unavoidable, and this creation has become so pervasive in the theory of Indo-European that its removal entails the rewriting of a good deal besides’ has quite failed to materialise. Kuryłowicz’s systematic and equally innovative *L’apophonie en indo-européen* (Wrocław, 1956) retained shwa, as did his *Problèmes de linguistique indo-européenne* (Wrocław, 1977). Szemerényi’s influential *Einführung in die vergleichende Sprachwissenschaft* (Darmstadt, 1970, rev. edn. 1990) still states that ‘Schwa . . . ergibt sich aus morphologisch ganz klaren Entsprechungen wie skt. . . . *pitar-* . . . *a-di-ta*’ and gives no credence to G.Av. *ptā* and Skt *-tta*, or indeed to Burrow and his move to treat the *-i/-a-* of *pitṛ/πατήρ* as a secondary phenomenon as compared with the *-a/-a-* of pairs such as *ślakṣhā/λακῆς*.

Yet the consensus view, as now described by Mayrhofer, is not entirely convincing. Mayrhofer conceded only grudgingly that the proliferation of vocalic reflexes in Indo-Iranian is dialectal,¹¹ and, while denying the possibility of a single basic ‘Murmelvokal’ (*Idg. Gr.*, 1986, 122 and 177), has adopted instead three individual and unstable vocalic entities, variously labelled ‘vokalische Kontinuanten’ (p. 126), ‘überkurzer Sprossvokal’ (p. 138), and ‘Fortsetzung’ (p. 142) which all collided in Indo-

⁸ M. Mayrhofer, *Indogermanische Grammatik* (*Idg. Gr.*), 1, 2 (Heidelberg, 1986), 121 ff.

⁹ *Indogermanische Grammatik* 122 f., 177 ‘jener “Murmelvokal”, der auf nicht ganz aufgeklärte Weise im ausgehenden 19. Jahrhundert an die Stelle der sonantischen Koeffizienten Ferdinand de Saussures gesetzt worden ist’. Cf. *idem*, ‘Laryngalreflexe im Indo-Iranischen’, *ZPSC*, 34 (1981), 429 = *Ausg. kl. Schr.*, II, 294.

¹⁰ 1949, 61.

¹¹ His ‘Laryngalreflexe’, 436 mentions ‘das . . . vielleicht auch durch Dialektunterschiede gestörte Material’; much reliance is placed on Pkt *āgamamiṇa*, Y.Av. *pita* (and O.Pers. *pitā*), despite older G.Av. *-əmna* and (*p*)*tā* (versus *fəḍrōilpiθrē*, to which may be added *zəθā* in Y 44.3 *zəθā pātā* = *pitā janitā*, different from Y 43.5 *zəθa*, v.l. *zəθβa*, ‘birth’; see *EWA*, s.v. *janitār*). Mayrhofer does not mention Burrow’s understandable objection to the impression that this creates of derivation of the monosyllable (*p*)*tā* from a monosyllable (*pHtā) via the disyllable *pitā*. For Burrow, parallels for the otiose extension *-i-* seen in *pi-tṛ*, *sthi-tā*, etc. are provided e.g. by *√sā-*, *si-*, *√śā-s*, *śi-s-*, and by Gk *δολι-χός* alongside Skt *dir-gḥāḥ*, Hitt. *dalu-gaš*.

Iranian with the vowel **i*.¹² Szemerényi, resisting both Burrow's and Mayrhofer's revised versions of the hypothesis, eventually (reviewing Burrow's *Problem of shwa in Sanskrit* in *Kratylos*, 28, 1983, 75) admitted the need for a comprehensive analysis of all instances where Skt *-i-* has hitherto been regarded as derived from shwa. Burrow, he declared, 'would obviously bring the best possible qualifications for such a difficult task', but the call came too late. Similar was the reaction of Hiersche in *OLZ*, 1982, 6, 595ff.

The most strenuous objection that had been voiced by earlier reviewers concerned the precious identity of *pitř* and *πατήρ* (Benveniste)¹³ and of *(pṛṇ)imah* and *(δόνν)αμεξ* (Gonda):¹⁴ these critics too made no mention of Av. *ptā* and *(friiṇ)mahī* which, as far as Burrow was concerned, prove that the identity is illusory. Martinet¹⁵ made explicit the critics' assumption that Burrow's notation *p-itā*, *duh-itā* (1949, 38f.) implied an analysis *π-ατήρ*, *θυγ-ότηρ* with an unacceptable suffix *-ater. Burrow later acknowledged the fault, although his article in fact had gone on to explain the *-i-* as a root extension (p. 46: 'the root extended by suffixal *i*'), and to describe (p. 59) Gk. *στ-α-τόξ* in terms reminiscent of his view (p. 23) of Skt *darś-a-tāḥ* as a post-Ablaut formation with multiple full-grade vowels (unlike the more primitive *sthi-tāḥ* and *dr̥ṣ-ṭāḥ*). Burrow's ill-considered attempt to explain the phenomenon in terms of serial extensions, such as he envisaged in *hár-i*, *harí-t*, *hárít-a* and in *√śā-s-*, *ś-i-ṣ-* and *√sā-dh-*, *s-i-dh-*, also distressed the critics, though they might have seen that the gaucherie of this argumentation scarcely affects the main point at issue, i.e. that, whether they are to be explained on the basis of epenthesis or proliferation of existing suffixes, there is no need for a laryngeal explanation for the appearance of such medial vowels.

He might have strengthened the case for scepticism by questioning the generally held belief that Indian grammatical theory has any bearing on the matter. Like others, he referred to *tř-* and *san-* as 'so-called *seř-roots*' (p. 26), thus fostering the impression that the grammarians had actually envisaged '*tari-*' and '*sani-*' as alternative forms of the roots. Burrow's protest may have been tacitly influenced by the fact that Pāṇini speaks (7.2.10, 35) only of suffixes as being regularly prefixed with *i-* (*seř*), but exceptionally also unprefixed (*aniř*) in the case of so-called '*anudātta*'

¹² Mayrhofer had previously tended rather to contemplate the sonorisation of fricatives: *Nach hundert Jahren* (Heidelberg, 1981) (=SbHAW, 8, 1981), 18f.

