

STUDIES IN FEMININE DERIVATION IN VEDIC

by

AIDAN O. CHENEY-LYNCH

(Under the Direction of Jared S. Klein)

ABSTRACT

The first objective of the first chapter is to investigate the synchronic distribution of and interaction between FEM. Motion and FEM. Static derivatives in Vedic and the Inner IE dialects. The second is to motivate the increased production the Motion derivational type shows, its encroachment upon the Static type, and the crystallization of a subset of “transitional” zero-derivatives exhibiting original and analogical morphological features. The third is to propose a zero-derived synchronic stage for FEM. agent nouns and FEM. participles on the basis that zero-derivation appears to have been the default, Pre-Motion derivational mechanism accessible to Vedic speakers. The second chapter classifies all Motion \bar{i} -stem derivatives as *deví* or *vrkí* and underscores five semantic categories they collectively constitute. Furthermore, semantic categories and forms of lexical class change characteristic of each derivational Motion \bar{i} -stem sub-type are identified. The linguistic bases, however, motivating Vedic speakers to select **-ih₂- / *-yéh₂-* (and possibly **-ih_x-*) but not **-eh₂-* to derive from MASC. thematic bases the Motion \bar{i} -stems, remains unknown.

INDEX WORDS: Distribution, Motion, Static, Vedic, Inner IE, Analogical, Morphological, Zero-derivation, Dataset

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CHAPTER I

The Delimitation of Motion (i.e. *Motionsfeminina*) and Static (i.e. zero-derived) Feminine-denoting Derivational Types in Vedic and the other Inner IE Dialects¹

INTRODUCTION

The first objective of this paper is to investigate the synchronic distribution of and interaction between *FEM.* Motion and *FEM.* Static (i.e. zero-derived) derivational types in Vedic and the Inner IE dialects. Motion produces *FEM.* nouns and adjectives from a *MASC.* base via overt derivational processes, whereas Static derivation accomplishes the same end with no change in the phonological form. The second objective is to motivate the increased production of the Motion type, its subsequent encroachment upon the Static type, and the crystallization of a subset of "transitional" zero-derived forms exhibiting both original and analogically remodeled morphological features. Third, while Vedic *FEM.* agent nouns and *FEM.* participles were overtly derivable, namely by the attachment of Motion inflection to the zero-grade of the suffix, a zero-derived synchronic stage is proposed for them on the grounds that zero-derivation appears to have been at an early period the default operation accessible to Vedic speech communities to link the *FEM.* signified with the *FEM.* signifier.

¹ Inner IE is here defined as all major IE subgroups with the exception of Anatolian and Tocharian. Evaluation of evidence from non-Inner Anatolian is integral to the full treatment of Motion and Static types and is cited wherever necessary.

1. THE GRAMMATICAL STATUS OF GENDER IN PIE

1.1 Bipartite vs. tripartite gender systems in Indo-European. The tripartite gender system Vedic speech communities possessed and the Vedas transparently document does not accurately reflect the grammatical status of gender in the proto-language. Most Indo-Europeanists today believe that PIE had two distinct gender categories, namely animate and inanimate, based upon the available data from Anatolian and the other IE daughter languages. The bipartite gender system the Anatolian subgroup synchronically shows is unusual. Nearly all IE sub-groups with the exception of Classical Armenian, which possesses almost no grammatical gender whatsoever (none in its nouns), were equipped to assign as many as three genders, masculine, feminine, and neuter, to nouns and adjectives in their respective lexicons. The table below illustrates just how uncommon the bipartite gender system was among the IE dialects.

BIPARTITE GENDER SYSTEM	TRIPARTITE GENDER SYSTEM
Anatolian	Albanian Celtic Greek Indo-Iranian Italic Germanic Balto-Slavic ² Tocharian ³

The bi-fold and tri-fold adjective inflectional sets the IE dialects respectively show are the primary basis for the classification outlined above. Such Inner IE dialects as Vedic exhibit both systems. For

² In Baltic only residual.

³ The NEUT. gender survived in Tocharian but is restricted to pronouns (Fortson 2010 : 357).

instance, Ved. *i*-stems adjectives are assigned either MASC.FEM. (animate) or NEUT. (inanimate) gender, whereas Ved. thematic adjectives are assigned either MASC., FEM., or NEUT. gender.⁴ The clear split between Anatolian and all other IE dialects – perhaps with the exception of Tocharian – suggests overwhelmingly that the IE FEM. grammatical category was an innovation restricted to the Inner IE dialects.

2. THE CREATION OF FEMININE DERIVATIVES IN INNER IE

2.1 Motion, Static, and Lexical means of derivation. Motion derivatives are IE FEM. nouns, adjectives, and participles formed by the attachment of a Motion suffix to a MASC. nominal base. The new FEM. form is largely distinguished by one of three suffixes **-ih₂-*/**-yéh₂*, **-ih_x-*,⁵ or **-eh₂-*⁶ and optional ablaut. The term Motion itself refers to the figurative movement exhibited by this derivational operation, whereby FEM. derivatives are synchronically derived from their masculine counterparts,⁷ e.g.

Ved.⁸ NOM.SG.FEM. *deví* 'goddess' ← Ved. MASC. *devá-* 'god'
 Ved. NOM.SG.FEM. *vṛkí-s* 'she-wolf' ← Ved. MASC. *vṛka-* 'wolf'
 Ved. NOM.SG.FEM. *jáni-tr-ī* 'mother' ← Ved. MASC. *janitá'* 'begetter'

Ved. ADJ. NOM.SG.FEM. *urví* 'wide' ← Ved. MASC. *urú-* 'id.'
 Ved. ADJ. NOM.SG.FEM. *priyá* 'dear' ← Ved. MASC. *priyá-* 'id.'
 Ved. ADJ. NOM.SG.FEM. *arkínī* 'radiant with light' ← Ved. MASC. *arkín-* 'id.'

⁴ For a bi- and tri-fold inflectional set survey in Indo-European, see Lundquist and Yates (2017 : 2094-2100).

⁵ The nature of this laryngeal, which produces feminine and masculine formations, is the subject of much debate. The traditional view selects **-h₂-* as opposed to **-h_x-* (see Pinault 2011 and Widmer 2005). Henceforward, for convenience of presentation **h_x* is referred to as **h₂*.

⁶ While synchronically the Motion suffixes were productively employed to mark feminine-denoting nominals, their common denominator **h₂* marked the NEUT. PL. grammatical category, singular collectives, and abstracts (Jasanoff : 2003, Nussbaum : 2014).

⁷ All Vedic and Sanskrit forms cited in this paper have been taken from Macdonell (1910, 1916), Whitney (1879), Wackernagel-Debrunner (1930), Lanman (1880), and Grassmann (1872).

⁸ Abbreviations are as follows. Ved. = Vedic Sanskrit, Skt. = Classical Sanskrit, Gk. Hom. = Homeric Greek, Gk. = Classical Greek, Lat. = Latin, Goth. = Gothic, OIr. = Old Irish, OCS = Old Church Slavic, Hitt. = Hittite.

Ved. PTCP. NOM.SG.FEM. *ghnatí* 'slaying' ← Ved. MASC. *ghnánt-* 'id.'

The second derivational means is Static⁹ or more traditionally, zero-derivation.¹⁰ It is a process whereby a phonological duplicate of the MASC. derivative is produced, but its referent is FEM., e.g.

Ved. ADJ. NOM.SG.FEM. *śúci-s* 'bright' ← Ved. ADJ. NOM.SG.MASC. *śúci-s* 'id.'

Ved. ADJ. NOM.SG.FEM. *hári-s* 'tawny' ← Ved. ADJ. NOM.SG.MASC. *hári-s* 'id.'

Ved. ADJ. NOM.FEM.SG. *madhú-s* 'sweet' ← Ved. ADJ. NOM.MASC.SG. *madhú-s* 'id.'

Ved. ADJ. NOM.FEM.SG. *rjú-s* 'straight, correct' ← Ved. ADJ. NOM.MASC.SG. *rjú-s* 'id.'

Vedic zero-derived pairs are formally distinguishable from their NEUT. counterparts in the NOM. and ACC. cases of all numbers. The obvious shortcoming of such Static derivatives, which were first generated at a pre-Motion synchronic stage, is that they allowed no overt distinction between MASC. and FEM. Zero-derivatives were the pre-Motion default morphological operation, most clearly evidenced by short *i-* and *u-*stem nouns and adjectives. When speakers gained access to overt derivational means, FEM. zero-derivatives were analogically remodeled based on their overt Motion competitor. Some highly archaic nouns are attested with both short and long stems, e.g. Ved. NOM.SG.FEM. *jáni-s* 'woman' : Ved. NOM.SG.FEM. *jáni¹¹* 'id.', suggesting competition between Static and Motion operations. The third means to derive FEM. forms in Vedic and the other IE dialects is lexical. Lexically derived pairs are likewise highly archaic, productive, and widespread among the IE daughter languages. Their bases are historically unrelated and their lexical content is semantically antonymous with regard to the axis

⁹ In this paper the term Static is used to characterize the morphologically and phonologically non-overt derivation of Vedic feminine derivatives.

¹⁰ Zero-derivation is defined as "a word-formation process that changes the lexical category of a word without changing its phonological shape" (Aronoff & Fudeman 2005 : 243). In this paper we include change of gender category in this definition.

¹¹ The short stem is original, whereas the long stem is hypercharacterized.

male : female. While lexical derivatives frequently share the same suffix, neither suffixation nor ablaut is responsible for most of the derivational semantic work, e.g.

Ved. FEM.SG. *jānī/ī*¹² 'woman' (< **g^wenh₂-*) : Ved. MASC.SG. *nár-* 'man' (PIE **h₂ner-*)

Ved. FEM.SG. *svásar-* 'sister' (PIE **swesor-*) : Ved. MASC.SG. *bhrátar-* 'brother' (PIE **bhrāter-*)

Ved. FEM.SG. *mātár-* 'mother' (PIE **māter-*) : Ved. MASC.SG. *pitár-* 'father' (PIE **ph₂ter-*)

3. MOTION DERIVATION IN INNER IE

3.1 Synchronic distribution of Motion and its PIE background. The large number and widespread distribution of Motion derivatives in Vedic and the Inner IE dialects point towards Motion as an exclusive isogloss among the Inner IE dialects, which subsequently positioned itself as one of the major means to derive FEM. formations. When we consider the comparative facts from non-Inner Anatolian, this hypothesis is further clarified insofar as the Hittite nominal system possessed no feminine gender.¹³ Its nominal formations were assigned either to the animate category, formally correlating with MASC. elsewhere in Inner IE, or to its non-animate counterpart, formally correlating with NEUT. in the same set of dialects. This grammatical divergence relative to gender suggests that non-Inner IE Anatolian split off from the other IE dialects at a pre-Motion stage in the proto-language; the primary function of Motion derivation, after all, was to link overtly the FEM. signified with the FEM. signifier. The Inner IE dimension of the Motion operation in dialects other than Indo-Iranian (cf. 2.1 above) is illustrated by the derivative list below.

¹² This form undergoes secondary adjustment after the *devī*-type (earlier NOM.PL. *jánayas*).

¹³ Melchert (2014 : 259).

Gk. Hom. NOM.SG.FEM. *kūdi-áneira* 'bringing glory to men' < *-*h₂ner-ih₂* ← Gk. Hom. NOM.SG.MASC. -*anér* 'man' < *-*h₂nér*

Lat. NOM.SG.FEM. *neptis* 'granddaughter' ←¹⁴ *-*nept-ih₂-s* ← Lat. NOM.SG.MASC. *nepōs* 'grandson' < *-*nepōts* (cf. GEN.SG. *nepōtis*)

Goth. NOM.SG.FEM. *þiwi* 'maidservant' < *-*þiw-ih₂* ← Goth. NOM.SG.MASC. *þiu-s* 'servant' < *-*þiwaz*

OIr. NOM.SG.FEM. *rígain*¹⁵ 'queen' < *-*rígan-ih₂* ← OIr. NOM.SG.MASC. *rí* 'king' (gen.sg. *ríg*)

OCS PTCP. NOM.SG.FEM. *nesōšti* 'carrying' ← *-*nesonti* < *-*nesont-ih₂* ← OCS PTCP. NOM.SG.MASC. *nesy* 'id.' < *-*nesonts*

4. MOTION DERIVATION IN VEDIC

4.1 Two Motion derivational types in Vedic and their general synchronic distribution. Wackernagel

and Debrunner (1930) were the first to assign the term *Motionsfeminina* to *deví-* and *vrkí-* based upon their synchronic ablaut, accent, and inflection. The formal features they exhibit were distinct enough to identify two separate Motion derivational types. The same common denominator *-*(i)h₂* also characterizes FEM. agent nouns and FEM. present participles, which are derivable by the attachment of the Motion suffix to the zero-grade of their MASC. bases. The morphological features distinguishing these two derivational types are best illustrated by Ved. FEM.SG. *deví-* and Ved. FEM.SG. *vrkí-*.

PRE-VEDIC	<i>deví-</i> STEM	PRE-VEDIC	<i>vrkí-</i> STEM
NOM.SG. * <i>dév-ih₂</i>	→ <i>deví</i>	* <i>vrk-ih₂-s</i>	> <i>vrkís</i>
VOC.SG. * <i>dév-ih₂-ø</i>	> <i>dévi</i> ¹⁶	* <i>vrk-ih₂-ø</i>	> <i>vrki</i>
ACC.SG. * <i>dév-ih₂-m</i>	→ <i>devím</i>	* <i>vrk-ih₂-m</i>	→ <i>vrkíyam</i>
LOC.SG. * <i>dev-yéh₂</i>	→ <i>devyám</i>	* <i>vrk-ih₂-i/ø</i>	> * <i>vrkíyi</i> → <i>vrkí</i>
INSTR.SG. * <i>dev-ih₂-éh₁</i> > <i>deviyá</i>	→ <i>devyá</i>	* <i>vrk-ih₂-eh₁</i>	> <i>vrkíyā</i>
DAT.SG. * <i>dev-yéh₂-ey</i>	> <i>devyái</i>	* <i>vrk-ih₂-ey</i>	> <i>vrkíye</i>
ABL.SG. * <i>dev-yéh₂-e/os</i>	> <i>devyás</i>	* <i>vrk-ih₂-e/os</i>	> <i>vrkíyas</i>
GEN.SG. * <i>dev-yéh₂-e/os</i>	> <i>devyás</i>	* <i>vrk-ih₂-e/os</i>	> <i>vrkíyas</i>

¹⁴ → indicates combinations of phonological and analogical processes; → denotes analogy or derivation.

