

VOICE, MOOD, AND THE GERUNDIVE (*KṚTYA*) IN SANSKRIT*

At least as early as the time of Pāṇini, a certain overlap between gerundives and the optative mood has been noted; cf. (1) below. And so has the fact that ordinarily the gerundive, like the *ya*-passive, marks the *karman* (patient) or *bhāva* (verbal action), not the *karṭṛ* (agent); (cf. 2). (This « patient or *bhāva* orientation » will in the following be referred to as « *P*-orientation », so as to make it possible to distinguish between the passive and other formations which are different from the passive, but share with it the fact that they mark the *karman*. Pāṇini includes the goal of motion verbs under *karman*).

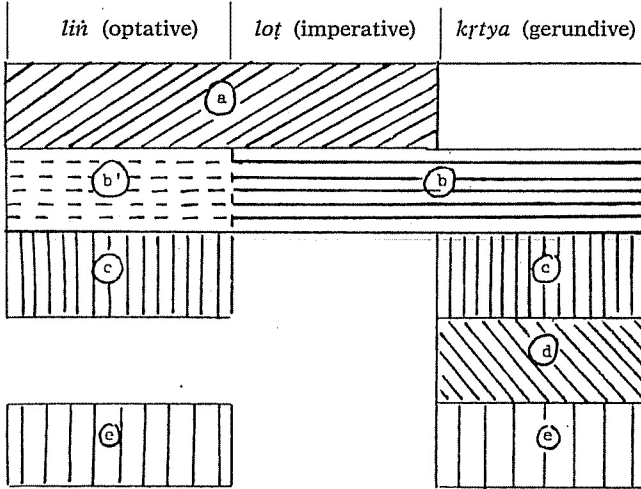
Similarly, Delbrück (1888:334) notes for the Vedic language that with prescriptive statements of general, not just individual validity, both the optative and the gerundive are used. And Speijer (1886:261-77) implicitly establishes the relationships in (3) between tense, mood, the lexical item *arh-* « deserve, be able, ough to » and the gerundive. To these, Speijer (p. 277) adds another relationship, namely that between gerundive and future; cf. the example in (4) and Speijer's discussion.

While earlier views thus recognize an overlap in function between optative and gerundive, they do not assert a functional identity. For as can be seen from (1) and (3) above, there are a number

* Paper read at the Sixth World Sanskrit Conference. I am grateful to the University of Illinois Program in South and West Asian Studies for travel support. I also owe thanks to my friend George Cardona for helpful comments on the paper. Needless to state, the responsibility for any errors or omissions rests with me.

of functions for the optative in which the gerundive cannot be used. Conversely, as (1d) shows, Pāṇini recognizes an area of use which is specific to the gerundive, namely that of « necessity » and « obligation ». A similar generalization about the gerundive is made by Speijer; cf. (5).

(1) Relation between gerundive and moods according to Pāṇini:



- (a) = *vidhi* « order », *nimantraṇa* « summons », *āmantraṇa* « invitation », *adhīṣṭa* « respectful requesting », *saṅ-
praśna* « deliberation, determining what should be done », *prārthana* « asking for, requesting » (3.3.161-2)
- (b) = *praiṣā* « instruction (to do s. th.) », *atisarga* « permission », *prāptakāla* « proper time (for s. th.) » (3.3.163 with 162).
- (b') = Same as (b), if *ūrdhvamauhūrtike* « (action to be performed) immediately » (3.3.164).
- (c) = *arhe* « being worthy, deserving (to do s. th.) » (3.3.169).
- (d) = *āvaśyaka* « necessity », *ādhamarṇya* « being indebted » (3.3.171 with 170).
- (e) = *saki* « possibility » (3.3.172 with 171).

- (2) Paninian sūtras on *karman/karṭṛ*-orientation of *kṛtyas*:
- (a) *kartari kṛt* (3.4.67) « *kṛt* affixes mark the *karṭṛ* (agent) ».
- (b) *bhavya - geva - pravacanīya - upasthānīya - janya - āplāvya - āpātyā vā* (3.4.68) « optionally in the case of *bhavya...* ».
- (c) *laḥ karmani ca bhāve cākarmakebhyaḥ* (3.4.69) « *la-* endings also mark *karman* (patient) and *bhāva* (verbal action) in the case of intransitives » (rough translation).
- (d) *tayor eva kṛtya-ka-khalarthāḥ* (3.40.70) « *kṛtyas* ... mark only the latter two (i.e. *karman* and *bhāva*) » (But note that (b) provides for optional exceptions to this rule).
- (3) Speijer's classification of tense, mood, etc. functions:

	Optative	Future	Imperative	<i>arh-</i>	Present	Gerundive
Hortative	x	x	x	x	x	x
Wish	x	x	x			
Potential	x	x	x			x
Hypothetical	x					
Generic Rel. Cl.	x					
Subordinate clause of design or inevitable consequence	x					

- (4) *kvacid upakṛtiḥ kāryāmībhiḥ kṛtā kriyate 'thavā* (Prabodh. 5.106) « The last example plainly shows, that the *kṛtya* borders upon the sphere of a participle of the future, *kārya* being here almost = *kariṣyamāṇa*. Thus *bhavitavya* or *bhāvya* may be even = "future", *bhavitavyatā* "the future" ».
- (5) Speijer (1886:277) on the gerundive:

They state « that, which one is obliged to do or what is prescribed to be done, but also what must happen by necessity or that which is fit, expected, likely to happen. »

Moreover, for both Pāṇini and Speijer, the overlapping relationship of the gerundive is not limited to the optative, but extends also to other formations; cf. (1) and (3), as well as Speijer's examples in (6) below, which illustrate this multiple overlap.