¹³ *BSL*, LI (1955), 25: 'Je ne crois pas qu'aucun comparatiste sait (*sic*) tenté d'adopter cette vue extrême'. Precisely the word *pitř* was and is a bad choice as a support for shwa: it seems likely that, as in the case of *mātř* (EWA, s.v.), a childish word has been assigned grammatical gender (*pa-/mā-*) and declension (after the manner of *náp-t*, *náp-t-ř?*).

¹⁴ *Lingua*, VI (1957), 289.

¹⁵ *Word*, X (1956), 304ff.

roots.¹⁶ The twelfth-century commentary on *Dhātupāṭha* concurs, although itself participating in the eventual confusion: *pratyayasya seṭve 'niṭve ca, upacārād dhātos tathāvyapadeśaḥ* 'While it is the suffix that is *seṭ* or *aniṭ*, the terms may be loosely applied to the root' (Kṣīrasvāmin s.v. *bhū*). Pāṇini's sources, enshrined in the *Dhātupāṭha*, were presumably concerned to identify a 'regular' *-a/-i-* conjugation of verbs, so that the list of roots was subdivided first on the basis of strong and weak stems in the present system (*bháva-/ad-*), then on the basis of the strength of stems elsewhere (*bhaviṣyá-/dhakṣyá-*), and finally on the basis of the strength of personal endings (*dviṣṭé/dvéṣṭi*). Certainly, the result was that lists of strong verbs ('*udātta*') with *seṭ* conjugation and of weak verbs ('*anudātta*') with *aniṭ* conjugation) were prepared; but at no point was the *-i-* deemed to be integral to the root. The later tendency to talk of '*seṭ* roots' instead of '*udātta* roots' will reflect the fact that the term *udātta* had become meaningless, once Pāṇini had determined that *-i-* is integral, not to the conjugated tense stem, but to the suffix.

Burrow reinforced his attack on the vocalic shwa in an article in *Pratidānam*, 1968, and in *The problem of shwa in Sanskrit* (Oxford, 1979). In the latter, he compiled a more complete repertoire of instances of the reduced-grade vowel *-a-* in Sanskrit (*rā-*, *rá-tna*; *vidā-*, *vidá-tha*, and the like), which would rule out the notion of vocalic shwa (*-i-*) as a reduced grade.¹⁷ He was by

¹⁶ The traditional, merely mnemonic application of the terms '*udātta*' and '*anudātta*', '*anudāttet*' and '*udāttet*' used in the *Dhātupāṭha*, being consistently applicable only to consonant-final roots, is surely secondary. The terms *udātta* 'accented' and *anudātta* 'unaccented' have no bearing on the accentuation of the *seṭ/aniṭ* forms themselves, but seem intended to associate 'regular' *seṭ* future stems like *bhaviṣyá-* with such 'regular' root-accented present stems as *bháva-*; and to associate 'irregular' non-presents like (Sū.) *soṣya-* and (Gr.) *totsya-* with such 'irregular' root-unaccented presents as *sunóti*, *tudāti*. Thus *bháva-*, *bhaviṣyá-* is '*udātta* par excellence' and *sunó-*, *soṣya-* is '*anudātta* par excellence'. In the root-accented Classes I and IV, *udātta* verbs constitute respectively some 90% and 60% of the class and take precedence as the norm; but in classes such as V and VI, *anudātta* verbs, which yield only some 50% and 25% of the respective totals, are given precedence. (Sub-groups, vowel-ending or grammatically motivated, are another matter, being arranged according to notions of cyclic digression, the only principle of sequence that Palsule was able to detect: see *The Sanskrit Dhātupāṭhas*, Poona, 1961, 31; *udātta* verbs take precedence in Class VIII, in keeping with the ostensible strength of the root syllable.)

This classification, involving an extension of the concept of accentual strength, and reflecting a rather post-Vedic notion of regular *-a/-i-* conjugation, presumably inspired the more sophisticated sub-classification of roots into *udāttet*, etc., where the terms correlate strength of stems with voice. The '*anudāttet*' weak stems, associated with strong middle-voice endings, take precedence in the more basic consonant-final *bhūvādi* categories over '*udāttet*' strong stems with weak active endings (cf. *-nuté/-nóti* respectively); and '*svaritet*' serves to denote a combination of strong and weak stems.

¹⁷ 'never before has the complete material been put together in such an impressive fashion': O. Szemerényi, *Kratylos*, 28 (1983), 73f.

now willing to accept laryngeals only where directly attested in Hittite. He stressed the failure of Hittite to support the theory of laryngeal-induced lengthening: Hitt. *pahš-* ‘protect’ is virtually unique; Skt *dāntá* and *damayati* would seem to owe their vocalism to their disyllabic base (cf. Hitt. *damaš-*); and (in the absence of corresponding disyllabic bases) there is no evidence that *terH and *senH (Hitt. *tarh-* and *šanh-*) could yield anything but a **tārayati* (unattested in the relevant sense ‘overcome’) and *sānayati* (presupposed by a Vārttika). Burrow did, however, adopt the notion of a glottal fricative as a pointer to the mechanism that would serve both to lengthen Skt *-sūta*, *suvāná* over against *-suta*, *-svāná* and (provided one upheld Brugmann’s Law) to preserve the short radical syllable in *janayati* as against *kārayati*. The suggestion has at least the merit of offering a convenient notation *jan’* for nasal long-sonant roots in Sanskrit, preferable to the shwa-based notation *JAN’* that has been adopted by Mayrhofer.

This length-generating and length-retarding factor, conceived (in deference to Saussure’s theory of disyllabic bases) as the ‘residual trace’ of a vowel, was a laryngeal in all but name, and it appealed to no-one as an improvement upon the shwa hypothesis or the laryngeal hypothesis. In respect of the pure vowels, he had abandoned the proposition that a lengthening process must inevitably involve some pre-existing vocalic or consonantal trigger; but he drew no moral from this, nor did he observe that the Sanskrit grammarians’ postulation of long-sonant roots on the one hand and of *seṭ* suffixes on the other is an inadequate guide to the Avestan and Rgvedic material as a whole.

