Verbal Governing Compounds with an Accusative-Marked First Member of the Type *agnim-indhá-*: From Vedic to Pāṇini

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Abstract   The verbal governing compound type *agnim-indhá-* 'kindling the fire', with an accusative-marked first member and a second member built to the present stem with the suffix *-á-*, is attested since the Vedic period and continues to enjoy a certain degree of productivity in later periods. In addition to this type, there are also related verbal governing compounds in Vedic and later Sanskrit of the type *khajaṃ-kará-* 'making a battle-din', in which the second member is not built to the present stem. After overviewing the early Vedic evidence for these types, we will examine Pāṇini's approach in deriving these compounds. Pāṇini generally derives such compounds built to a present stem with the *sārvadhātuka* affix *KHaŚ* and those which show some discrepancy with the present stem with the affix *KHaC*. The motivation for introducing these affixes is clear in the majority of cases but there remain some forms within the group of *KHaC*-derivatives for which Pāṇini's choice of *KHaC* over *KHaŚ* is not completely clear. Importantly, some sūtras within the *KHaC* group explicitly provide for the derivation of names (*sañjñā*), suggesting that a link with the present stem may have been less intuitive in such cases.

Keywords   Vedic. Sanskrit. Compounds. Pāṇini. Indian grammatical tradition.

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1 Introduction and Problem

In his paper on nominal compounds in Indo-European, Schindler (1997, 537-8) remarks that accusative case marking of the first member is obligatory in the *Ṛgveda* in certain verbal governing compounds with the suffix *-a-* whose final member is based not on the root but on the present stem, i.e. compounds of the type *agnim-indhá-* '(of a priest:) kindling the fire':[1]

> Obligatorisch ist im RV akkusativisches KA [= Kompositionsanfangsglied] bei bestimmten VRK [= verbale Rektionskomposita] mit Suffix *-a-*, deren Endglied nicht auf der Wurzel, sondern auf einem Verbalstamm basiert (Typus *agnim-indh-á-* 'das Feuer anzündend').

Such compounds are typically *nomina agentis* and are relatively frequently attested in the *Ṛgveda* and *Atharvaveda*, as the following list illustrates (some of the examples below are taken from Tucker 2012, 236, 241; examples are listed along with the relevant present stem):

agnim-indhá- 'kindling the fire'	*inddhé* 'kindle'
viśvam-invá- 'setting all in motion'	*ínvati* 'set in motion'
vācam-īṅkhayá- 'setting speech in motion'	*īṅkháyati* 'set in motion'
samudram-īṅkhayá- 'setting the sea in motion'	
viśvam-ejayá- 'setting all in motion'	*ejayati* 'set in motion'
ṛṇam-cayá- PN 'debt-recovering'	*cáyate* 'punish, recover'
vṛtaṃ-cayá- 'punishing the enemy'	
dhanaṃ-jayá- 'winning wealth'	*jáyati* 'win'
dhiyaṃ-jinvá- 'invigorating thought'	*jínvati* 'invigorate'
druhaṃ-tará- 'overcoming falsehood'	*tárati* 'overcome'
rathaṃ-tará- 'overcoming chariots'	
puraṃ-dará- 'attacking fortresses'	*daráyati* 'attack'
ugram-paśyá- 'fierce looking' (AVŚ)	*páśyati* 'see'
mām-paśyá- 'seeing me' (AVŚ)	
puṣṭim-bhará- 'bringing prosperity'	*bhárati* 'bear, bring'
vājam-bhará- 'bringing booty'	
viśvam-bhará- 'all-bearing' (AVŚ)	
śakam-bhará- 'dung-bearer' (AVŚ)	
sahasram-bhará- 'bringing a thousand(fold)'	
sutam-bhará- 'bringing the pressed drink'	
harim-bhará- 'bearer of the golden (mace)'	

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[1] See also Scarlata and Widmer (2015, 41-3) for a recent discussion of this compound type.

valaṃ-rujá- 'breaking the cave'	*rujáti* 'break'
cakram-āsajá- 'dragging its wheel'	*sájati* 'hang, adhere to'
janaṃ-sahá- 'conquering people'	*sáhate* 'conquer'

In addition to the fact that forms like *-indhá-*, *-ejayá-*, *-paśyá-*, etc. are clearly based on the present stem, the consistent root vocalism *-a-* (< PIE *-e-*) in the second member of many of the above compounds (e.g. *vājam-bhará-*) corresponds with that of the thematic present (e.g. *bhárati*), indicating a synchronic deverbative character (AiG II.1, 178; Tucker 2012, 241).[2] Tucker (2012, 241) and others (e.g. Richter 1898) have observed that the deverbative character of these compounds is also evidenced by parallel non-compositional collocations of finite verb + object. For example, beside compositional *vājam-bhará-*, the verb phrase *vájam bharati* 'brings booty' is attested at RV 4.16.16d, 4.17.9c.[3] On the other hand, in compounds of a similar type like *khajaṃ-kará-* 'making a battle-din' (RV) and *yudhiṃ-gamá-* 'going to battle' (AVŚ), the second member is not paralleled by the present stem. In this paper, I will examine how this type of compound is treated in Pāṇini's grammar.

2   Some Preliminary Observations

Before turning to Pāṇini's analysis, a few preliminary observations are in order. First, in compounds of this type, the accusative marking, while not obligatory, is overwhelmingly favoured; compare *dhiyaṃ-jinvá-* 'invigorating thought' (RV) vs. *viśva-jinva-* 'invigorating all' (RV) (AiG II.1, 207). Second, as noted above, the accusative *-m* sometimes also appears in verbal governing compounds in which the second member is not built to the present stem (the following are from the *Ṛgveda*):[4]

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[2]   See Wackernagel (AiG II.1, 178-83) for a comprehensive list of verbal governing compounds with a second member built to the present stem. Note that a number of these compounds are also attested with a first member in accusative *-m*.

[3]   Richter (1898, 188-9) lists twenty examples of compounds of this type (and some with a second member *-kara-* or *-kāra-*) from Vedic and non-Vedic texts which are paralleled by corresponding verb phrases.