¹⁵ The Latin cognate was likewise subject to extension by *n* followed by a feminine Motion suffix, here *-*eh₂*: Lat. *rēgīna* 'queen' < **rēgī-n-ā* ← **rēg-ih₂* ← *rēks* 'king' < **rēg-s*.

¹⁶ Assuming a different accentual treatment of the stem based on particular features of discourse employment.

NOM.VOC.PL.	* <i>dev-yéh₂-es</i> > * <i>devyās</i> → <i>devís</i> (RV) → <i>devyas</i>	* <i>vṛk-ih₂-es</i> > * <i>vṛkíyas</i> > <i>vṛkyas</i>
ACC.PL	* <i>dev-ih₂-ṅs</i> (> * <i>devíyas</i>) → <i>devís</i>	* <i>vṛk-ih₂-ṅs</i> > * <i>vṛkíyas</i> > <i>vṛkyas</i>
INSTR.PL.	* <i>dev-ih₂-bhis</i> > <i>devíbhis</i>	* <i>vṛk-ih₂-bhis</i> > <i>vṛkíbhis</i>
DAT.ABL.PL.	* <i>dev-ih₂-bhyos</i> > <i>devíbhyas</i>	* <i>vṛk-ih₂-bhyos</i> > <i>vṛkíbhyas</i>
GEN.PL.	* <i>dev-ih₂-ōm</i> > * <i>devíyām</i> → <i>devínām</i>	* <i>vṛk-ih₂-ōm</i> > * <i>vṛkíyām</i> → <i>vṛkínām</i>
LOC.PL.	* <i>dev-ih₂-su</i> > <i>devíṣu</i>	* <i>vṛk-ih₂-su</i> > <i>vṛkíṣu</i>
NAV.DU.	* <i>dev-ih₂-ih₁</i> > <i>deví</i> (RV) → <i>devyáu</i>	<i>vṛkíyā</i> (RV) > <i>vṛkyáu</i>
DIABL.DU.	* <i>dev-ih₂-bhyō</i> (<i>m</i>) > <i>devíbhyām</i>	<i>vṛkíbhyām</i>
GL.DU.	* <i>dev-ih₂-ous</i> → <i>devyós</i>	<i>vṛkíyos</i>

4.2 The role of ablaut in Motion derivation: *-ih₂-/*-yéh₂- vs. *-ih₂-. The Vedic long-vowel stems *ī ā* and *ū* are synchronically classified as one unified group, however morphological similarities and differences in the form of ablaut, accent, or inflection is neither a synchronic nor a diachronic coincidence. The *deví*-type shows the full-grade of the suffix *-ih₂/*-yéh₂-, whereas the *vṛkí*-type consistently shows zero-grade of the suffix *-ih₂-. The suffix-initial element corresponding to each derivational type bears the accent.¹⁷

4.3 Reconstruction of the two Motion stems. The Vienna School reconstructs two morphologically distinct canonical paradigms¹⁸ for Ved. *deví* and Ved. *vṛkís* (see below). Note that the *deví*- stem shows the full-grade of the suffix in the SG. oblique cases, yet it is restricted to the ABL./GEN., DAT. and the LOC. in the reconstructed paradigm. Since the *vṛkí*- stem consistently attests the zero-grade of the suffix, it is assumed to have shown no intraparadigmatic ablaut in PIE. Insofar as distinct morphological features

¹⁷ The *deví* type shows slight accent shift attributable to the original **yā* (Lanman 1888 : 355-356)

¹⁸ Malzahn (WS Handout 2014/15 : 18-19). No consensus has been reached relative to the morphological history of Motionsfeminina. These paradigms are presented to reflect one model as supported by one of the several European and American Indo-European schools.

in the form of ablaut and accent constitute the distinction between PIE athematic and thematic nouns, the ablaut exhibited by *deví* – interpretable as causally correlated with accent shift – is historically congruent with the PIE athematic class. FEM. nouns and adjectives like *vṛkís* exhibiting a fixed locus of accent, on the other hand, are congruent with the PIE thematic class.

NOM.SG.	* <i>déyw-ih₂</i>	> <i>deví</i>	* <i>w!k^w-ih₂-s</i>	> <i>vṛkís</i>
ACC.SG.	* <i>déyw-ih₂-m</i> [Stang's Law] ¹⁹	↔ <i>devím</i>	* <i>w!k^w-ih₂-ṃ</i>	↔ <i>vṛkyam</i>
LOC.SG.	* <i>diw-yéh₂ + m</i>	↔ <i>devyám</i>		
INSTR.SG.	* <i>diw-ih₂-éh₁</i>	↔ <i>devyá</i>		
GEN.SG.	* <i>diw-yéh₂-s</i>	↔ <i>devyás</i>	* <i>w!k^w-ih₂-es</i>	> <i>vṛkyas</i>
ACC.PL.	* <i>déyw-ih₂-ms</i> [Stang's Law]	> <i>devís</i>	* <i>w!k^w-ih₂-ns</i>	> <i>vṛkyas</i>

5. MOTION DERIVATION OF \bar{i} -STEMS IN VEDIC

5.1 Some salient morphological features of *deví*. Vedic derivative \bar{i} -stems are divisible into two main groups according to their respective divergent ablaut, accentual, and inflectional properties. Ved. *deví* shows in its SG. oblique (i.e. weak) forms the *e*-grade in the suffix, which was lowered to *-a-* in its linguistic prehistory, e.g. Ved. ABL.GEN.SG.FEM. *devyás* ← **div-yéh₂-s*, LOC.SG.FEM. *devyám* ← **div-yéh₂-m*.²⁰ The direct (i.e. strong) cases, by contrast, reflect full-grade in the root syllable, which co-occurs with the zero-grade of the suffix, e.g. NOM.SG.FEM. *deví* ← **déyw-ih₂*, ACC.SG.FEM. *devím* ← **déyw-ih₂-m*. According to the paradigmatic reconstructions in 4.1, the full-grade of the root, which is associated with the strong cases, was adopted by its weak counterparts, whereas the locus of accent, which is consistently fixed on the suffix in the weak cases, was simultaneously adopted by its strong

¹⁹ Stang's Law reduces word-final clusters as follows: CVRC # > CVC # ; CVHC > CVC.

²⁰ The possibility of a lengthened grade in the suffix here is supported by the LOC.SG. of (*i-* and) *u*-stems, e.g. *mádhu*.

counterparts. While PIE reconstructions often assume some causal correlation between accent and ablaut, close comparison with extant forms almost never shows a one-to-one mapping of formal features. This discrepancy is not unanticipated insofar as the phonological shape of any given nominal is subject to variation either in the form of synchronic alternations, or diachronic developments as constituted by two or more temporally distinct synchronic stages. The development of morphological asymmetries is regular and can be, for instance, the result of analogic processes like paradigmatic leveling operating on a relatively shallow level in the linguistic system. Its catalyst, while remaining relatively evasive to linguists, is often descriptive similarity between two or more forms in the lexicon, whose morphological histories are distinct. For instance, Pre-Ved. INSTR.SG.MASC. **agnī* 'by means of fire' was replaced by secondary *agninā* due to the analogical spread of the *-nā* ending. Being equally vulnerable to analogical processes, Ved. FEM. *devī* generalized simultaneously the full-grade of the root associated with the strong cases and the locus of accent associated with the weak.²¹

5.2 The word for 'foot' in Vedic and Homeric Greek. The IE root noun denoting 'foot' is relevant to the reconstruction of the two Motion derivatives insofar as it substantiates better than the two Motion *-* stems the causal correlation between accent mobility and ablaut, namely the historical residue of the dynamic (i.e. proterokinetic) accentual pattern. Lack of synchronic evidence does not preclude the reconstruction of largely parallel morphological features for Motion derivatives, however. The root

²¹ The only exception here is the word-initial accent exhibited by the VOC.SG., a fossilized vestige of PIE sentence accent.

syllable consistently bears the accent in the sg. strong cases, whereas the inflectional ending bears it in the sg. weak cases.

	PIE		VED.	GK. HOM.	<i>deví-</i>	<i>dyú-</i>
NOM.SG.	* <i>pód-s</i>	>	<i>pāt</i>	<i>poús</i>	<i>deví</i>	<i>dyáus</i>
VOC.SG.	* <i>pód-ø</i>	→	<i>pāt</i>		<i>dévi</i>	<i>dyàus</i>
ACC.SG.	* <i>pód-ṃ</i>	→	<i>pādam</i>	<i>póda</i>	<i>devīm</i>	<i>dyām</i>
LOC.SG.	* <i>péd-i</i>	→	<i>padí</i>	<i>podí</i> (dat.)	<i>devyām</i>	<i>diví</i>
INSTR.SG.	* <i>bd-éh₁</i>	→ * <i>ped-éh₁</i>	> <i>padá</i>		<i>devyá</i>	<i>divá</i>
DAT.SG.	* <i>bd-éy</i>	→ * <i>ped-éy</i>	> <i>padé</i>		<i>devyái</i>	<i>divé</i>
ABL.GEN.SG.	* <i>bd-é/ós</i>	→ * <i>ped-é/ós</i>	> <i>padás</i>	<i>podós</i>	<i>devyás</i>	<i>divás</i>
NOM.VOC.PL.	* <i>pód-es</i>	>	<i>pādas</i>	<i>pódes</i>	<i>devís</i>	<i>dyāvas</i>
ACC.PL.	* <i>bd-ṛs</i>	→ * <i>péd-ṛs</i>	→ <i>padás</i>	<i>pódas</i>	<i>devís</i>	<i>dyūn</i>
INSTR.PL.	* <i>bd-bhís</i>	→ * <i>ped-bhís</i>	> <i>padbhís</i>		<i>deví-bhis</i>	<i>dyúbhis</i>
DAT.ABL.PL.	* <i>bd-bhós</i>	→ * <i>ped-bhyós</i>	> <i>padbhyás</i>		<i>deví-bhyas</i>	
GEN.PL.	* <i>bd-óm</i>	→ * <i>ped-óm</i>	> <i>padám</i>	<i>podôn</i>	<i>devínām</i> ²²	
LOC.PL.	* <i>pt-sú</i>	→ * <i>petsú</i>	> <i>patsú</i>	<i>posí</i> (dat.)	<i>devíṣu</i>	

The full-grade root vocalism in the weak cases of this highly archaic IE formation is viewed as a secondary analogical development. The original alternation **e/o* ~ *ø* was replaced by **o* ~ *e*,²³ an ablaut pattern synchronically productive elsewhere in the PIE nominal system. The *a*-vocalism that Vedic exhibits is explainable by the vowel merger in Indo-Iranian, whereas the *o*-vocalism characteristic of the PIE strong stem was generalized throughout the paradigm in Homeric Greek. NOM.SG. *deví* (< **dev-ih₂*) represents the underlying root vocalism of the strong stem, and simultaneously the locus of accent over the suffix associated with the weak stem.

²² The nasal is originally uncharacteristic of the paradigm and was likely introduced secondarily via analogy from *n*-stems.

²³ Note that the underlying vocalism of strong and weak cases is subject to debate. Here the stem alternation **o* ~ *e* is viewed as secondary, while **e* ~ *ø* is viewed as original (see Malzahn Workshop Handout 2014/15: 5-6).

5.3 The Vedic word for 'sky'. Ved. MASC.FEM.NOM.SG. *dyáu-s*²⁴ 'sky' is compositionally more relevant to the Motion derivatives than **pod-/ped-* insofar as language-internally it bears the suffix *-w-*,²⁵ stands beside the Vedic root *dī* 'to shine', and more broadly belongs to the same derivational field as Ved. *devī* 'goddess' and Ved. *devás* 'god'. Diachronically preceding the latter two derivatives, Ved. *dyú-* possesses an underlying lengthened *e*-grade vocalism **dyēw-s* in its strong cases, e.g. NOM.SG. *dyáus* VOC.SG. *dyàus*, and an underlying zero-grade **diw-* in its weak cases, e.g. INSTR.SG. *divá* DAT.SG. *divé*. As in the case of **pod-* 'foot', its intra-paradigmatic accent locus predominantly coincides with its ablaut locus despite analogical pressure exerted by the weak cases upon their strong counterparts, e.g. ACC.SG. *dívam* (← **dyám*). The full-grade of the root **deiw-* constitutes the base for FEM. *devī* and MASC. *devá-*.

5.4 Morphological clusters across separate Vedic vowel-stem classes. The inflectional sets that the *devī-* and *vrkī-* types show are generally the same. However, the asymmetries identifiable between them are historically significant. The presence of *-s* in NOM.SG.FEM. *vrkī-s* and the lack thereof in NOM.FEM.SG. *devī* is one salient discrepancy. If both stems are in *-ī* and respectively refer to FEM. animate entities, what could be the historical basis for this formal distinction? Comparative evidence from non-Inner Anatolian suggests that the function of NOM.SG. **-s* was to distinguish secondarily between animate and inanimate nominals, e.g.

Hitt. NOM.ACC.SG.NEUT. *tuppi-ø* 'clay tablet'

Hitt. NOM.ACC.SG.NEUT. *išpanduzzi-ø* 'oblation'

Hitt. NOM.SG.ANIM. *halki-š*²⁶ 'grain'

Hitt. NOM.SG.ANIM. *luli-š* 'pond, basin'

²⁴ The absence of morphological features to distinguish between MASC. and FEM. forms defines zero-derivation and is also exemplified by Vedic short *i-* and *u-* stem adjectives.

²⁵ Ved. *dyáu-s* functions comparatively as a root noun (Watkins 2011 : 22).

²⁶ Beside this animate *i-* stem stands a zero-ending SG. collective Hitt. *halki*^{Hl.A}, 'a collection of grains.'