Burrow did not realise the extent to which the assumption of medial consonantal shwas, which he had accepted, is bound up with, or even dependent on, the postulation of vocalic shwa. Saussure believed that ‘sonant coefficients’ *A and *O (i.e. the eventually postulated laryngeal consonants) were necessary to explain vowel length in one particular category of root syllables; and that they yielded in isolation a single weak vowel (eventually labelled shwa and styled an allophone of zero). This belief presupposed the surprising assumption that in Indo-Iranian his coefficients *A and *O could collide with *i; it also assumed a link between the fictitious long-sonant roots (*kṛ-*, *pṛ-*, etc.) and the proliferating morpheme divider *-i-*, both features more obviously typical of Sanskrit than of the proto-Indo-Iranian one might have inferred from Av. *darəga*, *dugədar*, and *(p)tā*.¹⁸

To carry conviction it would have been necessary to widen the campaign. The general anxiety to uphold the equation $\sigma\alpha\tau\acute{o}\zeta$ /*sthitá* reflected the feeling that it importantly substantiates the putative laryngeal explanation of the

¹⁸ For the dependence of Saussure’s proto-laryngeal on his proto-shwa, cf. Mayrhofer, *Nach hundert Jahren*, 23, n. 67, and 28, n. 79.

vocalism and of the aspiration of *sthā-*. Burrow did go so far as to deny (1979, 20) that an isolated equation like Skt *pā-s-/Hitt. pah-š-* has any bearing on the vocalism of Skt *sthā-*; but he might have strengthened his position by observing that there is no need to assume that the aspiration of *sthā-* reflects anything more than a purely Indo-Iranian tendency to avoid the ambiguity of unaspirated forms like *abhiṣṭi* ('aid' = 'Bei-stand': EWA).¹⁹ In another instance where a significant laryngealist tenet rested on one dubious example, Burrow's scepticism was apparent, but unproductive: 'It is believed that one type of IE η . . . affected a preceding surd differently, by voicing it, in Sanskrit *pībati* = O. Ir. *ibid* "drinks" . . . but this appears to be the only example' (1955, 71 f.; cf. 1979, 37).²⁰ With his commitment to Dravidian linguistics and to completing the revision of *DED*, however, he was in no position to mount the implied full-scale reappraisal required.²¹

He did not survive to take stock of the evidence which in 1986 Mayrhofer marshalled as irrefutable proof of the ubiquity of laryngeals. If Burrow was right, the main surviving relevance of laryngeals would be to the occasionally disyllabic *-ā-* of Indo-Iranian and other syllable-initial phenomena with which neither Saussure nor he was concerned, e.g. *bhās* = *bhā'as* (RV 6.10.4), *pānt* = *pa'ant* (9.65.28–30), and *vāta* 'wind' = *vā'ata* (9.97.52, etc.: EWA **vaHata-*, Hitt./*huḡant-/*).²² Burrow's only relevant comment (1955, 238, on the disyllabic suffix in *téṣām*) does not address the main problem: but since Hittite offers no medial laryngeal in its version of *vāta*, he would have been undismayed.

His willingness in 1955 to accept the consonantal aspects of recent laryngeal theory (deriving Skt *tīr-ṇá*, *tīrati* from **t̪rH-* and *rāth(i)ya* from **rotHiHo*, and so forth), while denying the long-standing vocalic shwa, gave a doubly innovative aspect to his most widely read work *The Sanskrit language*. Appearing at a time when it was Comparative Philology more than anything else that drew students to Sanskrit, the book combined a detailed comparative historical phonology and morphology (primarily of Vedic) with a masterfully compact survey of its Indo-European prehistory and its subsequent debt to

¹⁹ Mayrhofer, *Sanskrit und die Sprachen Alteuropas* (Göttingen, 1983), 433, considered a laryngeal the only possible explanation for Skt *path-*: but Av. *padəbiš* ('paths') reveals that there had been a need in Sanskrit to create a distinction between *pathibhiḥ* ('paths') and *padbhiḥ* ('feet').

²⁰ Despite Mayrhofer (*Idg. Gr.*, I, 2, 143, n. 184), the possibility that an onomatopoeic **bib-* (Latin *bibit*) has been influenced by **pō-*, seems worth canvassing. (Unlike Pokorny, *IEW*, 1969, Mayrhofer cites O.Irish *ibid* as 2 pl. imperative.)

²¹ 'Burrow gehört zweifellos zu jener Art von Forschern, die kühn Schneisen schlagen und anderen das Aufräumen überlassen': R. Hiersche, *OLZ*, 1982, 6, 597.

²² For *vāta*, see notably 'Die Vertretung der idg. Laryngale im Lateinischen', *KZ*, 100, 1987, 97 n. = *Ausg. kl. Schr.*, II, 421 n.); for *pānt* m. 'drink' (the stem *pānta* is required only for the neuter transposition *pānta*, still with disyllable, at 10.88.1 *haviṣ pāntam* . . . *āhutam*), see EWA, s.v. *PĀ*².

Middle Indo-Aryan, Dravidian, and Munda. It was thus the first general treatment of Sanskrit that sought to exploit the Hittite evidence and the laryngeal theory, while offering new insights into the post-Vedic evolution of Sanskrit: but the format left him no room for manoeuvre in the matter of referencing, indexing, and cross-referencing. Martinet, in his sympathetic review, understood that Burrow had no choice but to make the book a repository for his theory of apophony (no-one having offered any attempt at refutation in the intervening seven years). He admired too 'by far the most lucid total presentation of laryngeal lore ever printed' and the 'amazingly simplified picture of IE nominal derivation': 'with all its one-sidedness, Burrow's huge black and white fresco may convey a more valid impression of what the nominal system of Indo-European may have been at a certain stage than more painstaking and roundabout expositions'.

Burrow's traditionalist view of Indo-European as a 'two-dimensional' (Martinet) amalgam of reconstructions was unpalatable to general linguists. Such reviewers found fault with both his conservatism and his originality, and certainly he had committed himself to a fair number of ill-considered or even inscrutable etymologies (e.g. *nákṣ-atra* and *sy-oná* respectively). Although now sadly out of print, the years, its reprintings, the Hindi translation of 1965, and constant citation in Anglophone circles have shown that it is a book that continues to meet a need for the general reader and for the budding specialist.