- (6) ... *cakriṇāṃ panthā deyaḥ* (Yājñ.1.117) = act. *panthānaṃ dadyāt* (opt.), *hantavyo 'smi na te* (Nala 1.19) = act. *mā vadhīh* (impve./inj.), *āśramamṛgo 'yaṃ na hantavyaḥ* (Śāk.1) = act. *na kaścid dhantum arhati*, ... *tvayā sajjikṛtakrameṇa sthātavyam* (Pañc.269) = *tiṣṭha* (impve.)

Finally, Pāṇini and other earlier linguists clearly recognized a relationship between the gerundive and the passive; cf. Pāṇini's sūtras in (2) and statements like Speijer's (p. 277) in which the correspondences given in (6) are said to result from « substituting for these kṛtyas the active voice. » However, no particular significance is attached to this relationship.

A recent paper by Jamison (1983) argues that the relationships of the gerundive both with the optative and with the passive are not just accidental but that at least in early Vedic the gerundives, when used as main verbs, suppletively functioned as the regular and proper optative of the passive. Moreover, she notes that with the sentence negation *ná*, there is yet another suppletion, namely the use of the dative infinitive instead of the gerundive. Accordingly, Jamison postulates the system in (7) for early Vedic. (An enlarged version of Jamison's paper has been published in JAOS 104.609-20 (1984), after the present paper was written. Except for RV *staveta* (cf. note 2a below), a discussion of her additional arguments will have to be reserved for a future publication).

(7)

	active/middle	passive
positive	optative	gerundive
negative		inf. in <i>-e</i> , <i>-tave/-tavai</i>

The latter suppletion, which had already been noted by Delbrück (1897:489), has a sufficient amount of evidence to support it. It is true, there are one or two Rig-Vedic examples in which *ná* + infinitive is found not only in mainverb function, but adnominally, cf. (8). However, I will not be concerned with such fine details. Moreover, I will also ignore here the developments by which the infinitive after *ná* became replaced by the gerundive. Jamison's ex-

planation of these developments seems perfectly acceptable¹.

(8) *ṛbhukṣāṇaṃ nā vārtav(e)* (RV 8.45.29)

« (I praise) R̥bhukṣan, (the one who is) not to be turned around »

The evidence which Jamison cites for her major claim, the suppletive optative-passive function of the gerundive, of course, includes the relationships between gerundive and optative and gerundive and passive which were noted earlier. In addition, however, she points to the fact that while the early Vedic language makes productive use of the active optative, and while there are passive formations in the imperative and subjunctive [cf. (9) and (10)²], there are virtually no passive optatives. The only Rig-Vedic examples Jamison could find are given in (11)^{2a}. Given this dearth of

1. Jamison sees the starting point in antithetical structures of the sort *nā purā sūryasyodyetor mān̥thitavai ... udyātsu raśmiṣu māthyas* (MS 1.6.10) 'the fire is not to be churned before the rising of the sun ... it is to be churned when the sun's rays have risen'. In contexts like this, transfer of the gerundive to the position after *nā* would easily come about; and in fact, there are mixed, intermediate structures of the type *nā saṃbhārāḥsaṃbhṛtyā nā yajuh kārtavā ity ākuḥ ... saṃbhṛtyā evā saṃbhārāḥ kāryāṃ yajur iti* (MS 1.7.2) '« The sacrificial equipment is not to be collected, the formula is not to be performed ». So (some) say ... (Others say) « The sacrificial equipment is to be collected, the formula is to be performed »'.

2. The first two forms under (9), as well as example (10) are cited also by Jamison. Avery (1880) adds the following: *ni* (...) *hīyatām* (6.52.1, 7.104.10), *vacyasva* (3x), *vacyantām* (1x). The latter two are clearly non-passive (Grassmann 1872:sv.: 'deponens'); and the former form may well belong to the intransitive type illustrated in (11b) and (12).— Also in the category 'passive subjunctive', Avery lists a few more forms: *ūhyāthe* (4.56.6), *ūhyāte* (1.120.11), and *sūyata* (10.132.4). The first two forms are of uncertain interpretation, and the third one seems to be an augmentless imperfect.

2^a In the 1984 version of her paper, Jamison interprets *staveta* as not entirely free from taint ... C. Watkins has suggested ... that *staveta* might be a sort of « optativized » form of the common *t*-less 3rd sg. passive *stave* « is praised » ... This interpretation appears to be based on the belief that passive forms like *stavase* (RV 1.169.8, 5.10.7, 10.148.5), *stavate* (1.154.2, 1.178.4, 2.24.2, 8.24.16), *stavante* (6.26.7, 10.65.4), are athematic subjunctive, rather than thematic indicative. However, several points suggest that this may be an inaccurate assessment. First, in the contexts where they occur, none of these middle-voice forms are unambiguously modal; indicative readings are equally possible. (In fact, except for *stavase* (1.169.8) and *stāvate* (2.24.1, perhaps also 6.26.7), Geldner has indicative translations). Secondly, if these forms were in fact subjunctives, their frequency of occurrence would be highly disproportionate compared to the frequency of other passive subjunctives in the Rig-Veda; cf. the statistics in (22). Moreover, the form *stavante*

optative passives, as well as the noted relationships between gerundive and optative and/or passive, Jamison's claimed suppletive function of the gerundive seems well supported.