[4]   For a comprehensive categorization of the functions marked by a first member with accusative *-m*, see Wackernagel (AiG II.1, 201-9). Wackernagel remarks that in such cases the accusative: (1) marks the object of a transitive verb or the goal of a motion verb (e.g. *a-sūryam-paśya-* 'not seeing the sun', *śubhaṃ-yā́-* 'hastening to beauty' [RV]); (2) has an adverbial function (e.g. *ugram-paśyá-* 'fierce looking' [AVŚ], *rātriṃ-cara-* 'wandering at night'); (3) functions as a predicative accusative (e.g. *agadaṃ-kāra-* 'making well, physician'); (4) functions as a predicative nominative (e.g. *pāmanam-bhávuka-* 'be-

Second member is *-kará-*

abhayaṃ-kará- 'causing security'	*kṛṇóti* 'do, make'
khajaṃ-kará- 'making a battle-din'	
yataṃ-kará- 'making constraint'	

Second member is a root noun[5]

śubhaṃ-yā́- 'hastening to beauty' (cf. also *śubhaṃ-yā́van-*, *śubhaṃ-yú-*)
dhiyaṃ-dhā́- 'producing insights'

Third, many of the compounds listed in the introduction are hapax legomena, indicating a certain degree of productivity for this compound type. Also, a number of the compounds show a remarkable semantic or formal similarity (e.g. *-invá-*, *īṅkhayá-*, *-ejayá-*, *-jinvá-*, all meaning 'set in motion, invigorate' and having either *-ayá-* or a cluster with a nasal), suggesting analogical influence. In some cases, the *-m* of the first member is likely phonologically motivated, serving to avoid vowel contraction and super heavy syllables, e.g. *viśvam-invá-*, *samudram-īṅkhayá-*, *viśvam-ejayá-*, *agnim-indhá-*, *cakram-āsajá-* (AiG II.1, 207). Metrical/rhythmic factors are also likely involved in the appearance of accusative *-m* (AiG II.1, 204-5; see also the discussion in Tucker 2012, 241-2, with previous literature). For example, *-m* appears in this compound type most frequently when the second member begins with a single consonant and has a short first syllable (e.g. the compounds from the *Ṛgveda* mentioned above with *-kará-*, *-cayá-*, *-jayá-*, *-bhará-*, *-rujá-*, etc.). When the second member is of another shape, the accusative marking typically does not appear; compare *khajaṃ-kará-* 'making a battle-din' (RV) vs. *khaja-kṛ́t-* 'id.' (RV) and *dhanaṃ-jayá-* 'winning wealth' (RV) vs. *dhana-jít-* 'id.'. Note in this connection the complementary distribution between *kṣema-kāraḥ* vs.

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coming liable to scabies' [TS]); (5) is without function and introduced analogically (e.g. *makṣuṃ-gamá-* 'going quickly' [RV]).

5 See Scarlata (1999, 743) for other possible examples of compounds involving an accusative-marked first member (in the singular, dual, and plural) and a second member which is a root noun. As acknowledged by Scarlata, the analysis of many of these forms is uncertain due to formal ambiguities. A parallel for this type in which the second member is generally a root noun is found in Old and Young Avestan (see AiG II.1, 209 for some of these examples), e.g. OAv. *vərəθrə̄m.jan-* 'smashing obstructions', YAv. *daēum.jan-* 'slaying the Daēvas' (AiW 662), YAv. *vīrəṇ-jan-* 'slaying men', YAv. *ašəm. mərəṇc-* 'destroying Order', *ašəm.stūt-* 'praising Order', YAv. *ahūm.stūt-* PN 'praising existence', OAv. *ahūm.biš-* 'healing existence', YAv. *nasūm.kərət-* 'cutting corpses', YAv. *šiiaoθnəm.vərəz-* 'performing deeds', YAv. *drujim.vana-* 'conquering the Lie', YAv. *pāraṇ-tara-* 'crossing over to the other side, located away from'. YAv. *mąθrəm-pərəsa-* 'investigating the formula' (V. 9.2) is cited by Wackernagel, but this is more plausibly a noncompositional phrase of the present participle *pərəsō* + object.

kṣemaṃ-karaḥ 'causing security' etc., which are derived by Pāṇini by A 3.2.44 (*kṣemapriyamadre 'ṇ ca*). An exception to this pattern is seen in the compounds *satyaṃ-kāra-* 'ratification' and *agadaṃ-kāra-* 'physician' provided for by A 6.3.70 (*kāre satyāgadasya*); see also *bhakṣaṃ-kārá-* 'furnishing food' (MS), *a-krūraṃ-kārá-* 'not injuring' (TS), and *astuṃ-kāra-* 'saying "astu"' (vārttika 1 on 6.3.70). The pair *sahasram-bhará-* 'bringing a thousand(fold)' (RV 2.9.1d) and *sahásra-bhara-* 'of thousandfold spoils' (RV 6.20.1c) is also instructive. In the latter, since the second member *-bhara-* 'spoils, booty' does not govern the first, we do not find accusative marking on the first member.

A final point relates to Kiparsky's (2010) discussion of "devatā" dvandvas such as *índrā-pūṣáṇā* 'Indra and Pūṣan', which display both non-compositional (i.e. phrasal) and compositional behaviour. Evidence for phrasal status comes from the separate case ending and accent on each member. Also, the fact that these dvandvas can span the caesura suggests that the link between the members of these compounds may have been somewhat looser:

> *śáṃ na **índrā**//**pūṣáṇā** vā́jasātau*
> '[may] Indra and Pūṣan [bring] us success in winning rewards' (RV 7.35.1d)

> *ā́d íd **dyā́vā**//**pṛthivī́** páry apaśyat*
> 'and he surveyed Heaven and Earth' (RV 3.26.8d)

In the same vein, considering the attestation of non-compositional phrases such as *vā́jam bharati* 'brings booty' and the fact that the first member of *vājam-bhará-* retains its case marking, we may expect that compounds of this type could also span the caesura. This is in fact what we find: see *vājam//bharám* (RV 1.60.5c) and *viśvam//invám* (RV 1.61.4d). However, since a number of other types of compounds have a mid-word caesura (see Knobl 2009, 139-200 for a detailed discussion), it is unclear what to make of this evidence.