Even the revised and improved edition of 1973 could do little to update all of Burrow's many knot-cutting solutions, only occasionally idiosyncratic or ill-advised; and no-one has taken up the challenge to try and do better. It was suggested by one reviewer of the revised edition²³ that Burrow had simply ignored justified criticism of the original, but this is by no means the case. The problem was rather the pressure imposed upon him by his medium, which evoked from Edgerton (*JAOS*, 1956, 193) the comment: 'It is clear that he knows the literature well, and in some cases a negative attitude can be detected towards certain views which he does not think it necessary even to mention specifically. It often takes a rather well-read specialist to divine what he is doing in such silent polemics'.

Burrow's reaction to Edgerton's own comments is typical: in the case of simple oversights (and the occasional howler: Russian *zemlja* had been credited with an *-l-* suffix), amendments were duly made. One detects, however, no reaction to Edgerton's complaint that the exposition of one original hypothesis, postulating identity of the neuter ending *-am* with an athematic nominal

²³ R. Schmitt, *Kratylos*, 17 (1972 [1974]), 203. M. Leumann had objected in *Kratylos*, 1 (1956), 29 to Burrow's treatment of *kṣ/κτ*, etc.: in the one specific instance where Burrow had indeed erred, the correction was made. The **teks-tōn* that was also criticised was a veiled allusion to proposals of Kuiper and Szemerényi; an improved formulation was only later provided by Mayrhofer (see *Idg. Gr.*, I, 2, 156).

derivative suffix *-m*, is seriously flawed. To justify this postulate, Burrow had invoked *yugmá* ‘paired’ (BRD *yugmá* ‘paarig, geradezahlig’): but this is actually a late Vedic form *yugma* whose predominant implication is ‘even-numbered’. As Edgerton observed, it seems to be a replacement for earlier *yugmán* (*ŚBr. yugmābhiḥ*, *R yugmāni*); and even this version seems to replace *yug-mánt*, antonym of *á-yuj* in TS. It is a serious criticism, but it by no means invalidates the argument, since it seems as easy to deduce the desired suffix *-m-* from *-m-an*, *-m-ant* as from thematic *-m-a*. A stimulating suggestion had been made, where none existed before; and even a complete rewriting of the three pages involved would have done nothing to satisfy those who would demand an entirely more sophisticated treatment of the origins of case and gender (noting that he had naively treated the masculine accusative *-am* as a quite unrelated pre-existing entity), or those for whom such unverifiable hypotheses have no place in such a book unless, like vocalic and consonantal shwa, they have been around for a lengthy period. On the other hand, it would not have been impossible to include in the new bibliographical note some laconic reference to other specific factual criticisms.²⁴

Burrow’s contribution to Indo-European reconstruction continued throughout his career, notably in his studies of anomalous sigmatic forms in Sanskrit (‘The Sanskrit precativ’, *Asiatica*, 1954 and ‘An archaic verbal termination in early Indo-Aryan’, *IJJ*, 1957); the antecedents of the Sanskrit consonant group *kṣ* (‘On the phonological history of Sanskrit *kṣam-* “earth”, *ḥkṣa-* “bear” and *likṣa-* “nit”’ and ‘Sanskrit *kṣi-*: Greek *φθίω*’, *JAOS*, 1959); the development of retroflex consonants in Sanskrit (‘Spontaneous cerebrals in Sanskrit’ and ‘A reconsideration of Fortunatov’s law’, *BSOAS*, 1971–2); and vowel-length based on original *-o-* (‘A new look at Brugmann’s law’, *BSOAS*, 1975).

His rejection of vocalic shwa apparently owed much²⁵ to Meillet’s observation in *BSL*, 1933, that a proliferation of sigmatic forms (where preterite endings with initial *t-* are involved) is common to the Sanskrit *-iṣ-* aorist and to the *-is-* preterites of Latin and Hittite. It was the preconception of vocalic shwa that had prevented Meillet from postulating a common Indo-European source for the *-is-* forms of Sanskrit (a mainstay of shwa theory), and those of Latin, Armenian, and Hittite. By identifying an Avestan correlate *tuyā* for the Vedic 3 sg. precativ active *bhūyāḥ*, and by collecting instances of anomalous 3 sg. *-stha*, Burrow was able to link these with 3 sg. *-s* and *-sta* preterite endings

²⁴ Such a list would have remained eclectic: Burrow was under no obligation to endorse all of Thieme’s hostile criticisms (*Language*, 1955, 428 ff. = *JBRs*, 58, 1972, 197 ff.), the more general of which are based on some fundamental misunderstanding of Burrow’s formulations, always Pāṇini-wise brief and careful. One must, however, regret Burrow’s failure to accept that a *syonā* ‘soft, agreeable’ is unacceptable as evidence of a suffix *-avana*, *-ona*; and that an *arī* ‘devoted, trustworthy, pious’, apparently from Sāyaṇa’s ‘*yajamāna*’ via BRD ‘anhänglich’ and MW ‘faithful’, is unduly eccentric (cf. Thieme, 1955, 433).

²⁵ Cf. Burrow, *TPS* (1949), 56 ‘certain formations in *-i-*’ (a characteristically tacit reference); *Asiatica* (1954), 39; *IJJ* (1957), 74f.

found in Hittite, and hence to show that not just the Sanskrit precative but the sigmatic aorist as a whole could be traced to an ending *-s* in the 3 sg. This is the acknowledged basis of Watkins's theory²⁶ that all 3 sg. endings developed from root extension, *-t*, *-i*, *-s*, *-u*. Like Burrow, Watkins has reduced the scope of vocalic shwa by several categories: the Hittite *-āi*- diphthongs and the Indo-Iranian middle endings **-i* and **-madhi*. Hence Watkins's retention of it elsewhere, thus separating the Sanskrit *-iṣ*- aorist from the other sigmatic preterites and the Sanskrit suffix *-(i)man* from Celtic **(i)amon*,²⁷ can seem anomalous on occasion.