(9) Imperative *ya*-passives in the Rig-Veda:

badhyantām (4.57.4)

ā vṛścyantām (10.87.18)

yujyadhvam (10.175.1)

ūpapṛcyatām (6.28.8)

(10) Subjunctive *ya*-passives in the Rig-Veda:

bhriyāte (5.31.12)

(11) Optative passives in the Rig-Veda:

(a) *prātār agniḥ ... staveta-ātithiḥ* (5.18.1)

« Agni, the guest, should be praised in the morning »

(b) *urvārukām iva bāndhān mṛtyór mukṣīya māmṛtāt* (7.59.12)

« like a cucumber from its stem may I be released from death, not from immortality » (J's translation; or: « may I become free »)

(c) *hatā rākṣāṃsi ... syuḥ* (6.63.10)

« ... the demons should be (/let them be) smashed » (J's transl.)

(recurring once in non-passive function; cf. RV 6.20.10) would be the only third plural middle-voice subjunctive with primary ending *-te*; elsewhere and with other roots, only the secondary ending *-ta* (8x) is attested. These difficulties are removed once we interpret these forms as synchronically thematic middle-voice presents with root in *guṇa* comparable to *huve*: *havate*, *punāti*: *pavate*, etc. This interpretation would additionally account for the fact that we get five attestations of a thematic present (passive) participle *stavamāna-* (1.47.5, 1.62.7, 1.139.6, 7.19.11, 8.24.4), a much higher number than the occasional *-amāna-*forms from (other) athematics. (Thus, *i-*, *ukṣ-*, have two forms each; but note also *ayati*, *ayate*, etc. (5x). *tuj-*, *dyut-*, *bhr-*, *vaś-*, *vas-* « clothe », *ṣ-* have one form each; but note *tuñjāte* (etc.), *vásanti*. The only root which shows a large number of such forms is *śubh-*; but note *śumbhase*, *śumbhati* etc. which indicate early thematicization). If we accept the synchronic existence of a middle-voice stem *stava-* (whatever its putative historical origin), then *staveta* ceases to be unusual and can be interpreted as a straightforward third person middle-voice optative passive. On the other hand, if we interpret forms of the type *stavante* as subjunctive, we would have to analyze it as a highly unusual « optativized » form of athematic *stave*, which is used instead of the more regular *stuvita* (RV 4.55.6; cf. also *stuvīmahi* 8.22.6), even though the latter form would fit the meter just as well.

asmé antár níhitāḥ ketávaḥ syuḥ (1.24.7)

« the beacons should be (/let them be) established in us » (J's transl.)

This is especially true if the examples in (11b) and (11c) are omitted. And there is, I believe, good reason for doing so: In the later language, where there is enough syntactic evidence to distinguish between (*ya*-)passives and intransitives in *-ya-*, the verb *muc-* is notorious for the intransitive, rather than passive use of its *ya*-present. Compare (12a) which shows that for *mucyate* it is the (surface) subject which controls absolutive formation, while in genuine passives (as in [12b]), it is the underlying agent, whether specified or not, which controls absolutive. It is therefore quite possible that also in this Rig-Vedic passage we have an intransitive rather than passive use of the verb.

(12) (a) intr. *ubhau sahottamaṃ saṅvatsaram eva kalpayitvā ubhau saha vimucyete* (KS 28.2)

« both having together established the last year, both get free together »

(b) pass. *tau vā etau pragāthāv ... punarādāyaṃ śasyete* (AB 3.17.3)

« those two pragāthas are sung (by one who is) taking them up again »

Also for (11c) the suspicion arises that these structures may be stative/intransitive, rather than genuine passive. In later Vedic prose, such stative/intransitives tend to differ from genuine *P*-oriented structures by taking the verb « be » in the indicative, and by taking the agent noun phrase in the genitive, rather than the instrumental, both in the indicative and in modal formations; cf. e.g. (13)^{2b}. However, where no agent is specified, and even else-

^{2b} Concerning the tendency to distinguish these two types of participial constructions, the data in Oertel 1939 are interesting. As the following summary shows, though there is no absolute distinction, instrumental agent marking predominates in MV function without 'be', genitive in MV + 'be' function. Note also Oertel's discussion (p. 6) on the nominal-like, stative value of (many of) the structures which contain genitive agents.

	MV + \emptyset	MV + 'be'	Nom./adj.	
Genitive agent	34 = 8%	351 = 78%	63 = 14%	448 = 100%
Instrumental	55 = 44%	13 = 10%	58 = 46%	126 = 100%

where, it frequently becomes difficult to distinguish the two types of construction; cf. e.g. (14). I do not see any meaningful difference between examples of the latter sort and the Rig-Vedic passages in (11c). That is, also these Rig-Vedic examples are ambiguous; and only one unambiguous optative passive remains, that in (11a). (Because of the ambiguous, nonprobative nature of structures as in (11b/c), I will ignore examples of this sort in the following, even where Jamison may have introduced such data from Vedic Prose).

- (13) (a) itr. *tathā hāsya pūrvapakṣe sākamedhair iṣṭaṃ bhavati* (KB 5.7)

« thus there is a sacrifice by/of him in the first half month by means of the sākamedhas »
tād yé vaiśvadevéna yájamānayoṛ vāsasī párihite syātāṃ té evātrāpi syātām (ŚB 2.5.2.46)
 « now, those garments which should be (having been) put on by/of the sacrificer and his wife at the Vaiśvadeva sacrifice, they should be on also now »

- (b) P-orient. *mānunā hy eṣā kṛtā* (MS 4.1.2., KS 3.1.1)
 « for she has been made by Manu »

- (14) *sá yád āgnāvaiṣṇavám evá nirvāpet / ... adhavarāsyaivá dīkṣanīyaṃ kṛtām syā(t)* (ŚB 6.6.1.3.)