Hitt. ADJ. NOM.ACC.SG.NEUT. *nakki-ø* 'weighty, heavy' : Hitt. ADJ. NOM.SG.ANIM. *nakki-š* 'id.'

Hitt. ADJ. NOM.ACC.SG.NEUT.SG. *šalli-ø* 'great, large' : Hitt. ADJ. NOM.SG.ANIM. *šalli-š* 'id.'

Widmer (2005) notes how PIE scholarship over the years came to ascribe substantivizing value to this -s, which functioned to substantivize the preceding derivative positioned in the chain, either a predicative genitive noun or a predicative instrumental noun *vrkí-* meaning first 'being of a wolf' or 'being (together) with a wolf, in the meaning 'she-wolf'.²⁷ In addition, what diachronic value can be ascribed to the *deví-*stem relative to its *e ~ ø* ablaut and to the absence of a NOM.SG. marker? The largely FEM. *ā*-stem class also does not possess NOM.SG. -s, e.g.

Ved. ADJ. NOM.SG.FEM. *priyá* 'dear' ← Ved. ADJ. NOM.SG.MASC. *priyá-s* 'id.'

Ved. ADJ. NOM.SG.FEM. *citrá* 'brilliant' ← Ved. ADJ. NOM.SG.MASC. *citrá-s* 'id.'

Ved. ADJ. NOM.SG.FEM. *sūnṛtā* 'beautiful' ← Ved. ADJ. NOM.SG.MASC. *sūnṛta-s* 'id.'

Ved. NOM.SG.FEM. *ághnyā* 'cow' ← Ved. NOM.SG.MASC. *ághnya-s* 'bull'

Second, the weak cases in *-ā* equally exhibit the full-grade in the suffix like the *deví* derivational type, e.g. Ved. ADJ. DAT.SG.FEM. *priyáyai* 'to the dear X'. Third, FEM. *ū*-stems require (like *vrkís*) -s in NOM.SG. and show no intraparadigmatic ablaut, e.g. NOM.SG.FEM. *tanú-s* 'body, self', ABL.GEN.SG.FEM. *tanúas*. The table below illustrates that the formal features associated with *deví* cluster with FEM. *ā*-stems, whereas those associated with *vrkí*-type cluster with FEM. *ū*-stems.

²⁷ Matasović (2005 : 169-70) thinks that the tell-tale marker *-ī-* the *vrkí*-type exhibits goes back to the Italo-Celtic GEN.SG. *o*-stem adjective case form (Lohmann 1932 : 70), and that reanalysis of the instrumental marker *-ī-* (< **-i-h-*), a view endorsed by Schindler (1980 : 391) and (Balles : 2000), is less likely.

FORMATION	DERIVATIONAL STEM-TYPE	ABLAUT	NOM. SG. MARKER	CLUSTERS WITH
<i>deví</i>	<i>deví</i>	YES	-Ø	FEM <i>ā</i> -stem
<i>vrkí-s</i>	<i>vrkí-</i>	NO	-s	FEM. <i>ū</i> -stem

5.5 The historical nexus between Inner IE zero-derived and Motion FEM. derivatives. Short *i*- and *u*-stem adjectives designate all three genders, however the NOM.SG. inflectional marker -s primarily functions to distinguish between animate (i.e. MASC. and FEM.) and inanimate (i.e. NEUT.) categories, leaving the MASC. and FEM. morphologically indistinguishable, e.g.

Ved. ADJ. NOM.SG.MASC.FEM. *śúci-s* 'bright' : Ved. ADJ. NOM.SG.NEUT. *śúci* 'id.'

Ved. ADJ. NOM.SG.MASC.FEM. *bhūri-s* 'much' : Ved. ADJ. NOM.SG.NEUT. *bhūri* 'id.'

Ved. ADJ. NOM.SG.MASC.FEM. *mádhu-s* 'sweet' : Ved. ADJ. NOM.SG.NEUT. *mádhu* 'id.'

Ved. ADJ. NOM.SG.MASC.FEM. *āśú-s* 'swift' : Ved. ADJ. NOM.SG.NEUT. *āśú* 'id.'

Ved. ADJ. NOM.SG.MASC.FEM. *cāru-s* 'dear' : Ved. ADJ. NOM.SG.NEUT. *cāru* 'id.'

The formal distinction *i*- and *u*-stems show between animate and non-animate semantic categories suggests a close historical kinship between the MASC. and FEM. nominals, and effectively accounts for the original "animate" function of NOM.SG. inflectional marker -s. That being said, if *-s was originally "animate", then what motivated speakers to create a separate derivational mechanism to produce FEM. nominals? As Motion derivatives became increasingly common in the lexicon, Vedic speakers likely became increasingly cognizant of the perceptually inadequate status of zero-derived FEM. derivatives. The introduction of Motion morphemes via reanalysis of grammatical units already employed in the language was an effective tool to resolve "spaces" of morphosemantic ambiguity. Vedic speakers

could identify Motion derivatives with ease for the simple reason that the attachment of one distinctly FEM. morpheme to a MASC. base overtly linked the FEM. signified and the FEM. signifier.

6. ZERO-DERIVATION OF *I*-STEMS IN VEDIC

6.1 A gap in Motion derivation. As is well known, Vedic FEM. *ī*-stem adjectives are largely zero-derived, and thus MASC. *ī*-stems rarely stand beside historically related FEM. Motion derivatives in *-ī*.

	MASC.FEM.	FEM.	NEUT.
NOM.SG.	<i>śúci-s</i>		<i>śúci</i>
VOC.SG.	<i>śúce</i>		[<i>śúci</i>]
ACC.SG.	<i>śúci-m</i>		<i>śúci</i>
LOC.SG.	<i>śúcā, śúcau</i>		<i>śúcā, śúcau</i>
INSTR.SG.	<i>śúcy-ā, śúci-n-ā</i>	<i>śúcī, śúci</i>	<i>śúci-n-ā</i>
DAT.SG.	<i>śúcay-e</i>		<i>śúcaye</i>
ABL.SG.	<i>śúce-s</i>		[<i>śúce-s</i>]
GEN.SG.	<i>śúce-s</i>		[<i>śúce-s</i>]
NOM.VOC.PL.	<i>śúcay-as</i>		<i>śúcī, śúci, śúcī-n-i</i>
ACC.PL.	<i>śúcī-n</i>	<i>śúcī-s</i>	<i>śúcī, śúci, śúcī-n-i</i>
INSTR.PL.	<i>śúci-bhis</i>		<i>śúci-bhis</i>
DAT.ABL.PL.	<i>śúci-bhyas</i>		<i>śúci-bhyas</i>
GEN.PL.	<i>śúcī-n-ām</i>		<i>śúcī-n-ām</i>
LOC.PL.	<i>śúci-ṣu</i>		<i>śúci-ṣu</i>
NAV.DU.	<i>śúcī</i>		<i>śúcī</i>
DIABL.DU.	<i>śúci-bhyām</i>		<i>śúci-bhyām</i>
GL.DU.	<i>śúcy-os</i>		<i>śúcy-os</i>

Most FEM. Motion derivatives in *-ī* are, by contrast, derived from MASC. thematic nouns and adjectives by substituting Motion **-ih₂-* for the thematic vowel **-o-*, e.g.

Ved. FEM.SG. *meṣī́-* 'female sheep' (< **meṣ-ī-*) ← Ved. MASC.SG. *meṣá-* 'ram' (< **meṣ-o-*)
 Ved. FEM.SG. *mahiṣī́-* 'female buffalo' (< **mahiṣ-ī-*) ← Ved. MASC.SG. *mahiṣá-* 'male buffalo' (< **mahiṣ-o-*)

Ved. ADJ. FEM.SG. *pāpī́-* 'evil' (< **pāp-ī-*) ← Ved. ADJ. MASC.SG. *pāpá-* 'id.' (< **pāp-o-*)
 Ved. ADJ. FEM.SG. *áruṣī́-* 'red' (< **aruṣ-ī-*) ← Ved. ADJ. MASC.SG. *aruṣá-* 'id.' (< **aruṣ-o-*)
 Ved. ADJ. FEM.SG. *āyasī́-* 'made of iron' (< **āyas-ī-*) ← Ved. ADJ. MASC.SG. *āyasá-* (< **āyas-o-*)

6.2 Zero-derived *i*-stems and the adoption of Motion morphology. A quantitatively long-vowel

formant is not required of FEM. *ī*-stem nominals,²⁸ e.g.

Ved. NOM.SG.FEM. *ávi-s* 'sheep'
 Ved. NOM.SG.FEM. *bhúmi-s* 'earth'
 Ved. NOM.SG.FEM. *dárvi-s* 'spoon'

The near absence of inflectional markings to distinguish between FEM. and MASC. derivatives was surely a source of confusion among Vedic speech communities, which necessitated the creation of Motion morphology. In the case of *i*-stems, we begin to see the extension of Motion derivation to a subset of this group already in the Rigveda. Thus, the following forms were remodeled after DAT.SG.FEM. *devyái:*

Ved. DAT.SG.FEM. *turyái* (instead of *turáye*) 'for victory'
 Ved. DAT.SG.FEM. *śrútyai* (instead of *śrútaye*) 'for blessing'

Substantives are likewise attested with the short and the long stem, e.g. Ved. NOM.SG.FEM. *jánīṣ, jánī* 'woman, wife'. This unidirectional pattern exhibited by these FEM. derivatives suggests the speakers' tendency to replace zero-derived features with overt FEM. Motion ones to resolve morphosemantic "spaces" in the lexicon. As previously pointed out, Static derivatives failed to distinguish between FEM. and MASC. referents. Once Motion became increasingly the norm as a derivational pattern, it is easily

²⁸ The high front vowel formant in the *ī*-stem and in the Motion suffix **-ih₂-* are synchronically unrelated.

imaginable that a subset of originally zero-derived MASC.FEM. *i-* and *u-*stems were remodeled due to the sheer communicative advantage of Motion morphology.

6.3 Morphological clusters across vowel stem classes. A number of noteworthy inflectional comparative clusters are observable in Vedic. First, the *ī*-stem NOM.SG.MASC.FEM. -s clusters with Ved. NOM.SG.FEM. *vrkī́-s*. Second, the indistinguishable status of MASC. and FEM. *ī*-stems could reflect a pre-Motion synchronic stage when **h₂* functioned as a marker of the NEUT.PL. category. Non-Inner Hittite NEUT.PL. nouns, for instance, were prehistorically marked by **h₂*, and the semantic content of some could have easily been reanalyzed as SG. collectives, e.g. Hitt. NOM.ACC.PL. *widār, wedār* 'waters' (< ***wedor-h₂*) : Hitt. NOM.SG.ACC. *wātar* 'water' : Gk. NOM.SG.NEUT. *hudōr* 'water' (< ***udor-h₂*). While NOM.SG. inflection for MASC. and FEM. *ī*-stems is formally overt, ablaut is observable in DAT.SG. *śúcay-e* and NOM.VOC.PL. *śúcay-as*,²⁹ which points towards morphological kinship with Ved. DAT.SG.FEM. *devyái*. These two morphological features in relation to the two Motion types are distilled in the table below.

<i>ī</i> -stem	like <i>deví</i> type	like <i>vrkī-</i> type
NOM.SG.FEM.MASC. in -s	NO	YES
ablaut in suffix -i/ey-	YES	NO

²⁹ The synchronic ablaut schema this *i*-stem shows is secondary and will be discussed below.

7. MOTION DERIVATION OF \bar{A} -STEMS IN VEDIC

7.1 The $\acute{s}en\bar{a}$ type in $*-eh_2$. Ved. NOM.SG.FEM. $\acute{s}en\bar{a}$ 'army' (< $*\acute{s}en-eh_2$), albeit not entirely akin to the Motion derivational process, exemplifies the function of $*(e)h_2$ to derive Vedic FEM. nominals. Exhibiting $*-eh_2$ and the telltale quantitatively long vowel stem due to laryngeal loss, \bar{a} -stems show morphological features similar to those observed in Motion \bar{i} -stems, e.g. Ved. ADJ. NOM.SG.FEM. $pr\acute{i}y\bar{a}$ 'dear' ← Ved. NOM.SG.MASC. $pr\acute{i}y\bar{a}$ -s.³⁰ This derivational process is distinct from Motion since the MASC. thematic vowel $-ā$ is replaced by the suffix \bar{a} ($*eh_2$ ← $*-o-$),³¹ e.g.

Ved. NOM.SG.FEM. $a\acute{s}v\bar{a}$ 'mare' ← Ved. NOM.SG.MASC. $a\acute{s}v\bar{a}$ -s 'steed'
 Ved. NOM.SG.FEM. $a\acute{j}\bar{a}$ 'she-goat' ← Ved. NOM.SG.MASC. $a\acute{j}\bar{a}$ -s 'goat'
 Ved. NOM.SG.FEM. $\acute{a}ghny\bar{a}$ ← Ved. NOM.SG.MASC. $\acute{a}ghny\bar{a}$ -s 'bull'

The table below illustrates the inflectional features of FEM.SG. $\acute{s}en\bar{a}$ - as well as ADJ.FEM.SG. $pr\acute{i}y\bar{a}$ - beside its MASC. and NEUT. counterparts.