3   Pāṇini's Approach

In chapters 3 and 6 of the *Aṣṭādhyāyī*, Pāṇini treats a number of compounds in which the first member ends in -*m*. It is crucial to note that in Pāṇinian grammar -*m* is not regarded as the accusative case ending but as an augment *muM*.[6] By 6.3.67 (*arurdviṣadajantasya mum*),

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6   6.3.67-72 lists provisions regarding the augment *muM*. See especially 6.3.68-9 for the related augment *am* introduced after certain monosyllabic first members (e.g. *vāc-aṃ-yamá-* 'restraining one's speech' [Br+], *pur-aṃ-dará-* 'destroyer of fortresses' [RV+]); note that this augment is said to function like the accusative case ending in certain respects (6.3.68: *pratyayavac ca*). For the irregular form *ātmam-bhari-* 'nourishing one's

when deriving compounds with an affix marked with *KH*, this augment is introduced after the last vowel of *aruṣ-* 'adj. wounded; (n.) a wound' (*aru-ṃ-tuda-* 'striking a wound, i.e. rubbing salt into someone's wound'), *dviṣat-* 'enemy' (*dviṣa-ṃ-tapa-* 'tormenting one's enemies'), and nominal stems ending in a vowel.[7]

Pāṇini's grammar introduces two distinct affixes to derive compounds of the type we are concerned with in this paper: *KHaŚ* and *KHaC*.[8] These affixes, termed *kṛt* by 3.1.93 (*kṛd atiṅ*), are introduced after verbal bases (3.1.91 *dhātoḥ*) on the condition that they co-occur with a semantically and syntactically related subordinate term (*upapada*) denoting the object of the action (3.2.1 *karmaṇi*). By 2.2.19 (*upapadam atiṅ* [17 *nityam*]), the verbal base provided with the relevant *kṛt* affix and the subordinate term obligatorily combine to form an *upapada-tatpuruṣa* compound. Like the final member *-kāra-* in the often discussed *upapada-tatpuruṣa* compound *kumbha-kāra-* 'potter' (see Scharf 2011; 2016), the derivatives in *KHaŚ* and *KHaC* (*-ejaya-*, *-gama-*, etc.) occur only as the final member of compounds and never in the simplex. Pāṇini accounts for such forms by having the subordinate term serve as a condition for introducing the affix on the verbal base and then requiring compounding. The analysis of compounds such as *aṅgam-ejaya-* 'making the limbs tremble' as *upapada-tatpuruṣas* also relates to Pāṇini's treatment of the *-m* of the first member as an augment and not the accusative case ending. First, we should note that while Pāṇini (6.3.1-24) provides for *aluk* ('absence of zero substitution') for the third to seventh *sUP* triplets after the first member of a compound, he does not provide for *aluk* for the second triplet, i.e. the accusative. Second, as emphasised by Scharf (2011; 2016), in the derivation of an *upapada-tatpuruṣa* compound, it is on-

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self, selfish' with a first member in *-m* and a second member derived with the affix *iN*, see 3.2.26 (the commentaries on this sūtra also cite *kukṣim-bhari-* 'belly-nourishing, gluttonous' and *udaram-bhariḥ* 'id.'). In *ātmam-bhari-*, the original compositional stem form of the first member, i.e. **ātma-*, has been hypercharacterised by the addition of the accusative *-m* for *a*-stems. Other examples of this type are *śakam-bhará-* 'dung-bearer' (AVŚ), with *śákar-/śákn-*, and *pāmam-bhaviṣṇú-* 'becoming liable to scabies' (MS), with *pāmán-*; see AiG II.1, 209 for more examples.

7   For evidence of a possible original *u*-stem **áru-* 'wounded', see *áruka-* 'injuring' (TĀ), *arū-kar-* 'to wound' (Lex.); perhaps one could propose an original pair **áru-* 'wounded' : *áruṣ-* 'wounded; n. wound', parallel to *tápu-* 'hot' : *tápuṣ-* 'hot; n. heat' *dviṣam-* can be explained historically as the accusative of the root noun *dvíṣ-* f./m. 'enmity; enemy' (PW s.v. "*dviṣaṃtapa-*"; AiG II.1, 209; II.2, 10).

8   The other affixes marked with *KH* are: (1) *KHamuÑ* (3.4.25), to derive gerunds like *coraṃ-kāram* 'making a thief, declaring to be a thief'; (2) *KHaL* (3.3.126-127), to derive forms like *svāḍhyaṃ-kara-* 'easily made rich'; (3) *KHiṣṇuC* and *KHukaÑ* (3.2.57), to derive forms like *āḍhyaṃ-bhaviṣṇu-*, *āḍhyaṃ-bhāvuka-* 'becoming rich' (for analogous Vedic examples, see *pāmanam-bhávuka-* 'becoming liable to scabies' (TS) and *pāmam-bhaviṣṇú-* 'id.' (MS); AiG II.1, 209); and (4) *KHyuN* (3.2.56), to derive forms like *āḍhyaṃ-karaṇa-* '(means of) making wealthy', *subhagaṃ-karaṇa-* '(means of) making happy'.

ly after the *kṛt* affix has been provided after the verbal base that the relevant case ending can be provided for the *upapada* (though this later undergoes zero substitution by 2.4.71). Since the *kṛt* affixes *KHaŚ* and *KHaC* are introduced after verbal bases on the condition that they co-occur with an *upapada* denoting the object of the action (*karman*), by 2.3.65 (*kartṛkarmaṇoḥ kṛti* [50 *ṣaṣṭhī*]: 'The sixth *sUP* triplet is introduced after a nominal stem when it denotes the agent or the object of the action signified by a verbal stem ending in a kṛt affix'; transl. by the Author) we would actually expect the *upapada* to be provided with the genitive ending. Pāṇini is able to avoid these problems by treating *-m* as an augment and not a case ending.