« now, were he to prepare only the Agni-Viṣṇu meal, then only the initiation of the (Soma-)sacrifice would have been made/would be (one which has been/is) made. ».

According to Jamison, the original distribution active optative: « passive » gerundive (and infinitive) is still discernible in Vedic Prose examples like those in (15) and (16). In (15), the optative of a dependent clause corresponds to a gerundive in the main clause. In (16), gerundive and active optative correspond to each other in discourse.

- (15) *yádi duhyāmānāvabhindyād anyáyā sthālyā nirnījya dohyā* (MS 1.8.3)

« if (the cow) being milked should break (it), she is to be milked with another cauldron, after cleaning up »

- (16) *yát táṃ ná visraṃsáyeta ... tásmāt sá visrásyah* (TS 6.2.9.4)
 « if he should not loosen it ... Therefore it should be loosened »

Examples of this sort abound in Vedic Prose. Without trying to make a complete count, I have come up with at least 35 examples of the first pattern, including (17) below which in fact combines patterns (15) and (16). Similarly, type (16) is attested frequently, especially in the formula « that should not be done / one should not do that » which frequently occurs in the texts and which may either appear in the active optative or in the gerundive [cf. (18)], with different textual traditions preferring one or the other version.

- (17) *yádi várṣet távaty evá hotavyàṃ yádi ná várṣec chvó bhūté havír nír vapet* (TS 2.4.10.1)

« if it should rain, so much should be offered; if it should not rain, one should put down an oblation the next day »

- (18) (a) opt. act. *ápi tán nādrīyeta* (ŚB 8.6.1.16)
tát tát (táthā) ná kuryāt (ŚB passim)
tat tathā na kuryāt (AB 3.32.6)
atha nādrīyeta (KB 22.8 and similarly elsewhere)

- (b) gerundive *tát táthā ná kāryām* (TS passim)
(tát) tán ná sūrksyam (KS, MS passim)
tad anāḍṛtyam (ŚB 2.3.10)
tat tan nāḍṛtyam (AAr. 1.2.3 and elsewhere)

In Vedic Prose, however, Jamison recognizes two contexts in which the old system begins to break down. One is the occurrence of (finite) passive optatives in dependent clauses of the type (19)³, which she accounts for as resulting from « modal attraction ». The other context is what she refers to as « worst-case » sentences such as in (20)⁴.

3. This item is not from Jamison. The examples which she lists follow the pattern either of (11b) or of (11c).

4. In addition, Jamison gives a few examples of « passive optatives » where a gerundive would be expected according to her theory. All of these, however, are of the type (11c).

- (19) *tásmād yáta ūrdhvám viloma yajñé kriyéta ná tát ádriyeta*
(SB 1.5.3.23)

« therefore if after this, something inappropriate should be done in the sacrifice, he would not need to heed that »
indrāya pradātré purodāśam ekādaśakapālam nīrvaped
yásmai práttam iva sán-ná pradīyét(a) (TS 2.2.8.4)

« he should put down an 11-s herd pap for Indra the giver, (for someone) to whom should/would not have been given, (even if something was) given, as it were »

(Similar cases elsewhere; altogether at least 20x)

- (20) *yád bhidyeta ... hanyétāsyā yajñāḥ* (TS 5.1.9.2-3)

« if it should break, his sacrifice would be destroyed »

yán nātmanātrī syān natmané kriyet(a) (KS 37.16)

« if it were not of the same measure as oneself, it would not be made for oneself »

(Similarly elsewhere; altogether at least 22x)

Jamison's interpretation, if correct, would provide an important new insight into the nature of the early Vedic system of voice and mood. Moreover, it would cast considerable doubt on treatments of early Vedic syntax which subscribe to the view that the relation between gerundive and other formations was one of overlap, rather than suppletion. (Cf. Hock In Press for one such treatment). For these reasons it deserves careful scrutiny.

In the remainder of this paper I will show that, as it turns out, none of Jamison's claims (save the early relation between gerundive and dative infinitive) stands up well under such scrutiny.

First of all, while in Vedic Prose and later it is true that by and large, the gerundive, like the passive, marks the *karman* or *bhāva*, not the *kartr*, there is good evidence that this is an innovation: In the Rig-Veda, the gerundive seems to have been used just like the *ta*-participle, being *P*-oriented for transitive verbs, but « active » for intransitives; cf. (20')⁵, as well as the lexicalized form

5. Note that in the meaning « be born », *jan-* is intransitive, rather than passive, as can be seen by the fact that it does not take an instrumental of the « agent » (by whom one was born), but an ablative of the source (from which one was born): *yáto yáviṣṭho ájaniṣṭa mātúḥ* (RV 7.4.2) « when he has been born as the youngest from/out of (his) mother ».

in (21). Passages like (20a) are found throughout the Vedic-Prose texts (e.g. KS 29.5, 34.8, AB 4.6.12, KB 2.2). Moreover, as (2b) shows, the pattern persists optionally down to the time of Pāṇini even though *P*-orientation has become the more regular pattern.

(20') (a) *pūruṣa evédāṃ sārvaṃ (/) yád bhūtāṃ yác ca bhāvyaṃ* (RV 10.90.2)
« puruṣa is all this, what has been and what is to be/will be »

(b) *yáj jātāṃ yác ca jāntvaṃ* (RV 8.89.6)
« what has been born and what is to be born (in the future) »

(21) RV + *átya-* « courser » (* « able to run »)
ŚB *ajaryá-* « not aging » (* « not able/liable to age »)
AV *amokyá-* « insoluble » (?)
(Cf. Debrunner 1954:791-5 for further discussion).

