TOWARDS A NEW METHOD FOR ANALYZING SYNTAX IN POETRY:

DISCRIMINATING GRAMMATICAL PATTERNS IN THE RIGVEDA

by

ANDREW MICHAEL PACZKOWSKI

(Under the Direction of Jared S. Klein)

ABSTRACT

The Rigveda is a large collection of hymns that represents the oldest attestation of the Indo-Iranian branch of the Indo-European language family. The value of the corpus as a source of syntactic insight, however, is limited by its entirely poetic nature. Its syntax has been studied, but until we better understand how poetic style and grammaticality interact, we cannot know how much our syntactic observations of the corpus really tell us about the grammar of the language. The difficulty of investigating syntax in poetry has not yet been properly treated. On the one hand, poetry must be intelligible, since it is composed and understood by the speakers of a language; on the other hand, the structures found in poetry can differ significantly from those of usual speech, which is why syntacticians avoid poetry in formal studies. But for those working with limited data or languages attested only in poetry, drawing the line between syntax and style is a necessary step towards an accurate syntactic account. The goal of this work is to establish a distinction between grammaticality and intelligibility, and to formalize a system for identifying which patterns in the Rigveda are grammatical and which may have been consciously manipulated. This system allows us to draw more reliable conclusions about the syntax of the language by filtering noise out of the data.

INDEX WORDS: Syntactic reconstruction, Generative syntax, Minimalism, Poetry, Meter, Scansion, Rigveda, Corpus, Vedic, Sanskrit, Indo-European

TOWARDS A NEW METHOD FOR ANALYZING SYNTAX IN POETRY: DISCRIMINATING GRAMMATICAL PATTERNS IN THE RIGVEDA

by

ANDREW MICHAEL PACZKOWSKI

A.B., University of Georgia, 2009

M.A., University of California, Berkeley, 2010

A Dissertation Submitted to the Graduate Faculty

of The University of Georgia in Partial Fulfillment

of the

Requirements for the Degree

DOCTOR OF PHILOSOPHY

ATHENS, GEORGIA

2016

TOWARDS A NEW METHOD FOR ANALYZING SYNTAX IN POETRY:

DISCRIMINATING GRAMMATICAL PATTERNS IN THE RIGVEDA

by

ANDREW MICHAEL PACZKOWSKI

Approved:

Major Professor: Jared S. Klein

Committee: Vera Lee-Schoenfeld
Keith Langston

Electronic Version Approved:

Suzanne Barbour
Dean of the Graduate School
The University of Georgia
May 2016

Acknowledgments

A proper expression of thanks to all those without whom this dissertation would never have seen the light of day, could fill up a dissertation of its own. After so many of my fits, false starts, and wolf-cries, apologies may be more appropriate.

The greatest thanks must go to my committee members: Jared Klein, from whom I have learned more than I can measure, from the basics of Historical Linguistics to the foundations of Indo-European; Vera Lee-Schoenfeld, whose syntactic tutelage has been indispensable to my work; and Keith Langston, for teaching me Old Church Slavic and for preventing me from embarrassing myself on many occasions.

Since my love of Language began in the Latin classrooms of Bobby Guarnella and Keith Toda, it is only right to give thanks to them, as well as my first Greek teacher, my friend and best man Alex Hansen. I am also greatly indebted to Zoe Stamatopoulou and Benjamin Wolkow for teaching me Ancient Greek.

I would like to thank all my teachers at Berkeley, especially Line Mikkelsen, for changing my mind about syntax; and Gary Holland, both for his classes and for his work on the Rigveda which made this dissertation possible in the first place. I would also like to recognize Stephanie Jamison and Craig Melchert for their feedback on some informal ideas that would one day become this dissertation.

Special thanks to my friends and colleagues Marcus Berger for his spaghetti and syntactic insights, Mark Wenthe, Josh Hannah, Lindsey Antonini, Jessica DeLisi, Andrew Byrd, Kelly Dugan, Martin Macak, and my friend and fellow Neo-Saussurian Sam Zukoff.