	FEM. $\acute{s}en\bar{a}$		MASC.	FEM.	NEUT.
NOM.SG.	$*\acute{s}en-eh_2-\emptyset$	> $\acute{s}en\bar{a}$		$pr\acute{i}y\bar{a}$	$pr\acute{i}y\bar{a}m$
VOC.SG.	$*\acute{s}en-eh_2-\emptyset$	> $*\acute{s}ena$ → $sene$		$pr\acute{i}ya$	$pr\acute{i}ye$
ACC.SG.	$*\acute{s}en-eh_2-m$	> $\acute{s}en\bar{a}m$		$pr\acute{i}y\bar{a}m$	$pr\acute{i}y\bar{a}m$
LOC.SG.	$*\acute{s}en-eh_2-y$	> $*sen\bar{a}i$ → $\acute{s}en\bar{a}y\bar{a}m$		$pr\acute{i}y\bar{e}$	$pr\acute{i}y\bar{a}y\bar{a}m$
INSTR.SG.	$*\acute{s}en-eh_2-eh_2$	> $*sen\bar{a}$ → $\acute{s}en\bar{a}y\bar{a}$		$pr\acute{i}y\bar{e}ṇa/pr\acute{i}y\bar{a}$	$pr\acute{i}y\bar{a}y\bar{a}/pr\acute{i}y\bar{a}$
DAT.SG.	$*\acute{s}en-eh_2-ey$	> $*sen\bar{a}i$ → $\acute{s}en\bar{a}y\bar{a}i$		$pr\acute{i}y\bar{a}ya$	$pr\acute{i}y\bar{a}y\bar{a}i$
ABL.SG.	$*\acute{s}en-eh_2-(e)s$	> $*sen\bar{a}s$ → $\acute{s}en\bar{a}y\bar{a}s$		$pr\acute{i}y\bar{a}t$	$pr\acute{i}y\bar{a}y\bar{a}s$
GEN.SG.	$*\acute{s}en-eh_2-(e)s$	> $*sen\bar{a}s$ → $\acute{s}en\bar{a}y\bar{a}s$		$pr\acute{i}y\bar{a}sya$	$pr\acute{i}y\bar{a}y\bar{a}s$
NOM.VOC.PL.	$*\acute{s}en-eh_2-es$	> $\acute{s}en\bar{a}s$		$pr\acute{i}y\bar{a}s/pr\acute{i}y\bar{a}sas$	$pr\acute{i}y\bar{a}s/pr\acute{i}y\bar{a}sas$
ACC.PL.	$*\acute{s}en-eh_2-ṅs$	> $\acute{s}en\bar{a}s$		$pr\acute{i}y\bar{a}n$	$pr\acute{i}y\bar{a}s$
INSTR.PL.	$*\acute{s}en-eh_2-bhis$	> $\acute{s}en\bar{a}bhis$		$pr\acute{i}y\bar{a}is$	$pr\acute{i}y\bar{a}bhis$

³⁰ The same morphological distinction between $-\emptyset$ and $-s$ is observable in the Latin relationship FEM.SG. *amica* 'friendly (female)' : MASC.SG. *amicu-s* 'friendly (male)'. These ADJS. stand beside zero-derived de-adjectival nouns, thereby illustrating substantivization, a highly productive derivational process in Vedic.

³¹ Direct attachment of $*h_2$ to the MASC. thematic stem in $-ā$ ($*-e$) could in theory produce $-ā$ (< $*e + h_2$).

DAT.ABL.PL.	<i>*sén-eh₂-bhyos</i>	> <i>sénābhyas</i>	<i>priyébhayas</i>	<i>priyábhayas</i>
GEN.PL.	<i>*sén-eh₂-ōm</i>	→ <i>sénānām</i>	<i>priyáñām</i>	<i>priyáñām</i>
LOC.PL.	<i>*sén-eh₂-su</i>	> <i>sénāsu</i>	<i>priyéṣu</i>	<i>priyásu</i>
NAV.DU.	<i>*sén-eh₂-ih₁</i>	> <i>séne</i>	<i>priyá, priyáu</i>	<i>priyé</i> <i>priyé</i>
DIABL.DU.	<i>*sén-eh₂-bhyām</i>	> <i>sénābhyām</i>	<i>priyábhyām</i>	<i>priyábhyām</i> <i>priyábhyām</i>
GL.DU.	<i>*sén-eh₂-os</i>	→ <i>sénayos</i>	<i>priyáyos</i>	<i>priyáyos</i> <i>priyáyos</i>

8. MOTION DERIVATION OF \bar{U} -STEMS IN VEDIC

8.1 FEM.SG. \bar{u} -stems Ved. *tanú-* 'body, self' and Ved. *vadhú-* 'bride, young woman'. The \bar{u} -stems are the third and final quantitatively long vowel-stem class in Vedic, being represented here by Ved. NOM.SG.FEM. *tanú-s* 'body, self' and NOM.SG.FEM. *vadhú-s* 'bride, young woman'. Their characteristic long vowel is unsurprisingly restricted to a set of intraparadigmatic cases due to two medial sound changes. Before a vowel-initial termination the sequence *CuH-V shows replacement of the laryngeal by a homorganic glide, yielding CuWV,³² e.g. INSTR.SG.FEM. *tanúvā* < **tanuh₂-eh₁*, INSTR.SG.FEM. *vadhúvā* < **vadhuh₂-eh₁*. Before a consonant-initial termination the stem vowels are lengthened due to laryngeal loss *CVH-C > C \bar{V} C, e.g. Ved. NOM.SG.FEM. *tanús* < **tanu-h₂-s*, Skt. NOM.SG.FEM. *vadhús* 'woman' < **vadhu-h₂-s*.

	FEM. [like <i>vrkí</i> -stem]		FEM. [like <i>deví</i> -stem]	
NOM.SG.	<i>*tanu-h₂-s</i>	> <i>tanús</i>	<i>*vadhu-h₂-s</i>	> <i>vadhús</i>
VOC.SG.	<i>*tanu-h₂-∅</i>	> <i>tánu</i>	<i>*vadhu-h₂-∅</i>	> <i>vádhu</i>
ACC.SG.	<i>*tanu-h₂-ṃ</i>	→ <i>tanúvam</i>	<i>*vadhu-h₂-ṃ</i>	→ <i>vadhúvam</i>
LOC.SG.	<i>*tanu-h₂-i</i>	> <i>tanúvi</i>	<i>*vadhu-h₂-i</i>	(> <i>vadhúvi</i>)
INSTR.SG.	<i>*tanu-h₂-eh₁</i>	> <i>tanúvā</i>	<i>*vadhu-h₂-eh₁</i>	> <i>vadhúvā</i>
DAT.SG.	<i>*tanu-h₂-ey</i>	> <i>tanúve</i>	<i>*vadhu-h₂-ey</i>	(> <i>vadhúve</i>)

³² i.e. *CRH-V > CRR-V.

ABL.SG.	<i>*tanu-h₂-e/os</i>	> <i>tanúvas</i>	<i>*vadhu-h₂-e/os</i>	> <i>vadhúvas</i>
GEN.SG.	<i>*tanu-h₂-e/os</i>	> <i>tanúvas</i>	<i>*vadhu-h₂-e/os</i>	> <i>vadhúvas</i>
NOM.VOC.PL.	<i>*tanu-h₂-es</i>	> <i>tanúvas</i>	<i>*vadhu-h₂-es</i>	(> <i>vadhúvas</i>)
ACC.PL.	<i>*tanu-h₂-ṅs</i>	> <i>tanúvas</i>	<i>*vadhu-h₂-ṅs</i>	> <i>vadhúvas</i>
INSTR.PL.	<i>*tanu-h₂-bhis</i>	> <i>tanúbhis</i>	<i>*vadhu-h₂-bhis</i>	(> <i>vadhúbhis</i>)
DAT.ABL.PL.	<i>*tanu-h₂-bhyos</i>	> <i>tanúbhyas</i>	<i>*vadhu-h₂-bhyos</i>	(> <i>vadhúbhyas</i>)
GEN.PL.	<i>*tanu-h₂-ōm</i>	> <i>*tanúvām</i> → <i>tanúnām</i>	<i>*vadhu-h₂-ōm</i>	> <i>vadhúnām</i>
LOC.PL.	<i>*tanu-h₂-su</i>	> <i>tanúṣu</i>	<i>*vadhu-h₂-su</i>	> <i>vadhúṣu</i>
NAV.DU.	<i>tanú</i> (RV) <i>tanúvā</i> (RV) → <i>tanúvau</i>			
DIABL.DU.	<i>tanúbhyām</i>			
GL.DU.	<i>tanúvos</i>			

8.2 Secondary adoption of Motion morphology by \bar{u} -stems. While these word-medial sound changes

are mirrored by the Motion \bar{i} -stems, e.g. Ved. INSTR.SG.FEM. *devyá* < **deviyā* < **dev-ih₂-eh*, Ved. INSTR.SG.FEM.

vṛkíyā < **vṛk-ih₂-eh*, Ved. INSTR.PL.FEM. *devíbhis* < **dev-ih₂-bhis*, Ved. *vṛkíbhis* < **vṛk-ih₂-bhis*, formal

similarities shared between \bar{u} -stems and Motion derivatives are secondary, including a number of

inflectional endings, e.g.

Ved. ACC.SG.FEM. *tanúm* (AV) (instead of *tanúvam*) 'body, self'

Skt. ACC.SG.FEM. *vadhúm* (instead of *vadhúvam*) 'woman'

Skt. DAT.SG.FEM. *vadhvai* (instead of *vadhúve*) 'to a woman'

Ved. DAT.SG.FEM. *agrúvai* (AV) (instead of *agrúve*) 'to a maiden'

FEM. \bar{u} -stems show the same general tendency as zero-derived \bar{i} -stems to adopt Motion morphology.

This secondary remodeling of morphological features according to an increasingly productive

nominal class characterizes the same previously discussed transitional stage, when space in the

lexicon originally occupied by Static FEM. nouns and adjectives was encroached upon by their Motion

competitors. Most instances of this type confirm that zero-derivation was originally the primary

default operation to produce FEM. linguistic entities. The form thereby produced was not ideal, however, insofar as it was formally indistinguishable from its MASC. counterpart, linking by default one signifier to two signified entities (i.e. MASC. and FEM.) as opposed to one (i.e. FEM.). The strong foothold zero-derived pairs hold in the lexicon, despite the increased productivity of Motion, similarly suggests that Vedic speakers tolerated non-overt derivations at a pre-Motion synchronic stage in the language, and more broadly, if the MASC. noun or adjective existed in the lexicon, then the zero-derived FEM. was in theory realizable. This analysis is extended to all Vedic nominal classes, whose MASC. and FEM. (i.e. animates) stand in direct morphological opposition to NEUT. (i.e. non-animates), and it may reasonably be hypothesized to extend to such Vedic derivational categories as FEM. agent nouns and FEM. participles, which historically attest no zero-derivatives. If this non-overt operation did previously target FEM. agent nouns and FEM. present participles, it would have been operative after the departure of Anatolian from the Inner IE dialects, but before Motion function was ascribed to the common denominator **h₂*.

9. ZERO-DERIVED AND SECONDARY MOTION *U*-STEM ADJECTIVES IN VEDIC

9.1. Zero-derived and Motion *ǔ*-stem ADJS. Two derivational means were available to introduce Vedic FEM. *ǔ*-stem adjectives into the lexicon. First, *u*-stems, like *i*-stems, were derivable by non-overt processes like zero-derivation, e.g.

Ved. ADJ. FEM.SG. *madhú-* 'sweet' ← Ved. ADJ. MASC.SG. *madhú-* 'id.'

Ved. ADJ. FEM.SG. *rjú-* 'straight, correct' ← Ved. ADJ. MASC.SG. *rjú-* 'id.'

Ved. ADJ. FEM.SG. *cáru-* 'dear' ← Ved. ADJ. MASC.SG. *cáru-* 'id.'

Second, FEM. *u*-stem adjectives similarly attest a subset of paradigms remodeled by the attachment of **ih₂*. Their phonological shape, however, is distinct from the secondary Motion *i*-stems insofar as the stem-vowel undergoes no lengthening, but instead is rendered consonantal beside the syllabic Motion formant. Motion FEM. *ū*-stems derived by the attachment of **h₂* to the *u*-stem MASC. base are not numerous, e.g.

Ved. ADJ. FEM.SG. *urvī-* 'broad' (< **urvih₂* < **uru-ih₂*) ← Ved. ADJ. MASC.SG. *urú-*

Ved. ADJ. FEM.SG. *prthvī-* 'broad' (< **prthvih₂* < **prthu-ih₂*) ← Ved. ADJ. MASC.SG. *prthú-*

Ved. ADJ. FEM.SG. *bahvī-* 'much' (< **bahvih₂* < **bahu-ih₂*) ← Ved. ADJ. MASC.SG. *bahú-*

Zero-derived FEM. and MASC. *u*-stems are also formally distinguishable from their NEUT. counterparts. In the case of *u*-stems, this is so not only in NOM., ACC., and VOC. of all numbers, but in oblique cases of the SING. and DU. as well.

	MASC.	FEM.	NEUT
NOM.SG.	<i>mádhu-s</i>	<i>mádhu-s</i>	<i>mádhu</i>
VOC.SG.	<i>mádho</i>	<i>mádho</i>	<i>mádhu</i>
ACC.SG.	<i>mádhum</i>	<i>mádhum</i>	<i>mádhu</i>
LOC.SG.	<i>mádhou, mádhavi</i>	<i>mádhou</i>	<i>mádhou, mádhavi, mádhuni</i>
INSTR.SG.	<i>mádhvā, mádhunā</i>	<i>mádhvā</i>	<i>mádhvā, mádhunā</i>
DAT.SG.	<i>mádhve, mádhve</i>	<i>mádhve</i>	<i>mádhve</i>
ABL.SG.	<i>mádhos, mádhvas</i>	<i>mádhos</i>	<i>mádhos, mádhvas, mádhunas</i>
GEN.SG.	<i>mádhos, mádhvas</i>	<i>mádhos</i>	<i>mádhos, mádhvas, madhunas</i>
NOM.VOC.PL.	<i>mádhavas, mádhvas</i>	<i>mádhavas, mádhvas</i>	<i>mádhū, mádhūni</i>
ACC.PL.	<i>mádhūn, mádhvas</i>	<i>mádhūs, mádhvas</i>	<i>mádhū, mádhūni</i>
INSTR.PL.	<i>mádhubhis</i>	<i>mádhubhis</i>	<i>mádhubhis</i>
DAT.ABL.PL.	<i>mádhubhyas</i>	<i>mádhubhyas</i>	<i>mádhubhyas</i>
GEN.PL.	<i>mádhūnām</i>	<i>mádhūnām</i>	<i>mádhūnām</i>
LOC.PL.	<i>mádhuṣu</i>	<i>mádhuṣu</i>	<i>mádhuṣu</i>
NAV.DU.	<i>mádhū</i>	<i>mádhū</i>	<i>mádhvī</i>
DIABL.DU.	<i>mádhūbhyām</i>		<i>mádhūbhyām</i>

GL.DU. *mádhvos* *mádhvos* *mádhunos* (AV)

With the subsequent introduction of Motion, morphological features specific to this process in the form of ablaut and inflectional sets could spread secondarily to zero-derived FEM. nouns and adjectives by analogy, and more broadly by layman's logic.³³ As pointed out above, the capacity for Motion derivation to designate overt FEM. referents was surely advantageous to speech communities. While zero-derived *u*- and *i*-stems were subject to analogical processes, within the larger linguistic system the zero-derived category itself must have already been firmly rooted in the lexicon, otherwise a much greater quantity of them would have been remodeled after the Motion derivational type.