It is therefore dubious to postulate a passive value for the early Vedic gerundive.

Secondly, while it is true that there is only one good example for a passive optative in the Rig-Veda, there aren't any more examples of passive subjunctives; and the passive imperative is likewise restricted to just four clear examples. [Cf. (9)-(11)]. That is, *all* modal forms are extremely rare in the passive. This is in striking contrast to the active, where modals occur much more freely; cf. (22).

The situation is similar in Vedic-Prose, if Avery's (1880) statistics for the Aitareya-Bṛāhmaṇa can be trusted [cf. (23)]; cf. also the statistics in (24) which are based on my count of unprefix forms in Taittirīya-Saṃhitā prose.

Given this situation, it is arbitrary to single out the category « optative » as the one in which the gerundive is said to function as a suppletive passive. Moreover, doing so would lead to surprising statistical results: We would have to accept a ratio of active to passive optatives which generally is much lower not only than that for any other modal category, but even than that for indicate actives to passives; cf. (22)-(24).

(22) Rig-Vedic indicative: modal correlations (following Avery 1880, with omission of dubious modal passives)

	present active	present passive	ratio (approx.)
indicative	3903	191	20 : 1
imperative	4100	4	1025 : 1
subjunctive	1101	1	1101 : 1
optative	504	1	504 : 1

		opt. act.	gerundive
gerundive (MV)	63	8 : 1	
		opt. act.	infinitive
infinitive (MV)	44 (+)	11 : 1	
		opt. act.	inf./gdve.
		5 : 1	

(23) Aitareya-Brāhmaṇa correlations (according to Avery 1880)

indicative	2132	210	10 : 1
imperative	128	5	26 : 1
subjunctive	58	0	58 : 0
optative	688	14	49 : 1

		opt. act.	gerundive
gerundive (MV)	87	8 : 1	
		opt. act.	opt. pas./gdve.
		7 : 1	

(24) Taittirīya-Saṃhitā correlations:

indicative	1508	251	6 : 1
imperative	189	0	189 : 0
subjunctive	27	6	(5 : 1) (Small sample)
optative	688	14	49 : 1

		opt. act.	gerundive
gerundive (MV)	85	3 : 1	

There is further evidence in Vedic Prose that the gerundive is rather different in its behavior from the passive. First of all, gerundives occur much more frequently than passives in absolute constructions of the type (25) ⁶. Secondly, and perhaps even more importantly, genuine intransitive verbs (excluding motion verbs which at this point have clearly become semi-transitive) offer a fair number of impersonal gerundives [cf. (26)]; however, they do not seem to occur in impersonal (*ya-*) passive constructions ⁷. [Examples like those in (27a) are limited to motion verbs which moreover are used as transitives, with case variation between accusative and non-accusative complements; cf. (27b, c). And for such transitives, impersonal passives are attested as early as the Rig-Veda; cf. (28) and Hock 1982, n. 2].

(25) (a) gerundive: *tāsmād anvārābhyaśrāvyaṁ* (TS 3.1.2.4)
 « therefore one should make the *vaṣaṭ* call
 while holding on »
 (Similarly elsewhere; altogether at least
 66x)

(b) passive: *nā vā āhiṅkṛtya sāma gīyate* (ŚB 1.4.1.1)
 « the *sāman* is not sung without (one's)
 making the sound *hiṅ* »
 (Similarly elsewhere; altogether 11x)

(26) (a) *bhū*: *paśúvratena bhavitavyaṁ* (MS 1.8.7)
 « one should be like cattle »
tasmān na moghahāsinā bhavyaṁ (KS 25.6)

6. My data for the gerundives are fairly complete for TS, MS, KS; later texts are not as systematically excerpted. For the passives, my data seem to be complete for all of Vedic prose, excepting a few sūtra texts. Moreover, I have cross-checked (and augmented) my collection by comparison with the data in Oertel 1926. (Needless to say, I also have drawn heavily on the various available indices, so as to make my collection as complete as possible).

7. Whitney (1885), to be sure, lists Vedic passives for *gam-*, *sthā-*, *saj-*, and *sad-*. However, a passive of *gam-* is attested in the Veda only from the transitive, prefixed *adhi-gam-* (AV 7.101.1); Vedic *sajyate/sajjati* behaves like an intransitive/stative; and none of the available indices list passives from *sthā-* or *sad-* without preverb, nor have I come across any examples in my own research.

« therefore one should not be one who laughs falsely »

(Similarly elsewhere; altogether 16x)

(b) Other itr.: *unnīyāmāne sthēyam* (MS 1.8.7)

« one should stand as it is being brought up »

[Similarly elsewhere as follows, totalling 15x; *jāgaritavyam* (MS 4.2.1), *smetavyam* (MS 3.6.7., JB 2.269-72, TAr. 5.1.4.), *snēyam* (KS 22.13 (3x), 35.6), *svaptavyam* (PB 10.4.3.), *bhavyam* (PB 10.5.16), *drogāhavyam* (ŚB 3.4.2.9, JB 1.286-7, AB 1.24.7, cf. *drōgdhavai* MS 3.7.10), *praśvasitavyam* (TAr. 11.3)]

(27) (a) impers. *tira iva vai mithunēna caryate* (ŚB 1.9.2.8)
« secretly, as it were, union takes place »
(lit. « it is carried on by means of coupling »)

(b) pers. *tira ivedām mithunām caryāt(ai)* (ŚB 4.6.7.9)
« secretly, as it were, coupling should be carried on »

(c) act *yā etāsya vratām śaknōti cāritum* (ŚB 2.4.2.6)
« who can carry on/adhere to this law »

(28) *āpāyy asyāndhaso* (RV 2.19.1)
« of this juice was drunk (by him) »

Jamison's identification of the gerundive as a (suppletive) passive therefore is open to serious doubt.