The affix *KHaŚ* (3.2.28-37, 83) is a *sārvadhātuka* affix[9] and, therefore, it is not introduced after the root itself but after the present stem, which consists of the root and the relevant stem-forming affixes (*vikaraṇa*). On the other hand, the affix *KHaC* (3.2.38-47) is not a *sārvadhātuka* affix and therefore is not regarded as being introduced after the present stem.[10] In the following two sections, we will survey the provisions for the affixes *KHaŚ* and *KHaC* in Pāṇini's grammar along with any examples provided in the commentaries (actually attested Vedic forms will be given with accent, if available, and with information about their periods of attestation).[11]

3.1   The Affix *KHaŚ*

3.2.28 *ejeḥ khaś*
The affix *KHaŚ* is introduced after the causative stem of *ej-* 'tremble' co-occurring with an *upapada* denoting the object of the action.

The KV cites *aṅgam-ejaya-* 'making the limbs tremble' and *janam-ejayá-* 'making men tremble' (ŚB+); for other Vedic examples of this type, see *viśvam-ejayá-* '(of soma:) making all tremble' (RV) and *arim-ejaya-* PN 'making foes tremble' (Br). Vārttika 1, MBh II.102 on this sūtra add the following compounds: *vātam-aja-* '(of an antelope:) driving forth (like) the wind', *śuniṃ-dhaya-* 'a bitch-sucker', *tilaṃ-tudaḥ* 'a

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9   The marker *Ś* facilitates assignment of the class name "sārvadhātuka"; by 3.4.113 (*tiṅśit sārvadhātukam*), "sārvadhātuka" refers to the personal endings (*tiṄ*) and other items marked with *Ś*, such as the affix *-a-* (*ŚaP*) in *bhav-a-ti* 'is, becomes' etc., present participle affixes (*ŚatṚ*, *ŚānaC*), infinitive affixes in *-adhyai* (*Śadhyai*, *ŚadhyaiN*), etc.

10   The marker *C* is said to be only for the purpose of distinguishing *KHaC* from *KHaŚ*; see KV ad 3.2.38 and Devasthali (1967, 94).

11   The examples cited from the commentaries are intended to be exhaustive. The majority are taken from the KV, but this is not because I give this text special weight but simply because its coverage is the most comprehensive. It should also be noted that of the sūtras involved in this section, Kātyāyana and Patañjali comment only on 3.2.28-30, 38, and 83.

sesame grinder', and *śardhaṃ-jaha-* '(of beans:) flatulence-releaser'.[12]

3.2.29 *nāsikāstanayor dhmādheṭoḥ*
The affix *KHaŚ* is introduced after the present stem of *dhmā-* 'blow' and *dheṬ-* 'suck' co-occurring with the *upapadas nāsikā-* 'nose' or *stana-* 'breast' denoting the object of the action.

The commentaries cite *stanaṃ-dhaya-* 'breast suckling, an infant', *nāsikaṃ-dhama-* 'blowing through the nose', and *nāsikaṃ-dhaya-* 'sucking through the nose'. See 6.3.66 (*khity anavyayasya*) for the short final vowel in *nāsikaṃ*°.[13]

3.2.30 *nāḍīmuṣṭyoś ca*
The affix *KHaŚ* is also introduced after the present stem of *dhmā-* 'blow' and *dheṬ-* 'suck' co-occurring with the *upapadas nāḍī-* 'tube, pipe, reed' or *muṣṭi-* 'fist' denoting the object of the action.

The KV cites *nāḍiṃ-dhama-* 'blowing through a tube/pipe/reed', *muṣṭiṃ-dhama-* 'blowing into one's fist', *nāḍiṃ-dhaya-* 'sucking through a tube', and *muṣṭiṃ-dhaya-* 'sucking through one's fist'. Vārttika 2 on A 3.2.29, MBh II.102, and the KV add the following: *ghaṭiṃ-dhama-* 'a pot blower, potter', *ghaṭiṃ-dhaya-* 'sucking a pitcherful', *khāriṃ-dhama-* '?blowing a khārī (a unit of volume)', *khāriṃ-dhaya-* '?sucking a khārī'[14], *vātaṃ-dhama-* 'wind-blowing, a mountain', and *vātaṃ-dhaya-* '?wind-sucking'. See 6.3.66 (*khity anavyayasya*) for the short final vowel in *nāḍiṃ*°, *ghaṭiṃ*° (*ghaṭi-*, with a short stem vowel, is also cited in grammatical texts), and *khāriṃ*°. Note that 3.2.30 was originally a vārttika that was promoted to the status of a sūtra by the KV (Vasu 1891, 420; Böhtlingk 1887, 96).

3.2.31 *udi kūle rujivahoḥ*
The affix *KHaŚ* is introduced after the present stem of *ruj-* 'break' and *vah-* 'carry' co-occurring with the preverb *ud* and the *upapada kūla-* 'shore, bank' denoting the object of the action.

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12 Note that the referents of many of the compounds cited here and below in the commentaries have idiosyncratic, highly conventionalized interpretations. Where available, I will give the referents provided by the commentaries in my glosses.

13 Wackernagel (AiG II.1, 208) suggests that the shortening of the feminine accusative *-ām* to *-am* in this type may be due to analogy with *iram-madá-* 'delighting in drink', in which the first member *iram*°, originally the accusative of *ír-* = *íḍ-* f. 'drink, libation' (PW, s.v. "*iraṃmadá-*"), was reinterpreted as an underlying accusative **irām*° of *írā-* 'drink, libation'. The shortening of *-īm* to *-im* (see 3.2.30 for examples) in compounds of this type has been explained as a Prakritism (Richter 1898, 187).

14 The SK (2945) also lists *kharī-* 'she-ass', so that the compounds *khariṃ-dhama-* '?' and *khariṃ-dhaya-* '?sucking the milk of a she-ass, Eselsmilch trinkend' (see the PW, s.v. "*khariṃ-dhama-*") can be derived.