A significant contribution to the clarification of Indo-European phonology was made by Burrow's completion of Kretschmer and Brandenstein's use of Hittite and Tocharian evidence to solve the problems associated with certain Greek cognates (κτχθφθ) of Sanskrit *kṣ*. He brought several key Indo-Iranian forms (*ṛkṣa*, *kṣiyánti*, *kṣám*, *kṣā́tí*, *kṣiṇánti*) into line with the rest of the evidence by indicating that the Sanskrit reflex can derive not from *ks* but from *tś* and *dʒh*, and by suggesting a possible etymology (*dah*- 'burn' for *kṣā*- 'burn'). The phonological developments involved have since been clarified by Kuiper and Mayrhofer, who has acknowledged in particular Burrow's contribution (*JAOS*, 1959) to Hittite-based solutions for *kṣám* and *ṛkṣa*, while disposing of certain doubts that had been expressed by Kuiper.²⁸

H. W. Bailey having demonstrated that many Sanskrit words with retroflex consonants have Iranian cognates with dentals, Burrow provided sufficient additional material to imply that for etymological purposes retroflexion can generally be ignored in the post-Vedic period. Following Mayrhofer, but deeming the whole process to be prehistoric, he inferred 'a process of fission' due to 'spontaneous cerebralization', although at least in the case of *-ṇ*- and *-ṣ*- it would seem wiser to suggest dialect mixture (i.e. adoption of regional *māṇava* and *abhilāṣa* to support semantic nuances distinct from *māṇava* and *vilāsa*, *ullāsa*).²⁹

His subsequent 'reconsideration' of that 'permanent issue of dispute', Fortunatov's Law, claimed 'to establish it beyond all reasonable doubt'. It revised the list of words to which the law might apply, i.e. those in which retroflexion could possibly be due to *-l*- rather than *-r*-. The article encouraged

²⁶ Cf. Watkins, *Idg. Gr.*, III (1969), 53 ff. Burrow's point (*apās* → *ápāt*) seems to be overlooked by Oettinger, *Stambildung des hethitischen Verbuns* (1979), 435 and Mayrhofer, *Idg. Gr.*, I, 2, 143 ('*a-pā-t* → *ápās*').

²⁷ *Idg. Gr.* 54.

²⁸ See Kuiper, *III*, 10 (1967), 103 ff. and Mayrhofer, *AÖAW*, 119 (1982), 246 f. = *Ausg. kl. Schr.*, II, 261 f.; *Idg. Gr.*, I, 2, 153 f.

²⁹ The early R̥gvedic instances (Mayrhofer, *Mélanges d'indianisme*, 1968, 509 ff.) seem to correlate strongly with cultural objects and commodities: *maṇí* '(amulet) jewel', *sthūnā* '(monumental) pillar', etc., so that it is not only *viṇā* 'lute' (p. 511) that may be branded a borrowable 'Kulturwort'. The dialect involved at this period might be that of Iranian artisans or merchants, whose dentals would differ from Indo-Aryan post-dentals. The word *pāṇí*, rare as a simplex and denoting 'hoof' at 2.31.2, is arguably applied as a humorous vulgarity to Indra's hands at 4.21.9 ('Don't just sit there . . .'). If so, the vulgar implication was soon lost.

Collinge to deliver his verdict that the ‘law’ still ranks as a ‘doubtful, but not incredible’ proposition and ‘a useful label’.³⁰ Its argument is, however, a victim of Burrow’s surprisingly monolithic view of Prakrit. He felt obliged to withdraw his very plausible explanation of *abhilāṣa* (<*abhilāsa* lex.) on the grounds that ‘in Prakrit all the sibilants have fallen together as *s*’ (BSOAS, 1972, 543f.), as though only the standard literary medium would have any influence on Sanskrit. Since this is not the case, and since graphic *yaṣo* for *yaso* may also play a part, the argument rebounds and there is no real incentive to believe that RV *pāṣyā*, VS *bhāṣ-*, etc., are likely to owe their retroflexion to a survival of *-ls-*. As all examples with *-ṇḍ-* had been withdrawn as inapplicable, the case rests (p. 536f.) on an alleged preponderance of instances of *-t-*, *-ṭh-*, *-ḍh-* from **-l-*, as against *-tṭ-* and *-ttṭ-*, etc., from **-r-*. Since, however, the latter very clearly reflect semantic differentiation on the basis of dialect mixture in Middle Indo-Aryan, and the former are generally reminiscent of the categories of vocabulary for which he had sought to demonstrate early ‘spontaneous cerebralization’ (read ‘early dialect mixture’, with note 29, above?), it is not surprising that the approach, on the evidence of subsequent issues of Mayrhofer’s etymological dictionary, has failed to carry conviction. One may regret Burrow’s rejection of plausible Dravidian etymologies, as for *taṭa* and *kuṇi*, under its incentive.³¹

In respect of Brugmann’s Law too, Burrow strove to reconcile nineteenth-century theory with twentieth-century understanding of Sanskrit. The article in BSOAS, 1975, which sought to establish a correlation between IE *-o-* vocalism and the appearance of *-ā-* in Sanskrit in all types of syllable, has been welcomed by Collinge³² as ‘a radical new treatment’ and ‘a courageous revival and a notable clarification’: it encouraged him to believe that Sanskrit *-ā-* < IE *-o-* might have a phonetic explanation (viz., inherently greater duration of the back mid vowel). Mayrhofer quotes,³³ without discussion, Burrow’s finding as ‘indoiran. /ā/ < idg. */o/ auch in geschlossener Silbe’. It must, however, be

³⁰ *The laws of Indo-European* (Amsterdam/Philadelphia, 1985), 45.