Above all, thank you to my family for their infinite patience, and for supporting me and my love of Language during what have been the most wonderful and stressful years of my life. And to my wife Caroline, I am glad I can now present this work as a belated paper anniversary gift.

List of abbreviations

1	first person
2	second person
3	third person
ABL	ablative
ACC	accusative
ADJ	adjective
AP	adjective phrase
AUX	auxiliary
C	complementizer
CL	clitic
CP	complementizer phrase
DAT	dative
ERG	ergative
FOC	focus
FUT	future
GEN	genitive
GND	gerund
IMP	imperative
IMPF	imperfect
INS	instrumental
KB	Kauṣītaki Brāhmaṇa
KS	Kaṭha Saṃhitā
LF	logical form
LOC	locative
MS	Maitrāyaṇī Saṃhitā
NOM	nominative
NP	noun phrase
OV	Object-Verb
PF	phonological form
PIC	Phase-Impenetrability Condition
PL	plural
PRF	perfect
RV	Rigveda
SG	singular
SUBJ	subjunctive
TS	Taittirīya Saṃhitā

Contents

1 Introduction **1**

1.1 The Rigveda 2

1.2 The generative approach to syntax 3

1.3 Syntax in the Rigveda 13

1.4 Outline of this Work 15

2 Previous approaches to Vedic syntax **18**

2.1 The traditional view of Vedic syntax 18

2.2 Modern approaches to Vedic syntax 21

2.3 Hale's generative account 28

2.4 A most puzzling phenomenon 36

2.5 Conclusion 39

3 Parallels in other languages **40**

3.1 Germanic V2 41

3.2 The free word order phenomenon 50

3.3 Conclusions 58

4 Getting Syntax out of Poetry **59**

4.1 Poetic permutations 61

4.2 Intelligibility versus grammaticality 66

4.3 Exploiting metrical variation 67
4.4 A method for syntactic exploration 75

5 A statistical method for discriminating grammatical patterns 77
5.1 The position of the genitive with regard to its head noun 80
5.2 The position of the gerund with regard to its subject 86
5.3 Enclisis to vocatives 90
5.4 The position of *áchā* with regard to its object 93
5.5 The position of the copula in predicate nominative constructions 97
5.6 Conclusion 100

6 Further remarks on grammatical patterns in the Rigveda 102
6.1 SOV 103
6.2 Wh-movement 105
6.3 Discontinuity 106
6.4 Scrambling 108
6.5 The Rigvedic left periphery 111
6.6 Conclusion 119

7 Conclusion 121
7.1 Future research 121
7.2 Contributions and problems 128

References 129

Appendices 134

A A shell script for scanning Vedic text 135

B Rigvedic lines with scansion in the first percentile of frequency 145

B.1 First percentile of 8 Syllable lines according to the frequency of each line's scansion pattern. 145
B.2 First percentile of 11 Syllable lines according to the frequency of each line's scansion pattern. 151
B.3 First percentile of 12 Syllable lines according to the frequency of each line's scansion pattern. 159

C Lines containing tokens **163**
C.1 The position of the genitive with regard to its head noun 163
C.2 The position of the gerund with regard to its subject 170
C.3 Enclisis to vocatives 173
C.4 The position of *áchā* with regard to its object 211
C.5 The position of the copula in predicate nominative constructions 215

Chapter 1

Introduction

The Rigveda is one of the oldest Indo-European texts, and from it have issued some of our deepest insights into the phonology and morphology of its more ancient ancestor language, Proto-Indo-European. However, the entire corpus consists of poetry, and without recourse to sufficiently contemporaneous prose (nor, it goes without saying, native speakers), any syntactic investigation of the langauge must either stall immediately or proceed with an uncomfortable acceptance of poetic data, which to an uncertain degree undermines the integrity of the account. The purpose of this dissertation is to lay some groundwork for a new method of investigating syntax within poetic corpora.