The KV cites *kūlam-udruja-* '(of a chariot, etc.:) breaking the banks (= *kūlam udrujati*)'[15] and *kūlam-udvaha-* '?bringing to/reaching/carrying away the banks'.

3.2.32 *vahābhre lihaḥ*
The affix *KHaŚ* is introduced after the present stem of *lih-* 'lick' co-occurring with the *upapadas vaha-* 'shoulder' or *abhra-* 'cloud' denoting the object of the action.

The KV cites *vahaṃ-liha-* '(of a cow:) shoulder-licking (= *vahaṃ leḍhi*)' and *abhraṃ-liha-* '(of wind:) cloud-licking'.

3.2.33 *parimāṇe pacaḥ*
The affix *KHaŚ* is introduced after the present stem of *pac-* 'cook' co-occurring with a unit of measurement (the *upapada*) denoting the object of the action.

The KV cites *prastham-pacā-* '(of a pot:) cooking the volume of a prastha (= *prastham pacati*)', *droṇam-paca-* 'cooking the volume of a droṇa', and *khārim-paca-* '(of a caldron:) cooking the volume of a khārī'. These terms are apparently used to designate pots of different sizes.

3.2.34 *mitanakhe ca*
The affix *KHaŚ* is also introduced after the present stem of *pac-* 'cook' co-occurring with the *upapadas mita-* 'a (limited) portion' or *nakha-* 'fingernail' denoting the object of the action.

The KV cites *mitam-pacā-* '(of a stingy brāhmaṇī:) cooking (only a) limited portion (= *mitam pacati*)' and *nakham-pacā-* '(of rice-gruel:) nail-scalding/hot enough to scald the nails'.

3.2.35 *vidhvaruṣos tudaḥ*
The affix *KHaŚ* is introduced after the present stem of *tud-* 'strike' co-occurring with the *upapadas vidhu-* 'the moon' or *aruṣ-* 'wound' denoting the object of the action.

The KV cites *vidhuṃ-tuda-* '(of Rāhu:) striking/eclipsing the moon' and *aruṃ-tuda-* 'striking a wound, i.e. rubbing salt into someone's wound' (for the full derivation of the latter, see 6.3.67, 8.2.23; also see footnote 7 above).

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[15]   When available, I will provide the non-compositional paraphrase (*vigrahavākya*) for the compound given in the commentaries.

3.2.36 *asūryalalāṭayor dṛśitapoḥ*
The affix *KHaŚ* is introduced after the present stem of *dṛś-* 'see' and *tap-* 'scorch' co-occurring with the *upapadas a-sūrya-*'ɴᴇɢᴀᴛɪᴏɴ-sun' or *lalāṭa-* 'forehead' denoting the object of the action.

The KV cites *asūryam-paśyā-* '(of a king's harem:) not seeing the sun' and *lalāṭaṃ-tapa-* '(of the sun:) scorching the forehead'.

3.2.37 *ugrampaśyerammadapāṇindhamāś ca*
The irregular forms *ugram-paśyá-* '(of Apsarases or dice:) fierce-seeing, fierce-looking (= *ugram paśyati*)' (AVŚ), *iram-madá-* '(of Agni:) delighting in drink (= *irayā mādyati*)' (VS), and *pāṇiṃ-dhama-* '(of paths:) where the hands are blown/whistled(?) into (to ward off snakes, etc.) (= *pāṇayo dhmāyante eṣu*)'[16] are also derived with the affix *KHaŚ*.

The three compounds listed here are treated as irregularly derived. According to the commentary on this section in the *Nyāsa, ugram-paśyá-* is irregular in that we would generally expect the affix *aṆ* and not *KHaŚ* by 3.2.1 (*karmaṇy aṇ*); *iram-madá-* in that the present-stem-forming affix *ŚyaN* (in *mādyati*) irregularly undergoes zero replacement;[17] and *pāṇiṃ-dhama-* in that the compound denotes a locus (*adhikaraṇa*) and thus the affix *LyuṬ* would be expected by 3.3.117 (*karaṇādhikaraṇayoś ca*). Note that the first two compounds are attested in Vedic and that the first member in the first two compounds is difficult to interpret as denoting the object of the action.

3.2.83 *ātmamāne khaś ca*
The affixes *Ṇini* and also *KHaŚ* are introduced after *man-* 'consider, think' co-occurring with an *upapada* X ending in a *sUP* triplet (3.2.4)[18] when the sense is 'considering oneself as X'.

The KV cites *darśanīyam-manya- ~ darśanīya-mānin-* 'considering oneself attractive (= *darśanīyam ātmānam manyate*)' and *paṇḍitam-manya- ~ paṇḍita-mānin-* 'considering oneself learned'. The KV ad 6.3.66 and SK (2993) also give *kālim-manyā-* 'considering oneself to be Kālī' and *hariṇim-manyā-* 'considering oneself to be Hariṇī'.

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16 See the commentary under this sūtra by the PM: *pāṇindhamāḥ panthāna iti | te punar yeṣu gacchadbhiḥ sarpādyapanodanāya pāṇayo dhmāyante, śabdyante ||.*

17 Historically, *iram-madá-* can be straightforwardly derived from the older present *mádati* rather than the more recent semantically identical *mā́dyati* which becomes more common in Vedic prose and after.

18 The KV ad 3.2.83 explicitly reads *supi* from 3.2.4 (*supi sthaḥ*) into this sūtra. In the KV ad 3.2.4, Jayāditya states that both *karmaṇi* from 3.2.1 and *supi* from 3.2.4 recur in subsequent sūtras and that the former is relevant for transitive verbs while the latter is relevant elsewhere (Scharf 2016, 304).

3.2 The Affix *KHaC*

3.2.38 *priyavaśe vadaḥ khac*

The affix *KHaC* is introduced after the root *vad-* 'speak, utter' co-occurring with the *upapadas priya-* 'friendly' or *vaśa-* 'will, authority' denoting the object of the action.