10. THE MOTIVATION FOR THE MOTION DERIVATIONAL TYPE IN VEDIC

10.1 The broad basis for the creation of the Motion derivational type in Vedic. The innovation of Motion presented speakers for the first time with the overt means to derive exclusively FEM. nouns and adjectives to resolve morphosemantic "spaces" of ambiguity located between zero-derived MASC. and FEM. animates in the lexicon. As shown above, the Vedic long vowel stem classes were targeted, and via analogical processes a subset of their morphological features were secondarily spread to such zero-derived categories as *i*- and *u*-stem nouns and adjectives.

³³ Layman's logic (or abduction) is the general sense most native speakers have of the structures of their language, leading them to consciously or unconsciously replace primary morphological features with increasingly productive ones based upon phonological or semantic similarity, in this case stem-formation and gender-specific semantic content.

10.2 Increased productivity and the creation of transitional FEM. derivatives. With the increased productivity of Motion derivation, it is not surprising that this process was extended to some of the most archaic formations in the lexicon, e.g. Ved. NOM.SG.FEM. *jānī* 'woman' beside *jānīs* 'id.'

10.3 A unidirectional pattern distillable into three stages. This set of variables conspired to constitute a unidirectional pattern in the language distillable into three synchronic stages. The first represents a pre-Motion period in the language when FEM. zero-derivatives were unaffected by the innovation (A); the second, a post-Motion "transitional" period when a subset of the same FEM. nouns and adjectives were exposed to unprecedented pressures by Motion derivatives and subsequently yielded to their increased productivity by adopting some of their overt morphological features (B). During this period, non-overt and overt means of derivation, associated with the same FEM. function, were in theory available to all speakers, and as such, the two operations competed to represent the set of FEM. referents in the lexicon. The third stage is characterized by the spread of Motion to zero-derived forms within the Vedic lexicon (C). The transitional zero-derived *i*- and *u*-stems listed below illustrate this finite three-step process, rendering the original distinct delimitation between Static and Motion derivatives synchronically less clear to speakers. Its developments were first generated prehistorically, and its subsequent consequences were fossilized in the form of examples beginning in the early Vedic period and extending into the Atharvaveda.

TRANSITIONAL *ī*-STEMS

SYNCHRONICALLY OLDER

DAT.SG.MASC.FEM.NT. *śúcaye*

SYNCHRONICALLY YOUNGER

[inflectionally remodeled after Motion *ī*-stems³⁴]DAT.SG.FEM. *turyái* 'for victory'DAT.SG.FEM. *deváhūtyai* 'for the invocation of the gods'DAT.SG.FEM. *nírṛtyai* 'for dissolution'DAT.SG.FEM. *puṣṭyái* 'for thrivance'DAT.SG.FEM. *bhujyái* 'for favour'DAT.SG.FEM. *bhṛtyái* 'for support'DAT.SG.FEM. *śrútyai* 'for blessing'

It is important to note that while the data strongly suggest that DAT.SG. *ī*-stems have inherited the full-grade of the suffix, e.g. *śúcaye*, *ūtáye*, *pītáye*, this morphological feature is likely unoriginal. There existed a competing type, which presumably had a broader range of occurrence in the earliest Indic, but was overtaken by the *śúces/śúcaye* type, leaving only a few relics of the hysterokinetic pattern, e.g. GEN.SG.MASC. *aryás* 'of a stranger', GEN.SG.MASC. *ávyas* 'of a sheep'. Cf. DAT.SG.MASC. *pátye* 'to a father' and DAT.SG.MASC. *sákhye* 'to a friend'.

SYNCHRONICALLY OLDER

[proterokinetic pattern]

GEN.ABL.SG. MASC.FEM.NT *śúces* (< **śúcais*)

SYNCHRONICALLY YOUNGER

GEN.ABL.SG.FEM. *nábhyās* 'of, from the navel'GEN.ABL.SG.FEM. *bhūmyās* 'of, from the earth'GEN.ABL.SG.FEM. *hetyās* 'of, from a missile'GEN.ABL.SG.FEM. *ánumatyās* 'of, from approval'GEN.ABL.SG.FEM. *árātyās* 'of, from malignity'GEN.ABL.SG.FEM. *nírṛtyās* 'of, from dissolution'GEN.ABL.SG.FEM. *pṛśnyās* 'of, from the dappled X'

³⁴ The quantity of remodeled *ī*-stems in almost all cases increased in the Atharvavedic period.

	GEN.ABL.SG.FEM. <i>yuvatyās</i> 'of, from a maiden'
LOC.SG.MASC.FEM.NT. <i>śúcā</i> < * <i>śúcāy</i>), <i>śúcau</i>	LOC.SG.FEM. <i>púramdhyām</i> 'on the bountiful X'
	LOC.SG.FEM. <i>bhūmyām</i> 'on the earth'
	LOC.SG.FEM. <i>bhṛtyām</i> 'on support'
	LOC.SG.FEM. <i>yuvatyām</i> 'on a maiden'
NOM.PL.MASC.FEM. <i>śúcayas</i>	NOM.PL.FEM. <i>avánīs</i> 'streams'
	NOM.PL.FEM. <i>ājānīs</i> 'births'
	NOM.PL.FEM. <i>ūtīs</i> 'aids'
	NOM.PL.FEM. <i>náktīs</i> 'nights'
	NOM.PL.FEM. <i>nírṛtīs</i> 'dissolutions'
	NOM.PL.FEM. <i>níškṛtīs</i> 'recoveries, cures'
	NOM.PL.FEM. <i>púramdhīs</i> 'bounties'
	NOM.PL.FEM. <i>bhūmīs</i> 'earths'
	NOM.PL.FEM. <i>viśvá-kṛṣṭīs</i> 'belonging to all men'
	NOM.PL.FEM. <i>sáyonīs</i> 'arisen from the same womb'

TRANSITIONAL Ū-STEMS

The ablaut schema of Vedic ū-stems is largely identical to the ī-stems insofar as the DAT.SG., ABL.SG., GEN.SG., LOC.SG., and NOM.PL. show the full-grade of the suffix. This formal feature, as was the case with the *i*-stem category, was not inherited from PIE. Just as the highly archaic noun Ved. *arí-* 'stranger' relative to the synchronic *i*-stem paradigm confirms the zero-grade, a limited set of highly archaic *u*-stem nouns and adjectives equally substantiate the inherited zero-grade of the suffix, e.g.

Ved. DAT.SG.MASC. *pásve* 'to a cow', GEN.SG.MASC. *paśvās* 'of a cow'

Ved. GEN.ABL.SG.MASC. *pitvās* 'of, from the food'

Ved. DAT.SG.MASC. *krátve* 'for determination', GEN.SG.MASC. *krátvas*

Ved. ADJ. GEN.SG.MASC.FEM. *mádhvas* 'of the sweet X', INSTR.SG.MASC.FEM. *mádhvā*

Ved. ADJ. GEN.SG.MASC.FEM. *vásvas* 'of the good X'

Ved. DAT.SG.MASC. *śísve* 'to the child', GEN.SG.MASC. *śísvas*, INSTR.SG.MASC. *śísvā*, GEN.LOC.DU.MASC. *śísvos*

In sum, the original delimitation between *i*- and *u*-stems, on the one hand, and Motion derivatives, on the other, was constituted by distinct sets of morphological features respectively inherited from the

proto-language via Proto-Indo-Iranian. With the Inner IE innovation of the two Motion derivational types, the structural boundary between these two historically separate classes was rendered increasingly indistinct to speakers and vulnerable to analogical processes. The synchronic derivational context in which subsequent generations of Vedic speakers made grammatical judgments was unprecedented, insofar as they became progressively cognizant of two separate derivational operations whereby FEM. nouns and adjectives could be introduced into the lexicon. The Motion type, as previously underscored, naturally encroached upon its zero-derived counterpart, given its inherent capacity to bind overtly the FEM. signified with the FEM. signifier, effectively facilitating communication of the FEM. linguistic sign in Vedic speech communities.

11. ZERO-DERIVATION: THE DEFAULT OPERATION FOR FEM. AGENT NOUNS AND PARTICIPLES

11.1 FEM. Motion agent nouns (and FEM. participles) relative to zero-derived names of relationship in

-tar. As briefly referenced above, Vedic FEM. agent nouns (and FEM. present participles³⁵) show a similar tendency to adopt analogically Motion inflection to derive their respective feminine derivatives. Agent nouns stand beside a derivationally zero-derived category, namely the highly archaic nouns of relationship which, irrespective of gender, uniformly possess lengthened-grade of the suffix in the NOM. SG. and virtually the same inflection, e.g.

Ved. NOM.SG.MASC. *pitá* 'father' < **pitá*[̑] < ***ph₂tér-s*³⁶

Ved. NOM.SG.MASC. *bhrátā* 'brother' < **bhrátā*[̑] < ***bhréh₂ter-s*

Ved. NOM.FEM.SG. *duhitá* 'daughter' < **duhitá*[̑] < ***dhuǵh₂tér-s*

³⁵ Agent nouns and participles are nominal in form, however they both express verbal action.

³⁶ Agent nouns are frequently attested as the base of compounds. When exhibiting regressive accent shift, their endocentric status is often rendered exocentric, producing a possessive compound (i.e. bahuvrīhi), e.g. Ved. NOM.SG.MASC. *dákṣa-pitā* 'whose father is Dakṣa', Ved. NOM.SG.FEM. *dví-mātā* 'whose mothers are two (= 'having two mothers').

Ved. NOM.SG.FEM. *mātá* 'mother' < **mātá*' < ***meh₂tér-s*

The genders of these lexically derived antonymic pairs, it may be said, were distinguishable by their historically unrelated roots, but not by any specific ablaut, accentual, or inflectional feature. Relative to the nouns of relationship, the gender of the agent nouns, which, by contrast, share the same root, are formally distinguishable by ablaut, namely the zero-grade of the suffix FEM. *-tr-* (~ MASC. *-tar-*), and by complete adoption of the Motion terminations. The MASC. agent noun is particularly remarkable on account of its suffix, since it is identical to the one exhibited by all four of the above nouns of relationship, pointing towards reanalysis of the suffix as agent-denoting, which first produced the MASC. agent base ROOT + *tár-*, and afterwards its FEM. counterpart ROOT + *tr* + *ī*. The larger derivational chain is viewable as three distinct stages i.e. MASC.FEM. noun of relation → MASC. agent noun → FEM. agent noun, e.g. Ved. NOM.FEM.SG. *jáni-tr-ī* 'mother' ← NOM.SG.MASC. *janitá* 'begetter' < **jani-tā*' (< ***génh₂ter-s*) [*: pi-tár-, bhrá-tar-*]),³⁷ e.g.

Ved. NOM.SG.FEM. *jánitri*³⁸ '(female) begetter' (= 'mother') ← Ved. MASC. weak stem *jani-tr-* '(male) begetter' (= 'father') [*: MASC. strong stem jani-tár- < *janh₂tér-*]

Ved. NOM.SG.FEM. *avitri* '(female) helper' ← Ved. MASC. weak stem *avitr-* '(male) helper' [*: Ved. MASC. strong stem avitár- < *avHtér-*]

Ved. NOM.SG.FEM. *netri* '(female) leader' ← Ved. MASC. weak stem *netr-* '(male) leader' [*: Ved. MASC. strong stem netár- < *nay(H)tér-*]

A former FEM. agent noun formally indistinguishable from its masculine counterpart – patterning with zero-derived *i-* and *u-*stems – is not entirely out of the question, and would constitute the intermediary stage between the nonexistence of the zero-derived FEM. category and the two-fold overt Motion operation. After the speakers' acceptance of ablaut as a viable grammatical means to

³⁷ Note that no FEM. agent noun ever directly derives from a noun of relation, but from the oblique MASC. agent stem.

³⁸ The FEM. agent noun exhibits regressive accent shift.

distinguish between zero-derived members, the assignment of FEM. denotation to the zero-grade of the agent suffix followed by Motion derivation became both conceptually and practically doable by Vedic speakers, and the morphosemantic ambiguity exhibited by these nominal agents was thereafter effectively resolved. The use of simultaneous zero-grade of the suffix and Motion inflection is likewise exhibited by FEM. present participles e.g. NOM.SG.FEM. *adat-í* 'eating' ← NOM.SG.MASC. *adánt* 'id.'

CONCLUSION

The Motion derivational type derives FEM. nouns and adjectives from a synchronic MASC. base via overt morphological means, whereas its Static counterpart accomplishes the same ends without any change in phonological form. Motion derived nouns and adjectives in Vedic largely surfaced in the form of quantitatively long vowel stems, the result of short vowel + laryngeal. The consequences each derivational type had on Vedic speech communities were fundamentally different. While both operations successfully bound the FEM. signified with the FEM. signifier, the overt morphological nature of the younger Motion type facilitated communication of the FEM. referent between one or more Vedic speakers. The Motion morpheme itself was perceptually salient and effectively distinguished the new FEM. derivative from its primary MASC. base. In Post-Motion times, both derivational operations were available to speakers and they synchronically competed to represent the set of FEM. referents in the Vedic lexicon. The younger Motion type was unrivaled by its Static competitor insofar as it clarified the presence of the FEM. referent in normal Vedic discourse and its artificial registers. As such, zero-derived categories like MASC.FEM. *i-* and *u-* stem nouns and adjectives were remodeled analogically either consciously or unconsciously after Motion derivatives. This diachronic development – distillable into

three synchronic stages – is substantiated by the crystallization of FEM. originally zero-derived transitional forms, which targeted a subset of ambiguous morphosemantic "spaces". Lastly, the interactions between Motion and Static derivatives reasonably justify the reconstruction of a zero-derived synchronic stage for FEM. agent nouns and FEM. participles. With the exception of lexically derived pairs, FEM. derivatives were only derivable by non-overt operations in Pre-Motion times, and under such conditions it is easily imaginable that Vedic speakers frequently produced zero-derived FEM. agent nouns and FEM. participles, which were eventually replaced in their entirety by their younger Inner IE Motion competitors.