³¹ RV *jaṭhāra*, with an implication of ‘tubby’ (*jaṭhala*), seems semantically a good match for *pāṇī* (above, n. 29). It is wrong to distance *taṭa* from Dravidian on the basis of a sense ‘slope’ (BRD, KEWA): appropriate is DEDR 3031 with *taṭa-* and the senses ‘impediment, restraint (of water), embankment, dam’. *Mbh.* 1.32.3 *himavatas taṭe* refers to a Tirtha at the back of beyond; *R* 4.12.16 *niṣpapāta . . . bhāskaro ’stataṭād iva* refers to the bounds of the Ocean, the ends of the earth, as do *Megh.* 60 *prāleyādrer upataṭam* and *Kathās.* 26.26 *śabdapūritadiktaṭān*: the respective translations ‘to the foot of’ (Ganguli), ‘over the top’ (Shastri), ‘near the skirt of’ (Kale), ‘filling the sides of heaven’ (Tawney), show BRD’s alleged sense ‘slope’ to be inapplicable, as indeed do van Buitenen’s quaint ‘mortifications on the slope of’ and Lefebvre’s compromise ‘from behind the slope of’. The new Pléiade transl. of *Kathās.* has, in the instance, rightly ‘limites de l’espace’. The error may reflect misunderstanding of *kaṭi-taṭa*, etc., for which nothing implies ‘sloping’ (BRD ‘abhāngig’): rather ‘bounds, contour’ of hips, both slim (*Mbh.* 3.146.66) and ample (13.14.108).

³² *The laws of Indo-European*, 16ff.

³³ *Idg. Gr.*, I, 2, 147.

emphasised that Burrow had to concede that the development is again not uniform in all dialects. In fact, he made only a tacit assumption of Iranian involvement, as when (p. 63) he passed over Av. ‘*pāšna*’ (Skt *pārṣṇi*)³⁴ without comment, and (pp. 60, 63, 74, re **ou*, **or*, **oi*) posited ‘a different treatment of IE *-o-* in such positions as between Sanskrit and Avestan’, i.e. an Iranian absence of *Vṛddhi* that occurs also dialectally in Indo-Aryan (p. 70).

Burrow’s conviction (p. 75) of the inadequacy of attempts to link Brugmann’s Law with a small handful of morphological categories is noteworthy. Mayrhofer (*Idg. Gr.*, 1, 2, 148) cites two such categories, without prejudice, but also without stressing this aspect of Burrow’s thesis. Though it is only to be expected that the distinctive weak grade that appears in *hūtá* would encourage distinctive strong grades in *āhavá*, *hávīman*, and Pāñ. *hvāyayati*, and that *cakara* would be resistant to lengthening, in company with *cakartha* and in contrast with *cakāra*, Mayrhofer is in such cases compelled by Brugmann’s shwa, if not by Brugmann’s Law, to believe that post-consonantal laryngeals must still have been active here in early Indo-Iranian. A Brugmann-inspired desire to find a way of closing the radical syllable in *cakara* and *janayati* compelled Burrow to retain the theoretical laryngeal and, shortly afterwards in *The problem of shwa in Sanskrit*, to attempt a new explanation for the phenomenon. In this context too, as Collinge has shown (*The laws of Indo-European*, 17), Burrow’s attempt at a compromise has weakened his important demonstration of the wide scope of the phenomenon in Sanskrit, so that his contribution to Brugmann’s Law has had no more evident impact than his assault on Brugmann’s shwa.

In ‘The Proto-Indoaryans’ (*JRAS*, 1973), he gave a critical survey of research on the early location and interaction of Iranians and Indo-Aryans, and this has remained an oft-quoted source in subsequent discussions. He offered a useful historical argument with which to counter the traditional late dating of the Zoroastrian Gathas. He coupled this with a plausible theory that the Iranians must have encountered the Indo-Aryans already established in the vicinity of Eastern Iran, and he sought to support this with the more dubious contention³⁵

³⁴ Surely one may read Av. *pāšni* (*pāšn<aē>ibiia* in *Vid.* 8.70f.; *ñ<ā> ibiia* in most MSS at 2.31) versus derived *kasu-pāšna*, *zairi-pāšna*: cf. notably RV *-aṅgula*, Av. *-aṅura*.

³⁵ The counter-argument of Boyce (*History of Zoroastrianism*, 1, (Leiden, 1975), 55, with n. 211), that the Zoroastrian objection to Daēvas was spiritual and ethical (and not noticeably xenophobic), did not go far enough. Gnoli relied on her argument so far as the term Daēva is concerned; but Burrow’s philological argument (*JRAS*, 1973, 130f.) in general lacks cogency. The authenticity of Av. *daēva* ‘god’ is not threatened by the coexistence of *baga*, any more than that of RV *devá* by *bhāga* (which latter is in Vedic a divine epithet and not only, as Burrow stated, ‘the name of a particular deity’); the suggestion that in all Avestan literature ‘there is no sign of any such classification as that into Devas and Asuras’ is hard to reconcile with the existence of a detailed pandemonium in *Vid.* 10 and of references to a plurality of Ahuras. The notion of a twofold wind, favourable and unfavourable, in Iranian corresponds to two antithetical Vātas in RV 2.39.5 (left and right) and 10.137.2 (to and fro), so that it suggests more a potential basis for fission into Yazata and Daēva than the merging of two ethnic rivals.

that the word Deva, together with many of the Deva names, Varuṇa, Indra, etc., was an innovation peculiar to the Indo-Aryans of the Near East and India, which the Iranians must have adopted. Both the historical and the ethnic conclusions were adopted as ‘the best and most likely working hypothesis’ by Gnoli in *Zoroaster’s time and homeland* (Naples, 1980, 70). In Mallory’s *In search of the Indo-Europeans* (London, 1989, 42f.), Burrow’s conception of the eastward migration was used to supplement Ghirshman’s account of the westward movement into Mitanni. Archaeological evidence to support or disprove Burrow’s view of the early migrations is neither available nor very likely to emerge.

All the while, Burrow had been publishing semantic studies of Sanskrit vocabulary. These, though carefully evaluated in Mayrhofer’s etymological dictionaries, are less well known than they should be, partly because of a sometimes exaggerated tendency to hypostatise the material in terms of new etymologies. With reference to the paper ‘Sanskrit *gṛ/gur* “to welcome”’ (*BSOAS*, 1957), for example, Goto³⁶ found that Burrow, in seeking to establish this base as a separate labio-velar root distinct from a velar root *gṛ/gir* ‘to proclaim, celebrate’, was guilty of exaggerating the antiquity of the phonological and semantic developments which he postulated. Nevertheless, the contribution that the article makes to the morphology and semantics of *gir-*, *gur-*, and *jar-* is an important one.