The KV cites *priyaṃ-vada-* 'speaking kindly (= *priyaṃ vadati*)', *vaśaṃ-vada-* 'obedient, submissive to the will of another'[19]. Vārttikas 1-4, MBh II.102 add the following under this sūtra: *mitaṃ-gama-* '(of an elephant:) going in measured steps', *mitaṃ-gamā-* f. 'id.', *vihaṃ-gama-* (~ *vihaṃ-ga-* ~ *viha-ga-*)[20] '(of a bird:) moving through the sky (= *vihāyasā gacchati*)'. The SK (2953) also gives *bhujaṃ-gama-* (~ *bhujaṃ-ga-*) '(of a serpent:) moving in a crooked manner'.

3.2.39 *dviṣatparayos tāpeḥ*

The affix *KHaC* is introduced after the causative stem of *tap-* 'scorch, torment' co-occurring with the *upapadas dviṣat-* 'enemy' or *para-* 'foreigner, enemy' denoting the object of the action.

The KV cites *dviṣaṃ-tapa-* 'tormenting one's enemies (= *dviṣantaṃ tāpayati*)', *paraṃ-tapa-* 'tormenting one's foes' (for the full derivation of the former, see 6.3.67, 8.2.23; also see footnote 7 above). See 6.4.94 (*khaci hrasvaḥ*) for the short vowel in *-tapa-*.

3.2.40 *vāci yamo vrate*

The affix *KHaC* is introduced after the root *yam-* 'restrain' co-occurring with the *upapada vāc-* 'speech' denoting the object of the action when the sense is maintaining a religious vow (*vrata*).

The KV cites *vācaṃ-yamá-* 'restraining one's speech (as a religious vow)' (Br+). See 6.3.69 (*vācaṃyamapurandarau ca*) for the augment *am* in *vāc-aṃ-yamá-*.

3.2.41 *pūḥsarvayor dārisahoḥ*

The affix *KHaC* is introduced after the causative stem of *dr̥̄-* 'split, destroy' and the root *sah-* 'endure, overcome' co-occurring with the *upapadas pur-* 'fortress' or *sarva-* 'all' denoting the object of the action.

The KV cites *puraṃ-dará-* '(of Indra:) destroyer of fortresses (= *puraṃ dārayati*)' (RV+) and *sarvaṃ-saha-* '(of a king:) all-endur-

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[19] On the late-attested *vaśaṃ-kara-* 'bringing under the control of, subjugating', see AiG II.1, 203-4.

[20] See AiG II.1, 201-2 on these forms.

ing'; it also adds *bhagaṃ-dara-* 'lacerating the vulva'. See 6.3.69 (*vācaṃyamapurandarau ca*) for the augment *am* in *pur-aṃ-dará-* and 6.4.94 (*khaci hrasvaḥ*) for the short vowel in *-dará-*.

> **3.2.42** *sarvakūlābhrakarīṣeṣu kaṣaḥ*
> The affix *KHaC* is introduced after the root *kaṣ-* 'scrape, erode, injure' co-occurring with the *upapadas sarva-* 'all', *kūla-* 'shore, bank', *abhra-* 'cloud', or *karīṣa-* 'cow-dung' denoting the object of the action.

The KV cites *sarvaṃ-kaṣa-* '(of a villain:) harming all (= *sarvaṃ kaṣati*)', *kūlaṃ-kaṣā-* '(of a river:) tearing away the bank', *abhraṃ-kaṣa-* '(of a mountain:) scraping the clouds', and *karīṣaṃ-kaṣā-* '(of a strong wind:) sweeping away dung'.

> **3.2.43** *meghartibhayeṣu kṛñaḥ*
> The affix *KHaC* is introduced after the root *kṛÑ-* 'make, produce' co-occurring with the *upapadas megha-* 'cloud', *ṛti-* 'assault, pain', or *bhaya-* 'fear' denoting the object of the action.

The KV cites *meghaṃ-kara-* 'producing clouds', *ṛtiṃ-kara-* 'causing pain', and *bhayaṃ-kara-* 'causing fear'. The KV also adds *abhayaṃ-kará-* '(of Indra:) causing security' (RV).

> **3.2.44** *kṣemapriyamadre 'ṇ ca*
> The affixes *KHaC* and *aṆ* are introduced after the root *kṛÑ-* 'make, produce' co-occurring with the *upapadas kṣema-* 'security', *priya-* 'affection', or *madra-* 'joy' denoting the object of the action.

The KV cites *kṣema-kāra-* (with *aṆ*) ~ *kṣemaṃ-kara-* (with *KHaC*) 'causing security', *priya-kāra-* ~ *priyaṃ-kara-* (VS) 'showing affection', and *madra-kāra-* ~ *madraṃ-kara-* 'causing joy'.

> **3.2.45** *āśite bhuvaḥ karaṇabhāvayoḥ*
> The affix *KHaC* is introduced after the root *bhū-* 'become' co-occurring with the *upapada āśita-* 'satiated, fed' when the sense is the means (of becoming satiated) or the state (of satiation)/event (of becoming satiated).

The KV cites *āśitam-bhava-* '(of porridge:) satisfying (in the sense of the porridge being the means that brings about a satiated state) (= *āśito bhavati anena*)', and *āśitam-bhavaṃ vartate* '(the state of) being satisfied/(the event of) becoming satisfied (= *āśitasya bhavanam*)'. The KV states that the condition *supi* (3.2.4) for the *upapada* recurs here; since *bhū-* is intransitive, it cannot be subject to the condition *karmaṇi* (3.2.1) (see footnote 18 above).

3.2.46 *sañjñāyāṃ bhṛṭīvṛjidhārisahitapidamaḥ*
The affix *KHaC* is introduced after the roots *bhṛ-* 'carry', *tṝ-* 'cross', *vṛ̥-* 'choose', *ji-* 'conquer', the causative stem of *dhṛ-* 'hold', the roots *sah-* 'endure', *tap-* 'heat', and *dam-* 'tame' co-occurring with an *upapada* denoting the object of the action or an *upapada* ending in a *sUP* triplet (3.2.4)[21] when the sense is a name.