CHAPTER II

The Distribution of Motion Derivational Types in **-ih₂-*/**-yéh₂-*, **-ih_x-*,¹ and **-eh₂-* in Vedic

INTRODUCTION

The distribution of Motion derivational types in **-ih₂-*/**-yéh₂-*, **-ih_x-*, and **-eh₂-* in Vedic is not well understood. Chapter 1 underscores that the former suffix in Vedic synchronically takes the phonological shape *-ī/yā* and that it was generally attached by speakers to thematic and athematic or consonant-stem masculine bases for the purpose of deriving FEM. nouns and adjectives. The operation was inherited from PIE and became highly productive in the Pre-Vedic period, as evidenced by a plethora of FEM. : MASC. pairs, e.g.

Ved. NOM.SG.FEM. *devī* ‘goddess’ (< **dev-ih₂*) ← Ved. MASC. *devá-* ‘god’

Ved. NOM.SG.FEM. *vṛkī-s* ‘she-wolf’ (< **vṛk-ih₂-s*) ← Ved. MASC. *vṛka-* ‘wolf’

Ved. NOM.SG.FEM. *pátnī* ‘mistress’ (< **pátn-ih₂*) ← Ved. MASC. *páti-* ‘master’

Ved. NOM.SG.FEM. *rājñī* ‘queen’ (< **rājñ-ih₂*) ← Ved. MASC. *rājā* ‘king’ (< **rājāⁿ*)

Ved. NOM.SG.FEM. *jánitṛī* ‘female begetter’ (< **jánitr-ih₂*) ← Ved. MASC. *jánitā* ‘male begetter’ (< **janitā^r*)

Ved. NOM.SG.FEM. *naptī-s* ‘granddaughter’ (< **napt-ih₂-s*) ← Ved. MASC. *nápāt* ‘grandson’

Ved. PART. NOM.SG.FEM. *mádantī* ‘intoxicating’ (*mádant-ih₂*) ← Ved. MASC. *mádan* ‘id.’ (< **mádant-*)

Prior to this exclusive Inner IE isogloss, speakers made no distinction between MASC. and FEM. gender.

Motion derivatives in *-ī* were introduced into the Vedic lexicon by means of suffixation. Their usage,

¹ Henceforward, for convenience of presentation **h_x* is referred to as **h₂*.

evidently contagious among Pre-Vedic speech communities, spread secondarily to *ǐ*-stems, which apparently resisted the creation of special derived FEM. forms the longest.

Motion derivatives in **-ih₂-* were not without their competitors. Pre-Vedic speakers regularly derived

Motion derivatives with **-eh₂-* exclusively from MASC. thematic bases. This morpheme was likewise

inherited from PIE via Proto-Indo-Iranian, e.g.

Ved. ADJ. NOM.SG.FEM. *śakrá* 'strong' (< **śakr-éh₂*) ← Ved. MASC. *śakrá-* 'id.'

Ved. ADJ. NOM.SG.FEM. *citrá* 'brilliant' (< **citr-éh₂*) ← Ved. MASC. *citrá-* 'id.'

Ved. ADJ. NOM.SG.FEM. *vāśrá* 'noisy' (< **vāśr-éh₂*) ← Ved. MASC. *vāśrá-* 'id.'

Ved. NOM.SG.FEM. *sūnṛtā* 'liberal' (< **sūnṛt-eh₂*) ← Ved. MASC. *sūnṛta-* 'id.'

Ved. PRON. NOM.SG.FEM. *sá* 'she' (< **s-éh₂-*) ← Ved. MASC. *sá(-s)* 'he'

Ved. NUM. NOM.SG.FEM. *ékā* '1' (< **ék-eh₂*) ← Ved. MASC. *éka-* 'id.'

1. THE SYNCHRONIC AND DIACHRONIC MOTION DERIVATIONAL CONSTELLATION

1.1 The synchronic and diachronic Motion derivational constellation. The synchronic derivational

constellations the Motion sub-types constitute within the Vedic lexicon remain an open question.

Discussion of this phenomenon over the years have indubitably been insightful, however no study to

my knowledge both examines an exhaustive Motion derivative set and proposes a coherent motivation

for the existence of two distinct Motion derivatives. No rule appears to have been available to speakers

according to the standard synchronic (and diachronic) grammars with the exception of lexical and

grammatical historic precedent among speech communities, which in turn barred, for instance,

neologisms like ADJ. FEM. **śakrī-*, ADJ. FEM. **citrī-*, PRON. FEM. **sī-*, NUM. FEM. **ékī-*. We must ask ourselves why

these derivatives were not created, that is, why the restricted distribution? If these four derivatives were

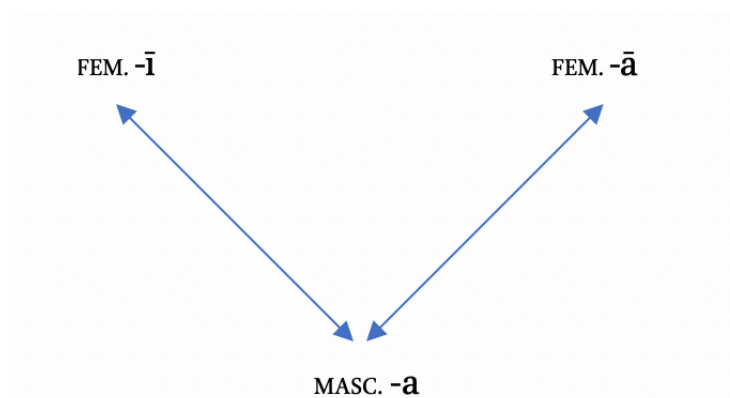
in theory employable, which they were on purely phonetic or phonological grounds, but never came to

be introduced into the lexicon, then some rule (or rules) not easily recoverable from the synchronic state of the lexicon must have precluded them. With such a rule or rules internalized, Pre-Vedic and Vedic speakers were accordingly able to discern between derivational bases and to create two respective Motion derivative groups: one in $*-ih_2-/*-yéh_2-$ or $*-ih_2-$, the other in $*-eh_2-$. The unrestricted status of $*-ih_2-/*-yéh_2-$ and $*-ih_2-$ is particularly noteworthy, since Vedic speakers could in theory have attached this morphological element to thematic and to athematic bases. It is important to keep in mind that the substitution of $*-ih_2-/*-yéh_2-$ or $*-ih_2-$ for $*-eh_2-$ would not have been ungrammatical. In fact, had such a morphological shift taken place, it would mirror – as least in part – the spread of the Motion *deví-* type to a subset of FEM. *ī-*stems.

1.2 The restricted distribution of the Motion derivative in $*-eh_2-$. The two example sets above underscore the most noteworthy formal distinction observable between the two Motion sub-types. The distribution of $*-eh_2-$ is synchronically exceptional. It is restricted to thematic bases, whereas its counterpart $*-ih_2-/*-yéh_2-$ and $*-ih_2-$ are attachable to both thematic and athematic bases. If the morphological function each suffix synchronically shows – namely to derive FEM. formations from MASC. bases – is virtually identical, then why did speakers systematically opt for the former instead of the latter morpheme to derive the Motion derivative from the MASC. thematic base? The derivation of FEM. **devā-* ‘goddess’ instead of FEM. *deví-* and FEM. **vrká-* instead of FEM. *vrkí-* would have, after all, achieved the same functional end: the FEM. stem formant $*-ā$ would have been perceptually distinguishable from the MASC. *-a*.

2. HOW TO EXPLAIN THE DISTRIBUTIONAL DISPARITY

2.1 A phonological or phonetic motivation. A phonological or phonetic motivation to account for this formal disparity appears to be out of the question. The stem formant each Motion sub-type exhibits is ultimately vocalic, i.e. $-ī$ or $-ā$, therefore the notion that speakers would have opted for one Motion sub-type over its synchronic competitor based on a qualitatively different relation between $-ī$ [+high, +front] and $-ā$ [+low, +back] is theoretically possible but not realistically probable. The phonological relationship between the MASC. thematic base and the two plausible FEM. outcomes is illustrated below.



2.2 A non-linguistic basis for Motion derivation within the Vedic tradition of oral transmission. While *ad hoc* Motion morpheme usage by Pre-Vedic and Vedic speech communities is not entirely out of the question, this scenario is unlikely based on what we know about the history of Vedic oral transmission. Within the oral tradition, language acquisition and production relative to the Vedic grammar and lexicon were defined by strict adherence to historical precedent. Therefore, Vedic priests who spoke this exclusive dialect more often than not were competent in synchronic usage and its historical grammatical origins. Consequently, any deviation in speech from the prescriptive standards on the part

of speakers, we can safely assume, was likely discouraged and eschewed. This, of course, excludes unconscious synchronic variation in speech and conscious innovation embraced at large by the Vedic speech communities.

2.3 The explanatory potential of morphology, the “case-derived” theory, and their shortcomings. A

morphological motivation to explain the creation of two distinct Motion sub-types is plausible. The stem formant the MASC. derivational base possessed, being either vocalic or consonantal, could have determined at least in part which of the two possible Motion morphemes speakers came to employ. This explanation would be especially applicable to **-eh₂-*. None of its derivatives ever stand beside a MASC. athematic noun or adjective in the Vedic lexicon. That is to say, speakers were one way or another cognizant that derivation from consonant stems via **-eh₂-* was categorically prohibited, e.g. NOM.SG.FEM. *atharí* ‘flame’ (not **athará* < **athar-eh₂*) ← NOM.SG.MASC. **athar* ‘fire’. Once again, why is this the case? Some scholars have endorsed the view that the Motion sub-type in **-eh₂-* was derived directly from one of two possible weak paradigmatic cases of the MASC. thematic noun or adjective in **-o/e-*. To complete this derivation the morpheme **-h₂-* was attached to the derivational base in **-e-* resulting in the quantitatively long stem formant *-ā-*. Ved. FEM. *áśvā-* ‘mare’ (not **aśví-*) ← Ved. MASC. *áśva-* ‘steed’ [cf. YAv. MASC. *aspa-* : FEM. *aspā-*] and Ved. ADJ.FEM. *citrā-* ‘brilliant’ (not **citrí-*) ← Ved. MASC. *citrá-* ‘id.’ [OAv. *čiθra-* ‘manifest, visible, clear, plain’] illustrate this process. This derivational operation was evidently crystallized among prehistoric Indo-Iranian speech communities in that the derivational equivalents are attested in Avestan, e.g.

MASC. <i>áśvas</i>					FEM. <i>aśvā</i>	
NOM.SG.	* <i>ekw-o-s</i>	> <i>áśvas</i>		NOM.SG.	* <i>ekwe + h₂</i>	> <i>áśvā</i>
VOC.SG.	* <i>ekw-e-ø</i>	> <i>áśva</i>	→			
ACC.SG.	* <i>ekw-o-m</i>	> <i>áśvam</i>				
LOC.SG.	* <i>ekw-e-i ~ -o-i</i>	> <i>áśve</i>				
INSTR.SG.	* <i>ekw-o-h_i</i>	> <i>áśvā</i>				
DAT.SG.	* <i>ekw-o-ey</i>	> * <i>áśvāi + ā</i>				> <i>áśvāya</i>
ABL.SG.	* <i>ekw-o-Vd</i>	> <i>áśvād ~ áśvāt</i>				
GEN.SG.	* <i>ekw-o-s-yo</i>	> <i>áśvasya</i>				

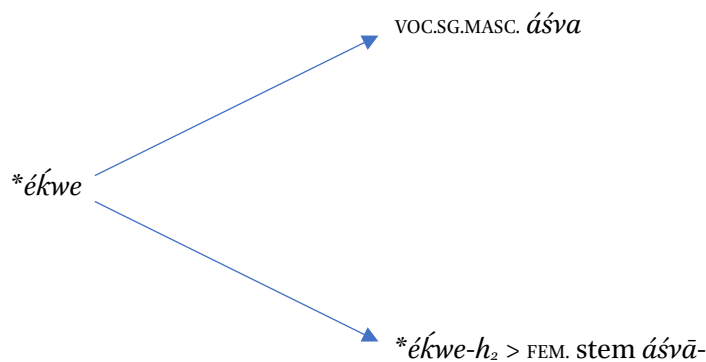
MASC. <i>citrás</i>					FEM. <i>citrā</i>	
NOM.SG.	* <i>citr-o-s</i>	> <i>citrás</i>		NOM.SG.	* <i>citré + h₂</i>	> <i>citrā</i>
VOC.SG.	* <i>citr-e-ø</i>	> <i>citra</i>	→			
ACC.SG.	* <i>citr-o-m</i>	> <i>citrám</i>				
LOC.SG.	* <i>citr-e-i ~ -o-i</i>	> <i>citré</i>				
INSTR.SG.	* <i>citr-o-h_i</i>	> <i>citrā</i>				
DAT.SG.	* <i>citr-o-ey</i>	> * <i>citrāi + ā</i>				> <i>citrāya</i>
ABL.SG.	* <i>citr-o-Vd</i>	> <i>citrāt</i>				
GEN.SG.	* <i>citr-o-s-yo</i>	> <i>citrásya</i>				

This explication at first glance – as depicted in the paradigms above – is workable. Upon closer scrutiny, however, it fails to explicate why a subset of MASC. thematic adjectives was never subject to the “case-derived” operation. Ved. FEM. *áyasī-* ‘iron’ (← Ved. MASC. *āyasá-* ‘id.’) and Ved. FEM. *aruṇī-* ‘ruddy’, ‘dawn’, ‘cow’ (← Ved. MASC. *aruṇá-* ‘id.’), respectively, show virtually no attested case-forms with FEM. **eh₂*-stems **āyasā-* and **aruṇā-*,² e.g.