In view of the vexatious absence of any collective reprint of Burrow’s articles on Indo-Aryan topics, it must be useful to list here the main items of lexicography which appear under anonymous rubrics in the bibliography (omitting those concerned solely with Dravidian provenance and the many etymological notes in his reviews of *KEWA* in *Kratylos*):

‘Indo-Iranica’ (*Siddha-Bhāratī*, 1951): *sphyá*, *sthūlá*, *√tr̥p*, *Srughna*, *āhlādayati*, *lakṣita*, *keśa*, *br̥sī*.

‘Sanskrit etymological notes’ (*Sarūpa-Bhāratī*, 1954): *kaṭaka* ‘hill-side’, *kuhū*, *√kṣam*, *kharvá*, *gambhīrá*, *nava* ‘sneezing’, *niryūha*, *nánāndr̥*, *priyaṅgu*, *√bhaṅḍ*, *matyà*, *marica*, *lavaṇá*, *líṅga*, *lūma*, *ślakṣṇá*, *√śliṣ*, *śvābhra*, *√saj*, *sphuliṅga*.

‘Sanskrit *kava-* and related words’ (*IL*, 1955): *kumārá*, *komala*, *ákava*, *kavatnú*, *ku-*, *kad*, *kubjá*, *ákūpara*.

³⁶ *Die ‘I. Präsensklasse’ im Vedischen* (Wien, 1987), 150f., 155. Burrow’s statements in *BSOAS* (1957), 140 and *The Skt lg.* (1973), 393f. do not make it clear whether he was influenced by Szemerényi’s similar suggestion (made in a paper read to the Philological Society in London on 8 February 1952); nor did he seem concerned by the fact that the proposal is consistent with the standard theory (Szemerényi, Mayrhofer, etc.) of three ‘tectal’ series, rather than with Burrow’s own view that instances of Skt *k*, *g*, *gh* for expected *ś*, etc., are not convincingly explained thereby (*The Skt lg.* (1973), 76f.).

'Nirvacanāni' (AORI, Madras, 1957): *anuḥirṇa*, *aṇṣāti*, *uśj*, *śmasi*, *vī grṇṭṣe*, *vārdala*, *siṣākti*, *kuluñcā*.

'Sanskrit lexicographical notes' (Fel. vol. Belvalkar, 1957): *√ard-*, *kaḍṭra* 'parchment', *kuḍaka* 'child', *nāgara* 'anchor', *palitopama*, *prāṣṭi*, *bukkā* 'fragrant powder', *vārdhrīṇasa*.

'Notes on some rare words in Sanskrit and their etymology' (BSOAS, 1970): *marīsa* (= *soḍha*, *dūsa*) 'milk', *upamārayati* 'submerges', *dūrśā* 'goat-skin', *panū* 'nourishment', *mukaya* 'mule', *varvaṇā* 'an insect', *saṃplomnāya* 'having kneaded'.

'Six notes on Sanskrit etymology' (S. K. De mem. vol., 1972): *alarka* 'mad dog', *āmiṣa*, *chamaṇḍa* 'orphan', *nindu* 'who bears dead children', *pariparin* 'adversary' *lakuṭa*.

'Two Saka loanwords in Manusmṛti' (UAJ, 1975): *hoḍha* 'stolen property', *hitā* 'dam'.

'Five notes on Sanskrit etymology' (Brahmavidyā, 1980–1): *nema* 'foundation', *mār(i)ṣa*, *raṅga*, *veṣṭa* 'resin', *hira* 'diamond'.

'Some notes on Sanskrit etymology' (Ṛtam, 1979–83): *arāṇi*, *alajī*, *ala-sāndra* (a pulse), *avaṭiṭa* 'flat-nosed', *aṣṭ(h)i*.

'Miscellaneous notes on Sanskrit etymology' (Kuppuswami Sastri comm. vol. II, 1985): *oja* 'odd', *keṇikā* 'tent', *kākiṇī* 'cowrie', *trapusa* 'sour', *nāgoda* 'belly armour', *praśala* 'cold', *bhukkhāṇa* 'nose-bag', *varuḍa* 'basket-maker', *vali*, *vellati*.

'Four contributions to Sanskrit etymology' (Festschrift Hoenigswald, 1987): *kṛ*, *chaṭā*, *pitta*, *biḍāla*.

'Two homonymous verbs in Sanskrit' (Happening Ben Schwartz, 1988): *javate* 'thinks', *smayate* 'smears'.

'Sanskrit *glauḥ* and related words' (unpublished): *gilāyu* 'tumour'; *grumuṣṭī* 'balled fist', *-gluntha*, *gilodya* 'bulb'; *gulma*, *gulphita*, *guluccha* (*guccha*, *gutsa*), *guḍa*; *gaḍu(la)*; *guṇikā*, *grñjana*, *gārjara*.

Just one early paper demonstrates the extent to which Thomas Burrow's devotion to the pressing needs of Indo-European and Dravidian historical linguistics represents a considerable loss in the field of the history of Sanskrit literature. In 'The date of Śyāmilaka's Pādatāḍitaka' (JRAS, 1946), Burrow succeeded in identifying the historical setting that had been used as the background for one of the few extant specimens of Sanskrit one-act farce: he found that it referred, for local colour, to Bhadrāyudha and Indradatta, two important figures in the consolidation and defence of the western marches of the Gupta empire in the fifth century. An early and instructive example of the narrative genre that features a mock-serious Court of Love was thereby localised in the empire's western capital.

Subsequent discussion³⁷ has suggested, however, that the references in the monologue are to AD 455/6, not to c.410, the date that Burrow had proposed and that was consequently adopted by the editors when the text came to be reissued in 1959. The play itself would be datable up to c.510, when the western provinces finally fell to the encroaching Gurjaras. Since Bhadrāyudha's activities must be associated with the reign, not of Candragupta II, but of Skandagupta, Burrow's date was certainly too early.

The new argument for 455/6 also has its flaws, however. As Burrow observed, the play describes an apparently very youthful Indradatta as a satellite ruler of the westernmost province: and it happens to be known that Indradatta's son was ruling by 455/6. Burrow had further noted that the wording of the description of Bhadrāyudha's conquests recurs in the Bhitari inscription, where, however, the topic is the prowess of Skandagupta himself. This is much more likely to imply that the historical records relating to 455/6 have been plagiarised at some subsequent date for the purposes of the farce than vice versa. As Schokker has noted, there is a reference to the god Skanda's epithet Gaṅgāsuta in the play; this, probably implicit in the Skandagupta inscription, is pointless in the new context.