The KV cites *viśvam-bhará-* '(name of the earth:) supporting all' (ŚB+), *rathaṃ-tará-* n. '(name of a *sāman*:) ?crossing with/on a chariot' (TS; the masculine 'overcoming chariots' is attested in the RV), *patiṃ-varā-* '(name of a weddable girl:) choosing a husband', *śatruṃ-jaya-* '(name of an elephant:) conquering enemies', *yugaṃ-dhara-* '(name of a mountain:) holding the yoke', *śatruṃ-saha-* PN 'withstanding enemies', *śatruṃ-tapa-* PN 'tormenting enemies', and *ariṃ-dama-* PN 'taming enemies'. See 6.4.94 (*khaci hrasvaḥ*) for the short vowel in *-dhara-*.

3.2.47 *gamaś ca*
The affix *KHaC* is also introduced after the root *gam-* 'go, move' co-occurring with an *upapada* ending in a *sUP* triplet (3.2.4)[22] when the sense is a name.

The KV cites *sutaṃ-gama-* PN 'obtaining a son'. For compounds in *-gama-* that are not necessarily names, see *hṛdayam-gama-* '(of speech, etc.:) going to the heart, affecting' and *yudhiṃ-gamá-* 'going to battle' (AVŚ), etc.

4 Observations on the Above Survey

From the above survey, we see that of the actual Vedic examples of compounds of this type given in the beginning of this paper, only a small subset are provided for by Pāṇini.[23] These are as follows: *-ejayá-*, *ugram-paśyá-*, *iram-madá-*, *vācaṃ-yamá-*, *puraṃ-dará-*, *abhayaṃ-kará-*, *priyaṃ-kara-*, *viśvam-bharā́-*, and *rathaṃ-tará-*. The majority of provisions for the affixes *KHaŚ* and *KHaC* involve compounds that are

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21 See the KV on this sūtra: *karmaṇi iti supi iti ca prakṛtaṃ sañjñāvaśād yathāsambhavaṃ sambadhyate* 'Both the provisions *karmaṇi* (3.2.1) and *supi* (3.2.4) recur here and are to be applied in accordance with the name that is derived' (transl. by the Author). According to the *Nyāsa*, reading *supi* from 3.2.4 (*supi sthaḥ*) into this sūtra is for the sake of deriving compounds denoting names in which the first member is not readily interpretable as denoting the object of the action. For example, the first member in the compound *rathaṃ-tará-* n. '(name of a *sāman*:) ?crossing with/on a chariot' is analysable as being in the instrumental case.

22 As in 3.2.45, the KV states that the condition *supi* (3.2.4) for the *upapada* recurs here. Presumably this is also for the sake of deriving compounds denoting names in which the first member is not readily interpretable as denoting the object of the action; however, the details are not clear.

23 To be sure, Pāṇini's lack of provisions for many Vedic compounds of this type does not imply that such forms were unknown to him.

not attested in Vedic. This is perhaps unsurprising since none of the sūtras we have cited explicitly concern the Vedic language. What is striking, however, is the considerable number of sūtras allocated to compounds of this type, which indicates that such forms continued to enjoy a relative productivity after the Vedic period.

As expected, all of the derivatives in the *KHaŚ* group (3.2.28-37, 83), except the irregular *iram-madá-* (3.2.37) that has a plausible historical explanation (see footnote 17), have a transparent relationship to the synchronic present stem:

ejayati : *-ejaya-* (3.2.28)
dhamati : *-dhama-* (3.2.29-30, 37)
dhayati : *-dhaya-* (3.2.29-30)
udrujati : *-udruja-* (3.2.31)
udvahati : *-udvaha-* (3.2.31)
leḍhi : *-liha-* (3.2.32)
pacati : *-paca-* (3.2.33-4)
tudati : *-tuda-* (3.2.35)
paśyati : *-paśya-* (3.2.36-7)
tapati : *-tapa-* (3.2.36)
manyate : *-manya-* (3.2.83)

On the other hand, the derivatives in the *KHaC* group (3.2.38-47) are a mixed bag in that some appear to have a clear relationship with the synchronic present stem while others do not. We summarise the forms in this group below along with the relevant present stems:

vadati : *-vada-* (3.2.38)
tāpayati : *-tapa-* (3.2.39)
yacchati : *-yama-* (3.2.40)
dārayati : *-dara-* (3.2.41)
sahate : *-saha-* (3.2.41)
kaṣati : *-kaṣa-* (3.2.42)
kṛṇoti : *-kara-* (3.2.43-4)
bhavati : *-bhava-* (3.2.45)
bharati : *-bhara-* (3.2.46)
tarati : *-tara-* (3.2.46)
jayati : *-jaya-* (3.2.46)
vṛṇīte : *-vara-* (3.2.46)
dhārayati : *-dhara-* (3.2.46)
sahate : *-saha-* (3.2.46)
tapati : *-tapa-* (3.2.46)
damayati : *-dama-* (3.2.46)
gacchati : *-gama-* (3.2.47)

Note that all of these forms are of the shape *-CaC-a-*. Three forms are explicitly derived from the causative stem: *tāpayati* : *-tapa-* (3.2.39), *dārayati* : *-dara-* (3.2.41), and *dhārayati* : *-dhara-* (3.2.46). The long vowel of the causative stem is shortened in the *KHaC*-derivative according to 6.4.94 *khaci hrasvaḥ* 'A substitute short vowel replaces the penultimate vowel of a verbal stem before the causative affix *Ṇi* co-occurring with the affix *KHaC*' (transl. by the Author). The short root vocalism and the lack of the stem formant *-aya-* (see 6.4.51) in these *KHaC*-derivatives explain why Pāṇini treats these forms as derived with *KHaC* and not *KHaŚ*. Note that at 3.2.36 Pāṇini derives *lalāṭaṃ-tapaḥ* '(of the sun:) scorching the forehead' (with *KHaŚ*) from the present stem *tapati* while at 3.2.39 *dviṣaṃ-tapaḥ* 'tormenting one's enemies' and *paraṃ-tapaḥ* 'tormenting one's foes' (both with *KHaC*) are derived from the causative stem *tāpayati*. The semantic distinction between *tapati* 'scorch, burn' vs. *tāpayati* 'torment, vex' (see Jamison 1983, 147-8) is likely the reason for this different treatment. Nevertheless, in 3.2.46, which provides for the derivation of names such as *śatruṃ-tapa-* 'tormenting enemies', it is not completely clear why Pāṇini cites *tapi* and not the causative *tāpi* as he does in 3.2.29,[24] though this may have something to do with the fact that 3.2.46 concerns the derivation of names, which typically are morphologically and semantically less transparent (see below).