² Ved. *aruṇā* (1x) at RV V.63.6.

	FEM. <i>āyasī-</i>	FEM. <i>aruṅī-</i>
NOM.SG.	<i>āyasī</i>	<i>aruṅīs</i> 'dawn'
ACC.SG.	<i>āyasīm</i>	
NOM.PL.	<i>āyasīs</i>	
ACC.PL.	<i>āyasīs</i>	
INSTR.SG.	<i>āyasībhis</i>	
GEN.SG.		
NOM.PL.		<i>aruṅāyas</i> 'ruddy', <i>aruṅias</i> 'dawn'
ACC.PL.		<i>aruṅīs</i> 'cow'
GEN.PL.		<i>aruṅīnām</i> 'dawn'
LOC.PL.		<i>aruṅīṣu</i> 'ruddy'

That FEM. *aruṅī-* forms an ADJ. meaning 'ruddy' and two substantivized ADJS. signifying 'dawn' and 'cow', namely inanimate and animate 'ruddy' entities, is notable, but it does not detract from the inadequate explanatory potential of the "case-derived" theory. Much more crucially, what about the theory itself? Why was the VOC.SG. case singled out and deemed by Vedic speech communities the canonical base from which these FEM. nouns and adjectives were derived? Evidence in support of such a derivational pathway is scant and therefore cannot be endorsed here. Alternatively, that the MASC. thematic weak stem underwent paradigmatic split, resulting in one single phonological form with two synchronic functions, is not unlikely. When it bore no ending it was first ascribed VOC.SG.MASC. value, whereas whenever conceived as opaque it was construed as a functionless stem to which any given morpheme could be fused to constitute a new derivative in the lexicon. In turn, *-*h*₂- was fused to the secondary base synchronically dissociated from its primary function, ultimately forming one Motion stem type, e.g.



2.4 Potentially opaque semantic features. This chapter supplies the reader with a dataset (see below) from which future solutions are potentially deducible. Its assessment, for instance, possesses the potential to elucidate such other dimensions of the two distinct Motion sub-types as their semantic origins. That each suffix functions to link the FEM. signified with the FEM. signifier via a MASC. base is transparent. However, the semantic state the derivatives synchronically possessed at the time of their first introduction is – at least in part – opaque. It is therefore likely they do not reflect in entirety the semantic state the Motion morphemes exhibited in the Pre-Vedic period, which in theory could have included semantic considerations other than the broad FEM. gender criterion.

2.5 The default alternative to the “case-derived” theory. If the Motion sub-type in **-eh₂-* was not derived directly from the MASC. thematic paradigm, an independent derivational mechanism would be the default view. Accordingly, the stem formant *-e-* the derivatives in **-eh₂-* possess would require explication. If its origins were independent of MASC. thematic nouns and adjectives, then where else could these derivatives have come from and what was the motivation? These are some of the linguistic considerations to be kept in mind in any future assessment of the Motion derivative dataset below.

3. MOTION DERIVATIVE TYPE IN *-ih₂-/*-yéh₂- and *-ih₂-

3.1 Some questions to keep in mind. This Motion derivative type is classified as either a *deví-* or a *vrkí-* sub-type.³ Three questions central to the history and prehistory of the Motion type in *-ī* which was derived by Vedic speakers from MASC. thematic nouns and adjectives in *-a* are as follows. First, why did Vedic speech communities select the morpheme *-ī* and not its synchronic competitor *-ā* (< *-eh₂-)? We know both options were available, so why the one and not the other? This question is not addressed here and thus remains open. Second, as one unified Motion type, do *deví-* and *vrkí-* derivatives fall within specific semantic fields and constitute separate derivational chains within the Vedic lexicon? Motion *ī*-stems do, in fact, collectively constitute both (see 4.2 below). Third, are there morphological features specific to each Motion *ī*-stem sub-type, which could have motivated Vedic speakers to distinguish formally between the two sub-types and accordingly to select one type over the other based on the semantic content and the lexical class of the future Motion derivative? It is not unlikely that the distinction between *deví-* and *vrkí-*, which largely appears to be arbitrary from a synchronic perspective, was, in fact, determined by factors related to semantic and lexical class (see 4.3 below).

4. THE VEDIC DATA: DEVÍ-TYPE AND VRKÍ-TYPE

4.1 The data collection method. All the *deví-* and *vrkí-* derivatives and the specific cases in which they are attested in the Rig-Veda are drawn directly from Grassmann (1872). The nuanced context-dependent meanings each derivative possesses are likewise taken from Grassmann and translated directly into English from German. Each semantic rendering was then compared with those in

³ For morphological features like accent locus and inflectional set respective to each Motion sub-type, see Chapter 1.

Mayrhofer (1986-96), Jamison and Brereton (2014), Witzel et al. (2007, 2013), and Renou (1956). Most Motion derivatives are followed by the base from which they are derived. If no derivational base is listed, it either never existed, was lost, or I failed to identify it.

4.2 Five semantic categories. Whenever largely transparent, the semantic category each derivative exhibits is specified. As one unified group, the *deví-* and the *vṛkí-* types fall into the following five semantic categories:

(1) FEM. substantivized [color, physical- or character-related] adjectives that are

(a) animates, e.g. (i) animals, (ii) goddesses

(b) inanimates, e.g. abstracts

(2) FEM. substantivized adjectives that are

animates, e.g. proper names

(3) FEM. substantivized agent nouns and participles that are

(a) animates, e.g. agent nouns

(b) inanimates, e.g. (i) instruments, (ii) abstracts

(4) FEM. denominative substantives that are

animates

(5) FEM. deadjectival adjectives

4.3 The possible historic bases for the morphological distinction between the *deví-* and *vrkí-* types. The Motion \bar{i} -stems listed below are divided into two separate groups, *deví-* and *vrkí-*, based on their respective morphological features.⁴ They are as follows. Forms showing no trace of the NOM.SG. marker -s and weak case forms exhibiting apophony belong to the *deví-* class. By contrast, derivatives possessing the NOM.SG. marker -s and the non-apophonic and accent-bearing suffix - \acute{i} are of the *vrkí-* sub-type. *vrkí-* derivatives exhibiting accent variation are rare and are restricted to two scenarios: regressive accent shift whose purpose is to trigger adnominalization⁵ and derivatives with pronominal status. That the morphological characteristics of each Motion \bar{i} -stem and its corresponding case forms map exclusively to one single Motion derivational type supports the reconstruction of two separate Motion derivational \bar{i} -stem classes in prehistory. The canonical interparadigmatic accent shift the *deví-* type frequently exhibits is, by contrast, unremarkable.

Just as important to highlight here is how each Motion \bar{i} -stem class appears to constitute specific semantic categories and specific types of lexical class change. They are as follows. First, all FEM. substantivized agent nouns in the form of agent nouns, instruments, and abstracts – except for Ved.

⁴ The following six Motion \bar{i} -stem derivatives are indeterminate. (1) *aparí-* ‘the future’ ← MASC. *apará-* [substantivized FEM. of *apará-*]: DAT.ABL.PL. *aparíbhyas*, LOC.PL. *aparíṣu*; (2) *áruṇí-* ‘reddish draft animal of the Maruts’, ‘cow’ [cf. *áruṇí-* ‘reddish’; regressive accent shift is correlated with possessive semantics, thus ‘possessing reddish[ness]’] ← *aruṇá-* ‘reddish’: LOC.SG. *áruṇíṣu* [animate substantivized [color] adjective]; (3) *tapaní-* ‘heat’ ← *tápana-* ‘scorching’: INSTR.SG. *tapaní* [substantivized agent noun in abstract value]; (4) *puruṣí-* ‘woman’ ← *puruṣá-* ‘human’ [cf. metrically longer MASC. *púruṣa-* ‘id.’]; GEN.PL. *puruṣíṇaam*; (5) *vamrí-* ‘female ant’ ← *vamrá-* ‘male ant’: INSTR.PL. *vamríbhis* [animate denominative substantive]; (6) *vrjaní-* ‘(cow) in its pen’: LOC.PL. *vrjaníṣu*.

⁵ Citing the views of prior scholars like Schindler (1980) and Balles (2000), Widmer (2005 : 190-93) proposes for the Vedic *vrkí-* type a correlation between the accent-bearing suffix - \acute{i} and nominal lexical class status. My analysis confirms this, and also this proposal is strengthened by instances in this study where adnominalization is triggered by the application of regressive accent shift to *vrkí-* derivatives, e.g. *gandharví-* ‘female gandharvá-’ : *gándharvī-* ‘characteristic of a female gandharva-’.

dūtí- ‘mission’ (← Ved. MASC. *dūtá-* ‘messenger’) – belong to the *deví-* type. Second, all FEM. substantivized physical- or character-related adjectives show *deví-* features, e.g. Ved. NOM.SG. *máhiṣī-* ‘female buffalo’, ‘wife of a chieftain’ (← Ved. MASC. *mahiṣá-* ‘buffalo’, ‘large one’, originally ‘large’). Third, all FEM. substantivized color adjectives which designate animals, goddesses, and abstracts, with the exception of Ved. *śyāvī-* ‘dark brown, a designation of the night’, ‘of a mare or cow’, are characterized by *vrkí-* morphology. Fourth and finally, all atypical non-FEM. Motion derivatives belong to the *vrkí-* type, e.g. Ved. NOM.SG.MASC. *rathís-* ‘charioteer’,⁶ with the exception of the *deví-* derivative Ved. MASC.FEM. *rāṣṭrī-* ‘male ruler’, ‘female ruler’, ‘mistress’.

DEVÍ-TYPE	VRKÍ-TYPE
<p>ádevī- ‘not god-like, ungodly’ ← ádeva- ‘id.’</p> <p>The regressive accent shift of both ádevī- and ádeva- is noteworthy [cf. : Ved. deví-] and is indicative of possessive semantics and adnominal syntactic status, namely ‘(one) possessing no god’.</p> <p>NOM.PL. ádevīs ACC.PL. ádevīs</p> <p>anudéyī- ‘to be forgiven’ ← anudéya- ‘id.’</p> <p>NOM.SG. anudéyī</p> <p>aśvájani- ‘the whip, as driving the steeds’ ← MASC. -ájana-</p> <p>VOC.SG. aśvájani NOM.SG. aśvájani</p> <p>áyasī- ‘iron’ ← āyasá- ‘id.’</p>	<p>ádurmaṅgalī- ‘bringing no disaster, misfortune’ ← ádurmaṅgala- ‘id.’</p> <p>NOM.SG. ádurmaṅgalīs</p> <p>amīva-cātānī- ‘repelling plague’ ← amīva-cātana- ‘id.’</p> <p>NOM.SG. amīva-cātānīs</p> <p>arāyī- ‘female demon’ ← árāya- ‘male demon’</p> <p>VOC.SG. arāyi ACC.SG. arāyíyam</p> <p>aruṅí- ‘ruddy’, ‘light brown’, ‘golden yellow’, ‘cow’, ‘dawn’ ← aruṅá- ‘ruddy’, ‘light brown’, ‘golden yellow’</p> <p>NOM.SG. aruṅís ‘dawn’ [inanimate substantivized (color) adjective]</p> <p>NOM.PL. aruṅíyas ‘dawn’</p>

⁶ See Widmer (2005) for the derivational history of the Vedic *vrkí-* stem.

<p>NOM.SG. áyasī ACC.SG. áyasīm NOM.PL. áyasīs ACC.PL. áyasīs INSTR.PL. āyasībhis</p>	<p>ACC.PL. aruṇís ‘cow’ [animate substantivized (color) adjective] GEN.PL. aruṇínām ‘dawn’ LOC.PL. aruṇíṣu ‘ruddy’</p>
<p>áśvina- ‘of or for the Áśvins’</p>	<p>kalyāñí- ‘beautiful’ ← MASC. kalyāṇa- ‘id.’</p>
<p>NOM.PL. áśvinīs</p>	<p>NOM.SG. kalyāñís NOM.PL. kalyāñiyas INSTR.PL. kalyībhis</p>
<p>upasécanī- ‘the spoon to pour Soma or melted butter’ ← upasécana- ‘pouring’</p>	<p>kilāśí- ‘speckled animal’ ← MASC. kilāsa- ‘speckled’</p>
<p>NOM.SG. upasécanī [inanimate substantivized agent noun designating an instrument with the function of ‘pouring’]</p>	<p>ACC.PL. kilāśiyas [animate substantivized (color) adjective; here the accent shift is progressive, however the newly acquired possessive semantics are consistent with the synchronically inverse shift] [cf. possessive áruṇī- : non-possessive áruṇí]</p>
<p>urvī- ‘wide’, ‘broad’, ‘big’ ← urú- ‘id.’</p>	<p>kr̥ṣṇí- ‘the black one = night’ ← ADJ. kr̥ṣṇá- ‘black’ : MASC. kṛ̥ṣṇa- ‘the black one = the black antelope’</p>
<p>NOM.SG. urvī ACC.SG. urvīm GEN.SG. urviyás INSTR.SG. urvī</p>	<p>The FEM. and the MASC. substantives are derived from the thematic adjective and are semantically opposed along the FEM. : MASC. and the abstract : concrete axis. The comparison between the MASC. thematic adjective and its possessive counterpart is noteworthy. The creation of the MASC. substantive is solely reliant upon regressive accent shift. The FEM. equivalent, on the other hand, shows no accent shift, and its creation is solely constituted by suffix replacement.</p>
<p>VOC.DU. úrvī NOM.ACC.DU. urvī</p>	<p>NOM.SG. kr̥ṣṇís [substantivized (color) adjective designating an abstract]</p>
<p>VOC.PL. úrvīs NOM.PL. urvís ACC.PL. urvís</p>	<p>kévalī- [pron.] ‘belonging to someone exclusively’ ← kévala- ‘id.’</p>
<p>kṣoṇí-, kṣoṇí- ‘(battle) cry’, ‘heaven and earth [DU.]’ [← MASC. kṣoṇá- ‘(?)’]</p>	<p>NOM.PL. kévalīs [this pronoun exhibits possessive semantics]</p>
<p>The NOM.SG. is attested with and without -s, but the plural shows only the <i>devī</i>-type inflection.</p>	
<p>NOM.SG. kṣoṇí kṣoṇís</p>	
<p>NOM.ACC.DU. kṣoṇí INSTR.DAT.AB.DU. kṣoṇībhyām</p>	