Such manipulation of historical data may be linked with the fact that, unlike the locales that are directly named in other associated farces, the western capital appears anonymously as *sārvabhaumanagara* 'imperial city'. While the composition of the play indeed has 455/6 as *terminus post quem*, the destruction of Ujjain c.510 is thus not necessarily a secure *terminus ante quem*. As Burrow's argument indicates, the dramatist seems to have been attempting to reconstruct the apogee of the 'Gupta golden age' for its setting: Skandagupta's inscriptions suggest that already in 455/6 life in Ujjain no longer embodied the idyll of sophistication and romance that the genre demanded.

Few scholars can match Burrow's achievement in revolutionising Dravidology and in pursuing a radically new approach to Sanskrit historical linguistics, while at the same time conducting (until 1965 single-handed) what was without doubt the most demanding BA degree course in all of Sanskrit studies worldwide, as well as many wide-ranging research supervisions in the field of Vedic and classical Sanskrit literature, Tamil, and the history of ancient India. He is remembered with affection and gratitude as a teacher and scholar of the old school, immensely learned and surprisingly reticent. As at the sister universities, Cambridge and London, students of Sanskrit had in any case to be suitably qualified linguists and above all self-reliant; but others besides Burrow's own students found him approachable and sympathetic, helpful and tolerant. As a reviewer of books, he would supply, virtually by

³⁷ Dasharatha Sharma, *JGJhari* (1956–7), 20; G. H. Schokker, *The Pādatāḍitaka of Śyāmilaka* (The Hague, 1966), 23.

return of post, a masterly and appreciative digest of any argument, abstruse or otherwise; negative criticism was invariably restricted to correcting points of linguistic or historical fact.

He was keeper of the Indian Institute in Oxford until its demise; Vice-President of the International Association of Tamil Research from 1966; Fellow of the British Academy (elected in 1970), an Honorary Fellow of the School of Oriental and African Studies, and an Honorary Member of the Linguistic Society of India. He was awarded the decennial prize of the Dravidian Linguistics Association, and in 1979 an issue of the *Bulletin of the School of Oriental and African Studies* was devoted to Sanskrit, Middle Indo-Aryan, Iranian, and Dravidian studies composed in celebration of his seventieth birthday. His books were presented to Wolfson College Library, Oxford: some 160 having reference to Dravidian, 80 to Indo-Aryan languages, 220 to Sanskrit and Prakrit literature, and 300 to linguistics, history, etc. His interleaved and annotated copy of Monier Williams's *Sanskrit-English Dictionary* has been deposited in the Indian Institute Library.

J. C. WRIGHT

*School of Oriental and African Studies
University of London*

Appendix

In the bibliography published in *BSOAS*, 50, 2 (1987), 350ff., read:

(1935¹): 'Tokharian elements in the Kharoṣṭhī documents from Chinese Turkestan'.

(1936²): 'The dialectical position of the Niya Prakrit'.

(1954¹): *Asiatica* (Festschrift Weller).

(1957³): *Annals of the Oriental Research Institute*.

(1958): *BRMIC*, 9, 2 (1958) (lecture delivered at the Institute in Sept. 1957).

(1970¹): *BSOAS*, 33, 1 (1970) (In honour of Sir Harold Bailey).

(1977¹): 'Sanskrit *irā* "nourishment"' *SO*, 47 (Aalto fel. vol.).

(1977²): 'Some cases of alternation between *c* and *ś* in Sanskrit' ['between *c* and *s*' is surely a misprint in the published text: the two references to *c/s* alternation seem incidental to the topic].

(1985): 'Miscellaneous notes on Sanskrit etymology' (paper submitted c.1970: see *Die Sprache*, 31 (1985), 324).

(1987): *Festschrift for Henry Hoenigswald*, (*Ars Linguistica*, 15), 57-64.

There is a specious misprint in the listing in Dandekar, *Vedic bibliography*, v, 827 of the title of the article 1983¹ as 'A note on the Indo-Iranian root *kan-* "smell" and the etymology of Latin *canis* "dog" ': for "smell", read "small".

Add:

'The language of the Kharoṣṭhi [*sic*] documents from Chinese Turkestan'. Cambridge University Thesis, [1935]. (Since the subscript dots were appended in ink, it seems possible that Burrow had intended to leave Kharosthi without diacritics. Publ. 1937.)

'Two homonymous verbs in Sanskrit', in *A linguistic happening in memory of Ben Schwartz* (Bibliothèque des Cahiers de l'Institut Linguistique de Louvain), ed. Yoël L. Arbeitman (Louvain-la-Neuve: Peeters, 1988), 489–92.

'Sanskrit *glauh* and related words' (unpublished typescript).

Two other short and possibly incomplete typescript articles were found after Burrow's death but cannot at present be traced: 'The Sanskrit root *kharj*- "to scratch, to itch" and its derivatives' and 'Vedic *aditi*-/*Aditi*-'.

Obituaries:

'Professor Thomas Burrow: Sanskrit and Dravidian studies', *The Times*, 18 June, 1986.

M. B. Emeneau: 'Thomas Burrow', *IL*, 47 (1986), unpag.

Gillian R. Hart, 'Thomas Burrow', *BSOAS*, 50, 2 (1987), 346–57, with a list of Burrow's books, articles, reviews and notices compiled by G. R. Hart, E. Tucker and J. C. Wright.

The Thomas Burrow Memorial Lecture at the XV All India Conference of Dravidian Linguistics, 1987 was published in *IJDL*, 16, 1 (1987), as follows:

H. S. Ananthanarayana: 'Thomas Burrow's contribution to Sanskrit studies', pp. 1–21.

P. S. Subrahmaniam: 'The non-literary languages and their contribution to Dravidian comparative grammar', pp. 22–30.

B. Ramakrishna Reddy: 'Burrow's fieldwork and research on tribal Dravidian languages', pp. 31–43.

Bh. Krishnamurti: 'Professor Thomas Burrow (1909–1986)', pp. 44–8.