The situation is similar in respect to her identification of the gerundive as a (suppletive) optative. As is shown by the classifications of Pāṇini and Speijer [cf. (1) and (2), as well as (6)], the gerundive of the Classical language overlaps in use not only with the optative, but also with other formations, including the imperative. This is by no means a recent innovation. Although rarer than the examples of overlap with the optative [cf. (15)-(18)], there are similar Vedic attestations also for overlap with the imperative, as

well as — more rarely — with the subjunctive and perhaps also with the construction *arh-* + infinitive; cf. (29). For overlap with the future, cf. the Rig-Vedic examples in (20').

(29) (a) gerundive / imperative:

... *sá praśāṅṣyaḥ / sa dhībhir astu sánitā* (RV 8.19.9)

« he is to be praised, he should / shall win with (his) poems »

... *prapadya pratibrūhīti / tvayā vāyaṃ pratyucya iti* (JUB 3.1.2.3)

« stepping forward, answer; by you this man must be answered »

(b) gerundive / subjunctive:

bahūni me ákrīṭā kártvāni (/) yúdhyaī tvena sám tvena pṛchai (RV 4.18.2)

« many undone things are to be done by me; with this one I must/shall fight, with this one I must/shall come to an agreement »

(c) gerundive / *arh-* + infinitive (?):

ko devānāṃ bhāgaṃ dātum arhati tasmād dhuta eva deya iti (JB 2.158-61)

« who should (or 'may'?) give the share of the gods? Therefore it is to be given when oblation has been made ».

Moreover, in the Classical language there is clear evidence that there is an area of usage which is specific to the gerundive, namely that of necessity and obligation; cf. (1) and (5). Thus, for expressions like that in (30) it is quite difficult, if not impossible, to create a corresponding « active », along the lines of the correspondences in (6).

(30) *mayāvaśyaṃ deśāntaraṃ gantavyam* (Pañc. 167, apud Speijer)

« I must needs go abroad »

While the presence of a form like *avaśyam* « by necessity » provides an unambiguous signal for such a « necessity » reading, in the absence of such a form it is more difficult to be certain as to whether a « necessity » or a hortative or potential reading is intended for a given gerundive. However, passages like that in (31) show that

the « necessity » value must be old for the gerundive, even if we are here dealing with a non-*P*-oriented gerundive and with a transferred « necessity » reading.

(31) *sānā tā kā cid bhūvanā bhávitvā* (RV 2.24.5)

« some of these creatures must be old (because they have been penned up in the cave for many years) »

There is additional, syntactic evidence which suggests that the gerundive is not on a par with the modal forms of the verb. From Rig-Vedic times, through Vedic Prose, into the Classical period it is possible for the gerundive to cooccur with modal forms of the auxiliary verb « be », especially the optative; cf. (32). Such a « stacking-up », however, is not possible for, say, imperatives with optatives (I.e., there are no such things as imperatives of the optative).

(32) (a) RV (*a*)*bhyayaṃsényā bhavatam manīṣibhiḥ* (1.34.1)
« be ye to be demanded by the thoughtful ones »

(b) Ved. Pr. *néd dveṣyó 'sān(i)* (ŚB 2.3.4.4)

« lest I be to be hated »

átho khálv āhur yád aráṇyoḥ samārūḍho náśyed úd asyāgnīḥ sīdet punarādhéyaḥ syād iti (TS 3.4.10.5)

« Now they say 'If being placed on the kindling sticks it should be lost, his fire would be dispersed, it would have to be piled up again' ». (Sim. MS 1.8.3., etc.)

piṅgalo 'naḍvān pariṇeyaḥ syād ity āharanti (ĀGS 4.6.15)

« they bring (it) up, thinking 'a reddish-brown drought-ox should have to be led around' ».

(c) Class. *ubhau niḡṛhya dāpyaḥ syād iti dharmasya dhāraṇā* (M 8.184)

« by forcing him he should have to be made to give both, this is a settled rule of law »

Similarly, the gerundive may be put in the past tense, by means of a cooccurring past-tense form of the verb « be »; cf. e.g. (33). Again, this is not possible for modal forms of the verb.

(33) *idāṃ kāryāṃ āsīd* (TS 6.3.4.8)

« this was to be done »

(Similarly TS 6.6.2.3, MS 1.9.3, ŚB 1.6.2.3)

Moreover, the gerundive may be used adnominally and as a participle embedded under verbs of thinking etc. (cf. [34] and [35]), something which again is not possible for modal verb forms.

(34) *indre viśvāni vīryā kṛtāni kārtvāni ca* (RV 8.63.6)

« all heroic deeds, those done and those to be done, are with Indra »

(35) *nāhāṃ tāṃ veda dābhyam* (RV 10.108.14)

« I do not know him as one (who is) to be deceived »

tād dhaikē hotāvyaṃ manyante (ŚB 12.4.2.2)

« Now some think that (it) should be offered/one should offer »

Jamison is, of course, aware, of these differences between the gerundive and modal verb forms; however, she separates these uses as « predicative » or adnominal from the « main-verb » (without « be ») functions. While some of the passages with gerundive + modal or past-tense form of « be » may in fact be predicative, many others, such as the examples in (32b. second item) and (33), are not. Moreover, whether the gerundive is used adnominally, predicatively, or as a main verb, the same range of connotations, from hortative, to necessity, to potential is found. I therefore see no compelling reason for making a distinction between these uses.