<p>NOM.PL. kṣoṇís ACC.PL. kṣoṇís INSTR.PL. kṣoṇībhis</p> <p>dāsī- ‘belonging to the Dāsa’ ← dāsa- ‘demonic,’ ‘barbaric’ ← dāsá- ‘fiend’, ‘misanthropic demon’</p> <p>ACC.PL. dāsīs ‘belonging to the Dāsa’</p> <p>devī- ‘goddess’ ← devá- ‘god’</p> <p>VOC.SG. devī [animate denominative substantive] NOM.SG. deví ACC.SG. devím INSTR.SG. deviyá DAT.SG. devyai GEN.SG. deviyás LOC.SG. deviyám</p> <p>VOC.DU. devī NOM.ACC.DU. deví</p> <p>VOC.PL. devīs NOM.PL. devís ACC.PL. devís SPL.VOC.SG. dévitame</p> <p>paśu-sádhanī- ‘driving cattle forward’ ← paśu-sádhana- ‘id.’</p> <p>NOM.SG. paśu-sádhanī</p> <p>pāvamānī- ‘verses relating to the self-purifying Soma’ ← pāvamāná- ‘purified, self-purifying’, said of Soma</p> <p>ACC.PL. pāvamānís [substantivized participle designat- ing an abstract]</p> <p>pāvīravī- ‘daughter of Pavīru’ ← pāvīrava- ‘sprouted from lightning’</p>	<p>gandharvī- ‘female gandharvá-’ ← MASC. gandharvá- ‘name of divine beings or class’</p> <p>NOM.SG. gandharvís [animate denominative substantive]</p> <p>gāndharvī- ‘characteristic of a gandharva-’ [: MASC. gāndharvá-]</p> <p>The regressive accent shift (together with the vṛddhied root vowel) indicates adnominal syntactic status and mirrors in some ways the opposition between Ved. ádevī- ‘ungodly’ and Ved. devī- ‘goddess’. The nominal Ved. gandharvī- ‘female gandharvá-’ shows the anticipated accent-bearing suffix characteristic of the vṛkī-type.</p> <p>gaurī- ‘a whitish, yellowish, reddish thing’; ‘buffalo-cow’ ← gaurá- ‘whitish’, ‘yellowish’, ‘reddish’</p> <p>NOM.SG. gaurís ‘cow’ [animate substantivized (color) adjective] ACC.SG. gauríyam ‘cow’ LOC.SG. gaurí ‘cow’</p> <p>NOM.PL. gauríyas ‘cow’</p> <p>cakrī- ‘wheel’ ← cakra- ‘id.’</p> <p>INSTR.SG. cakrīyā GEN.DU. cakrīyos</p> <p>dūtī- ‘mission’ ← MASC. dūtá- ‘messenger’ [cf. dūtíya- ‘message’]</p> <p>This derivational field exhibits MASC., FEM., and NEUT. derivatives.</p> <p>NOM.SG. dūtís [abstract derived from agent noun] LOC.SG. dūtíyám</p> <p>maṇḍūkī- *‘female frog’, ‘name of a plant’ ← MASC. maṇḍúka- ‘frog’</p>
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<p>NOM.SG. pāvīravī [substantivized adjective designating a proper name]</p>	<p>INSTR.SG. maṇḍūkiyā ‘name of a plant’</p>
<p>puro-gavī- ‘lead cow’ ← puro-gavá- ‘id.’</p>	<p>yamī- ‘twinned’, ‘sibling’, ‘proper name of Yama’s twin sisters’ ← MASC. yamá- ‘Yama’, ‘twin’</p>
<p>NOM.SG. puro-gavī</p>	<p>VOC.SG. yámi</p>
<p>prśanī- ‘caressing’ ← MASC. *prśaná-</p>	<p>NOM.SG. yamís</p>
<p>NOM.SG. prśanī</p>	<p>ACC.SG. yamíyam</p>
<p>NOM.PL. prśaníyas</p>	<p>NOM.ACC.DU. yamíyā</p>
<p>ACC.PL. prśaníyas</p>	<p>ACC.PL. yamíyas</p>
<p>máhiṣī- ‘female buffalo’, ‘buffalo-cow’ ← MASC. mahiṣá- ‘buffalo’, originally ‘large’.</p>	<p>rathī- ‘driving (in) a chariot’, ‘male charioteer’, ‘female charioteer’, ‘chariot steed’, ‘chariot fighter’, ‘driver’ ← rátha- ‘chariot’</p>
<p>The MASC. animate substantivized adjective is zero-derived, a derivational mechanism mirroring, with the exception of locus accent shift, such derivational sets as kṣṇá- ‘black’ : MASC. kṣṇa- ‘the black one = the black antelope’.</p>	<p>NOM.SG. rathís [MASC.] [animate substantive derived from inanimate substantive]</p>
<p>NOM.SG. máhiṣī ‘female buffalo’, ‘wife of a chieftain’ [animate substantivized (physical-related) adjective]</p>	<p>rathís [FEM.]</p>
<p>ACC.SG. máhiṣīm</p>	<p>ACC.SG. rathíyam</p>
<p>mánuṣī- ← MASC. mánuṣa- ‘human, of man’</p>	<p>INSTR.SG. rathíyā</p>
<p>VOC.SG. mánuṣī ‘belonging to the sons of Manu [of Uṣas]’</p>	<p>DAT.SG. rathíye</p>
<p>NOM.SG. mánuṣī</p>	<p>VOC.DU. ráthiyā</p>
<p>VOC.PL. mánuṣīs</p>	<p>NOM.ACC.DU. rathíyā</p>
<p>NOM.PL. mánuṣīs</p>	<p>VOC.PL. ráthiyas</p>
<p>ACC.PL. mánuṣīs</p>	<p>NOM.PL. rathíyas [MASC.]</p>
<p>GEN.PL. mánuṣīṇām</p>	<p>rathíyas [FEM.]</p>
<p>mánuṣīṇaam</p>	<p>NOM.PL. rathís [FEM.]</p>
<p>LOC.PL. mánuṣīṣu</p>	<p>ACC.PL. rathíyas [MASC.]</p>
<p>yahvī- ‘youthful maiden’, ‘exuberant maiden’ ← MASC. yahvá- ‘youthful’, ‘exuberant’</p>	<p>rathís [FEM.]</p>
	<p>GEN.PL. rathínaam</p>
	<p>COMP. rathítaras ‘better charioteer’</p>
	<p>SPL.NOM.SG. rathítamas ‘best charioteer’</p>
	<p>SPL.ACC.SG. rathítamam</p>
	<p>SPL.DU. rathítamā</p>
	<p>róhiṇī- ‘red cow’ ← róhita- ‘red’, ‘red steed’ ← rohít- ‘red-brown, red’</p>

<p>NOM.ACC.DU. yahvī́ [animate substantivized (character-related) adjective]</p>	<p>The MASC. equivalent of the animate substantivized (color) adjective has been thematicized from the original consonant stem. The regressive accent shift triggering possessive semantics has here been associated with the consonant stem rohít-.</p>
<p>NOM.PL. yahvís</p>	<p>INSTR.SG. róhiṇiyā́ [animate substantivized (color) adjective]</p>
<p>ACC.PL. yahvís</p>	<p>LOC.PL. róhiṇīṣu</p>
<p>yahvíyas</p>	<p>vaśanī́- [MASC.] 'leading, leader'</p>
<p>INSTR.PL. yahvī́bhis</p>	<p>NOM.SG. vaśanís</p>
<p>LOC.PL. yahvíṣu</p>	<p>vibālī́- 'name of a river'</p>
<p>yádurī- 'merging' ← yádura- 'merging, uniting'</p>	<p>ACC.SG. vibālīyam</p>
<p>NOM.SG. yádurī</p>	<p>viśva-rūpī́- 'possessing all shapes or colors' ← viśvá-rūpa- 'id.'</p>
<p>rāṣṭrī- 'female ruler', 'mistress' [MASC. rāṣṭrī- 'male ruler']</p>	<p>ACC.SG. viśva-rūpīyam</p>
<p>FEM. and MASC. derivatives are formally indistinct like Ved. MASC.FEM. rathī́-</p>	<p>venī́- 'tracking, tracker' ← vená- 'id.'</p>
<p>NOM.SG. rāṣṭrī</p>	<p>NOM.PL. venís</p>
<p>ródasī- [= ródas] 'world', 'Rudra's wife' (IX), 'the two worlds' [DU.]</p>	<p>śakaṭī́- 'cart', 'chariot'</p>
<p>VOC.DU. ródasī</p>	<p>NOM.SG. śakaṭís</p>
<p>NOM.ACC.DU. ródasī</p>	<p>sahásra-starī́- 'having a thousand barren cows'</p>
<p>GEN.DU. ródasiyos</p>	<p>NOM.SG. sahásra-starīs</p>
<p>GEN.LOC.DU. ródasīyos</p>	<p>simhī́- 'lioness' ← simhá- 'lion'</p>
<p>DAT.DU. ródasībhiyām</p>	<p>ACC.SG. simhīyam [animate denominative substantive]</p>
<p>vasu-pátnī- 'mistress of goods' ← vasu-pati- 'lord of goods'</p>	
<p>NOM.SG. vasu-pátnī</p>	
<p>vāja-patnī- 'mistress of booty' ← vāja-pati- 'master of booty'</p>	
<p>NOM.SG. vāja-patnī [animate denominative substantive]</p>	
<p>vāṇī́- 'voice' ← vāṇá- 'music [?]'</p>	
<p>NOM.SG. vāṇī</p>	
<p>ACC.SG. vāṇīm</p>	

<p>NOM.ACC.DU. <i>vāṇī</i></p> <p>NOM.PL. <i>vāṇīs</i></p> <p>ACC.PL. <i>vāṇīs</i></p> <p>INSTR.PL. <i>vāṇībhis</i></p> <p>LOC.PL. <i>vāṇīṣu</i></p> <p><i>vāmī-</i> ‘valuable’ ← <i>vāmá-</i> ‘id.’</p> <p>NOM.SG. <i>vāmī</i></p> <p>ACC.PL. <i>vāmīs</i></p> <p><i>vimānī-</i> ‘measurer, measuring’ ← <i>vimāna-</i> ‘id’</p> <p>ACC.SG. <i>vimānīm</i> [substantivized noun of agent]</p> <p><i>viśpātnī-</i> ‘mistress of the clan’ ← <i>viśpāti-</i> ‘clan-lord’</p> <p>ACC.SG. <i>viśpātnīm</i> [animate denominative substantive]</p> <p>DAT.SG. <i>viśpātniyai</i></p> <p><i>vīrá-patnī-</i> ‘hero’s wife’ ← <i>-pati-</i></p> <p>NOM.SG. <i>vīrá-patnī</i></p> <p>NOM.DU. <i>vīrá-patnī</i></p> <p><i>vīṣa-patnī-</i> ‘whose husband is a bull’ ← <i>-pati-</i> ‘husband’</p> <p>ACC.PL. <i>vīṣa-patnīs</i></p> <p><i>vīṣā-kapāyī-</i> ‘wife of <i>vīṣā-kapi-</i> ‘man-monkey’; ‘name of same’</p> <p>VOC.SG. <i>vīṣā-kapāyi</i> ‘wife of <i>vīṣā-kapi-</i>’ [animate denominative substantive]</p> <p><i>śam-gáyī-</i> ‘bringing fortune, luck to the household’</p> <p>ACC.SG. <i>śamgáyīm</i></p>	<p><i>su-prāvī-</i> MASC. ‘offering good aid’, ‘helpful’, ‘very careful’, ‘very eager’ (in matters of ritual); ‘performing [ritual] well’⁷</p> <p>NOM.SG. <i>su-prāvīs</i></p> <p>ACC.SG. <i>su-prāvīyam</i></p> <p>DAT.SG. <i>su-prāvīye</i></p> <p>GEN.SG. <i>su-prāvīyas</i></p> <p><i>su-maṅgalī-</i> ‘bringing luck’ ← <i>su-maṅgála-</i> ‘id.’</p> <p>NOM.SG. <i>su-maṅgalīs</i></p>
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⁷ Jamison and Brereton (2014).

śavasi- 'the strong one, as designation of Indra's mother'
← *śavasa- 'strength'

NOM.SG. śavasi [personified]

śāsani- 'teacher, instructor' ← śāsana- 'teaching'

ACC.SG. śāsanim [animate substantivized noun of agent]

śyāvī- FEM. of śyāva- 'dark brown, a designation of the night', 'of a mare or cow' ← śyāva- 'the dark brown one [proper name]'

NOM.SG. śyāvī 'the dark brown one' [animate substantivized (color) adjective]

ACC.SG. śyāvīm

NOM.PL. śyāvīs 'dark brown mare or cow'

GEN.PL. śyāvīnaam 'dark brown mare or cow'

saṃgāmani- 'bringer together', 'assembler'
← saṃgāmana- 'id.'

NOM.SG. saṃgāmani [substantivized noun of agent]

sa-pātnī- 'rival'; [DU. or PL.] the co-wives of a man'
← sa-pātna- 'rival'

NOM.SG. sa-pātnī 'rival'

ACC.SG. sa-pātnīm 'rival'

NOM.ACC.DU. sa-pātnī 'co-wives of a man' ← -pati-

NOM.PL. sa-pātnīs 'rival'

ACC.PL. sa-pātnīs 'rival'

sam-rājñī- 'sovereign queen'

NOM.SG. sam-rājñī

sinīvālī- 'name of a goddess'

VOC.SG. sínīvālī

NOM.SG. sinīvālī	
DAT.SG. sinīvālyai	
su-pātnī- 'having a good husband' ← -pati-	
ACC.DU. su-pātnī	
NOM.PL. su-pātnīs	
ACC.PL. su-pātnīs	

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