Other forms in the *KHaC* group that have no direct relationship with the synchronic present stem are *yacchati* : *-yama-* (3.2.40), *kṛṇoti* : *-kara-* (3.2.43-4), *vṛṇīte*: *-vara-* (3.2.46), *damayati*: *-dama-* (3.2.46), and *gacchati* : *-gama-* (3.2.47). Eliminating these forms from the above list of *KHaC*-derivatives leaves the following, which, as they correspond to the present stem, appear to be equally derivable with the affix *KHaŚ*:

> *vadati* : *-vada-* (3.2.38)
>
> *sahate*: *-saha-* (3.2.41, 46)
>
> *kaṣati*: *-kaṣa-* (3.2.42)
>
> *bhavati*: *-bhava-* (3.2.45)
>
> *bharati*: *-bhara-* (3.2.46)
>
> *tarati*: *-tara-* (3.2.46)
>
> *jayati*: *-jaya-* (3.2.46)
>
> *tapati*: *-tapa-* (3.2.46)

Examining the above list, we see that over half of the forms appear in 3.2.46, which provides for the derivation of names (*sañjñā*). Cross-

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24 See Böhtlingk's (1887, 97) comment under this sūtra: "Warum nicht *tāpi* wie 3, 2, 39?".

linguistically speaking, since proper names tend to be highly lexicalised and less transparent morphologically and semantically, it is possible that the relationship between the set of forms in 3.2.46 and the present stem may have been less intuitive. This may help explain why Pāṇini derives these forms with the affix *KHaC* rather than *KHaŚ*. Also, we should note that many forms with a first member in *-m* that we have seen in this paper function as epithets, so that this feature may have been to some degree conventionalised in forming names.[25]

With regard to *-vada-*, the KV ad 3.2.38 in fact states that introducing a different affix (i.e. *KHaC* rather than *KHaŚ*) at 3.2.38 is so that this affix can be read into subsequent sūtras (*pratyayāntarakaraṇam uttarārtham*). If this is the case, the choice of *KHaC* over *KHaŚ* to derive *-vada-* may not be motivated by purely linguistic factors. As for *-saha-* in *sarvaṃ-saha-* '(of a king:) all-enduring' (3.2.41) and the name *śatruṃ-saha-* PN 'withstanding enemies' (3.2.46), note that there are two stems for this root listed as semantically identical in the *Dhātupāṭha*: the causative stem *sāhayati* (DhP X.267: *ṣahA marṣaṇe*) and the simple thematic present stem *sahate* (DhP I.905: *ṣahA marṣaṇe*). However, since Pāṇini elsewhere in this section typically specifies the causative stem (*tāpi* 3.2.39, *dāri* 3.2.41, *dhāri* 3.2.46), it seems likely that if he had *sāhayati* in mind he would have made this explicit (see, for example, *sāhi* at 3.1.138). As for *-bhava-* in *āśitam-bhava-* '(of porridge:) satisfying, etc.' (3.2.45), the fact that *bhū-* is intransitive and cannot be subject to the condition *karmaṇi* (3.2.1) may have motivated Pāṇini to derive it with the affix *KHaC* and not *KHaŚ*, but this remains unclear. In sum, while the majority of forms in the *KHaC* group are explainable, there remains a small group of forms for which Pāṇini's choice of *KHaC* over *KHaŚ* is unclear.

5 Summary

In Vedic, the class of verbal governing compounds built to a present stem with the suffix *-á-* show a strong correlation with a first member with accusative marking, though such marking is not obligatory. We also find second members that are not built to the present stem such as *-kará-* and *-gamá-* already in early Vedic which have the accusative *-m*. After the period of the Ṛgveda, this type of compound, particularly that with a second member of the shape *-CaC-a-*, continues to remain relatively productive. Pāṇini generally derives such com-

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25 See also the remarks by Wackernagel (AiG II.1, 206): "Die mehrfache Beschränkung dieses Bildungstypus auf Saṃjnās (P. 3, 4, 46), d.h. auf Namen u. Termini technici, erweist dessen Altertümlichkeit; die betr. Kompp. müssen schon vorkl. mit etymologischer Bedeutung existiert haben. Beachtenswert ep. kl. *jala-dhara-* „Wolke" eig. „wassertragend" aber kl. *jalam-dhara-* n. pr".

pounds built to a present stem with the *sārvadhātuka* affix *KHaŚ* and those which show some discrepancy with the present stem with the affix *KHaC*. The motivation for introducing these affixes is clear in the majority of cases but there remain some forms within the group of *KHaC*-derivatives for which Pāṇini's choice of *KHaC* over *KHaŚ* is not completely clear. As pointed out in § 4, the majority of sūtras concerning this remaining *KHaC* group of derivatives explicitly provide for the derivation of names (*saṃjñā*), suggesting that a link with the present stem may have been less intuitive in such cases. Finally, Pāṇini's use of *KHaC* to derive compounds in *-vada-* and *-bhava-* may be motivated by non-linguistic or system-internal considerations.

Abbreviations

A = *Aṣṭādhyāyī*
AVŚ = *Atharvaveda* (Śaunaka recension)
Br = Brāhmaṇa
DhP = *Dhātupāṭha*
MS = *Maitrāyaṇī-Saṃhitā*
PM = *Padamañjarī*
PN = proper name
RV = *Ṛgveda*
SK = *Siddhāntakaumudī*
ŚB = *Śatapatha-Brāhmaṇa*
TĀ = *Taittirīya-Āraṇyaka*
TS = *Taittirīya-Saṃhitā*

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