Finally, there is evidence which casts doubt on the cogency of structures like that in (15), with optative in the dependent clause (DC) and gerundive in the main clause (MC). For other correlations may be found. Thus the gerundive of an MC may be paired with an indicative of the DC, as in (36). And also the converse relation may be encountered, as in (37).

(36) *yād etā āpo 'tisṛjyānté 'chinnam srāvayitavyā(h)* (MS 1.4.6)

« if these waters are released in addition, they are to be made to run into an unbroken (vessel) »

- (37) *tād yāt kiṃ ca vācā kartavyam / adhvaryúr evā tát karóti...*
 (ŚB 2.5.2.33)
 « Now whatever is to be done with speech, the Adhvaryu
 does that... »

All the evidence amassed up to this point, then, suggests that Jamison's suppletive passive-optative account for the early Vedic gerundive is not acceptable. Moreover, given the relative rarity of modal passives in general, there is no reason against interpreting the one Rig-Vedic attestation of a passive optative (11a) for just what it is — a genuine optative passive. In fact, similar « free » optative passives can be encountered also in the language of Vedic Prose, including in fairly early, ritualistic formulae; cf. (38). Here, too, they are relatively rare, just as are other modal passives; but their existence cannot be denied.

- (38) *devaṃ barhis sudevaṃ devais syāt suvīraṃ vīrair vastor
 vṛjyetāktoḥ prabhriyet(a)...* (KS 19.13 = TB 3.6.13.1, vir-
 tually identical in MS 4.13.8; a *yājyānuvākya*)
 « the divine barhis should be well-divine with gods, well-
 heroed with heroes, it should be gathered at dawn, it
 should be brought forward by day... »
 (Similar examples: *kriyéta* (KS 12.11 = MS 2.3.9), *yujyeta*
 (KB 26.8), *avadhīyerann* (KB 24.9), *dīyeta* (ŚB 2.1.2.12 =
 Āp. ŚS 5.3.11), *sūyemahi* (ŚB 9.3.4.6), *sūyey(a)* (JB 3.152),
ś(r)āyeramś (GB 2.5.9).

To these must be added examples of a « free » use which comes close to what Jamison would call the « worst-case » optative, as in (39).

- (39) *tāt tātā nā kāryaṃ yād bhāgadhéyam abhi pūrva uddhri-
 yāte kiṃ āparo 'bhyút / hriyeta* (TS 2.2.4.7-8)
 « that should not be done. Since the former is taken out
 for a definite share, how/why would/should another
 one be taken out for (it)? »
*ghṛtaṃ vai devā vajraṃ kṛtvā somam aghnan / srucau
 bāhū tasmāt srucau somīm āhutiṃ nāsāte / avadhīyeta
 somaḥ...* (GB 2.2.4)

having made ghee the thunderbolt (and) the two ladles the arms, the gods slew soma. Therefore the two ladles do not assist (in) the soma sacrifice. Soma would (otherwise) be confined... »

(Similarly ŚB 4.4.1.17)

All of these, of course, are well-established uses of the optative, with their exact counterparts in the active; cf. (40) and (41).

(40) *vayāṃ syāma pátayo rayīṇām* (RV 4.50.6)

« may we be lords of wealth »

yaḥ kāmayeta kṣatreṇa viśaṃ hanyām iti... (AB 3.19.8)

« who should desire 'May I defeat the viś by means of the kṣatra' »

(41) *kād dha nūnām ṛtā vādanto anṛtaṃ rapema* (RV 10.10.4)

« How could/would we now, speaking truth, whisper untruth? »

kiṃkāmāyā yajemahi (ŚB 1.2.5.25)

« for what purpose should/would we sacrifice? »

nātiṣṛtaṃ kāryaṃ rétaḥ śoṣayet (MS 1.8.2)

« it is not to be cooked too much. (Otherwise) he would cause the seed to dry up »

The same holds true for Jamison's « worst-case » optative passive in the apodosis of conditional DC/MC structures; cf. (20) with (42), as well as (14) etc.

(42) *yád indrahāṃ yáthā tvám iṣṭiya vásva éka it / stotā me góṣakhā syāt* (RV 8.14.1)

« if I, Indra, like you were sole ruler over goods, my praiser would be befriended by cows »

In fact, the argument can also be extended to the protasis of such constructions; cf. (19) with (42). However, Jamison's explanation of the optative in this structure as resulting from « modal attraction » does deserve some additional comment.

Structures of the type (19), (20), (41), (42), with optative (or subjunctive, or conditional) in both protasis and apodosis do represent the most common type of conditional sentences. It should therefore not be surprising that Pāṇini postulates the rule given

in (43) and that Whitney should make a statement like that in (44). And this modal agreement could very well be accounted for as modal attraction, if the mood of the apodosis is taken as primary.

- (43) *hetuhetumator liñ* (Pāṇ. 3.3.156)
 « the optative is used in the protasis and apodosis »
 (Cf. also Pāṇ. 3.3.139-40 for a similar provision for the use of the conditional)
- (44) « So at 101.2, in the apodosis of a sentence having an optative in its protasis, we must absolutely have the optative *ricyeta*: there is no exception in the older language to the rule that the mode, whether optative or subjunctive or conditional, is the same in both members of the sentence ».
 (Whitney 1887 : ccxxvii)

However, as Keith (1909 : 152) realized, even in the older language, this is only the most common pattern. Other patterns, with different moods in protasis and apodosis may be found. Keith illustrated this with examples from the *Maitrāyaṇī-Saṃhitā* and other Vedic-Prose texts. However, as early as the *Rig-Veda*, such « heteromodal » structures can be observed; cf. (45)-(47).

- (45) *Rig-Veda* (a) *suryāṃ yó brahmā vidyāt sá id vādhūyam arhati* (10.85.34)
 « what priest/if a priest should know the the *suryā*, he deserves the bride's garment »
- (b) *adyā murīya yádi yatudhāno ásmi* (7.104.15)
 « may I die today if I am a warlock »
- (46) *Ved. Prose* (a) *yád ásomayāji saṃnáyet parimoṣá evá só 'nṛtaṃ karoti* (TS 2.5.5.1)
 « if a non-soma-sacrificer should offer the *sāmnāyya*, he being a thief does wrong »
 (Sim. TS 2.2.2.2, MS 1.4.14, 1.10.8, AB 3.46, 5.23, etc., KB 25.4, etc., SB 1.7.2.2, etc. etc.)
- (b) *yó 'gnīm citvānyásya striyam upaiti yathā hiviḥ skannám evāñi syād* (MS 3.4.7)

« if a man, having established the fire altar, has intercourse with a woman, he would be like a spilled oblation »

(Sim. *ibid.*, 2.3.6., 4.1.14, etc., KS 35.16, TS 3.1.3.2, ŚB 1.3.2.15, etc., etc.)

- (47) Post-Vedic *yo na hanyāt sa hanyate* (Pañc. 1.271)
« who/if someone should not (decide) to kill, he is killed »

While the interpretation of some of these structures may be open to some differences of opinion, especially of the (b) structures (which occur much less frequently), there are too many unambiguous attestations of this type (especially for (a) structures) to be dismissible as grammatical mistakes. Rather, they suggest that like other languages, such as English [cf. (48) and (49)], Sanskrit was able to make more subtle distinctions in conditional sentences than the ones which could be conveyed by means of the more ordinary type, with modal identity between protasis and apodosis.

- (48) Ordinary English conditional sentence:

If you had a Reagan 'n' a Bush, how many rayguns would you have in the sky?

- (49) Unusual, but grammatical alternative structures:

(a) *If he were to be crowned king tomorrow, he still remains good old Joe*

(b) *If 1² equals 1 and 2² equals 4, how much would 3² be?*

While this paper has come to negative conclusions concerning Jamison's claim that the gerundive functioned as a suppletive optative passive in early Vedic, this should not distract from the fact that there *is* a considerable amount of overlap between the gerundive and the optative (as well as other modals) and of the gerundive and the passive. The former overlap may at least in part have been responsible for the relative rarity of optative and other modal passives in the early language — even if such passives evidently did exist. The latter overlap, on the other hand, appears to have been responsible for the fact that in the post-Vedic language, impersonal passives began to be permitted also from genuine intransitives: As we

have seen, in the Vedic (Prose) language, such structures were limited to the gerundives (cf. (26)). The appearance of similar structures in the passive of the post-Vedic period, then, may be accounted for as the result of generalization, from the *P*-oriented gerundive to the likewise *P*-oriented passive. However, in spite of this and other « convergent » developments in the *P*-oriented constructions (for which see Hock In Press), the relationship between gerundive and passive remains one of overlap, not of suppletion.

REFERENCES

- AVERY, JOHN. 1880. *Contributions to the history of verb-inflection in Sanskrit*. JAOS 10.219-324.
- DEBRUNNER, ALBERT. 1954. (*Wackernagel's*) *Altindische Grammatik*, 2:2. Göttingen: Vandenhoeck + Ruprecht.
- DELBRÜCK, BERTHOLD. 1888. *Altindische Syntax*. Repr. 1968, Darmstadt: Wissenschaftliche Buchgesellschaft.
- . 1897. *Vergleichende Syntax der indogermanischen Sprachen*, 2. (= *Grundriss der vergleichenden Grammatik der indogermanischen Sprachen*, 4.) Strassburg: Trübner.
- GRASSMANN, HERMANN. 1872. *Wörterbuch zum Rigveda*. Repr. 1964, Wiesbaden: Harrassowitz.
- HOCK, HANS HENRICH. 1982. *The Sanskrit passive: synchronic behavior and diachronic change*. *Studies in South Asian languages and linguistics*, ed. by P. J. Mistry, 127-37 (South Asian Review, 6).
- . In Press. *P-oriented constructions in Sanskrit*. *South Asian languages: structure, convergence, and diglossia*, ed. by Bh. Krishnamurti et al. Delhi: Motilal Banarsidass (1984?).
- KEITH, A. BERRIEDALE. 1909. *Tenses and moods in the Kāthaka Saṃhitā*. JRAS n.s. 41.149-54.
- OERTEL, HANNS. 1926. *The syntax of cases in the narrative and descriptive prose of the Brāhmaṇas*, 1. Heidelberg: Winter.
- . 1939. *Zu den Kasusvariationen der vedischen Prosa*, 3. (Sitzungsberichte der Bayerischen Akademie der Wissenschaften, Phil.-Hist. Kl., 1939:6).
- SPEIJER, J. S. 1886. *Sanskrit syntax*. Repr. 1973, Delhi: Motilal Banarsidass.
- WHITNEY, WILLIAM DWIGHT. 1885. *The roots, verb-forms, and primary derivatives of the Sanskrit language*. Repr. 1945, New Haven: American Oriental Society.
- . 1887. *Notes on part IV Schröder's edition of the Maitrāyaṇī-Saṃhitā*. JAOS 13:ccxxvi-viii.