My original plan was only to map out the syntax of topic and focus in the Rigveda, with a particular emphasis on the phenomenon of fronting. The corpus has been treated similarly before by Mark Hale and Hans Henrich Hock in the 1996 book *Approaching Second*, but the subject has generally lain fallow since then. Due to the advancement of modern generative theories since that time, a fresh analysis seemed warranted. I immediately ran into the difficulty of trying to decide whether a word had been fronted in order to confer focus on it, or only so that its line would better reflect the metrical pattern of the hymn.

Any syntactic account citing the language's word order was thus jeopardized. Nor was I content to accept the observed patterns as representative of the language's grammar (as Hale and Hock had been), for the same banal reason that syntacticians working on modern languages avoid poetry: the unstated suspicion that poetic language might not really be "grammatical."

Because the present work attempts to marry the historically independent fields of Generative Syntax and Historical Linguistics, a brief overview of each will constitute the first two parts of this introduction. The first part will introduce the language and corpus on which my work was conducted, and the second will introduce the framework of generative syntax in which we hope ultimately to model the syntax of that language. The final part of the introduction will include a chapter summary.

1.1 The Rigveda

Within the Indo-European language family, the Indo-Iranian branch comprises the second oldest attestations (after Anatolian), in the form of the Vedic language, which takes its name from the most ancient holy texts of India. The Vedas consist of four books: the Rigveda, the Sāmaveda, the Yajurveda, and the Atharvaveda; and there is a host of other literature, written after these texts, whose language is also called Vedic. Max Müller, in his *History of Ancient Sanskrit Literature*, divided the Vedic language into four periods: the Chandas period being the most ancient, followed by the Mantra period, the Brāhmaṇa period, and the Sūtra period (1860: 63).

The writings of the Sūtra period bridge the gap between the latest Vedic works and Classical Sanskrit. The Brāhmaṇa period contains the writings not only of the Brāhmaṇas themselves, but also the Upaniṣads and Āraṇyakas. The boundaries between these classes of texts are fuzzy. All of them are theological in nature, dealing with the interpretation of

older texts, the performance of sacrifices, and other cultural instruction (1860: 307). Interestingly, Müller tentatively places the Sāmaveda, the Yajurveda, and the Atharvaveda within the Brāhmaṇa period, reserving the Mantra period only for the compilation of the Rigveda (1860: 417), and the Chandas period for its composition (1968: 481). Müller, being careful to highlight the impossibility of assigning absolute dates to these periods, estimates each as having a span of about 200 years, with the earliest beginning around 1200 BCE (1860: 525). Vedic scholars in general agree with this estimate. In any case, the comparative antiquity of the Rigveda is notable, especially relative to the first prose attestations of the language (the Brāhmaṇas and portions of the Yajurveda).

The Rigveda consists of 10 books called maṇḍalas ("cycles"), comprising a total of 1028 hymns dedicated almost entirely to the gods of the ancient Indic pantheon. The hymns are poetic in nature, being composed in a small variety of quantitative meters. And since the comparative method relies on privileging older attestations for the purpose of reconstruction, the Rigveda has traditionally been the focus of proportionally more linguistic scrutiny. Thus it is from Rigvedic evidence that we derive the greatest number of insights into the prehistory of Vedic, and by extension, the grammar of Indo-European.

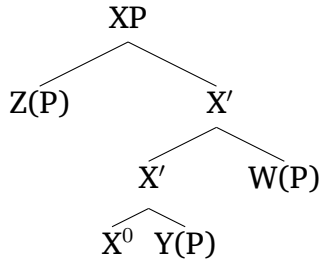
1.2 The generative approach to syntax

Syntax is the study of how morphological entities combine to form larger units, for instance the way nouns combine with determiners and adjectives to form phrases, and how phrases in turn form sentences. In the past six decades, Syntax as a field has evolved from disconnected observations concerning word order into a self-contained science, the lofty goal of which is to produce a single theory of syntax that can model all human languages equally well.

In 1957, Noam Chomsky ushered in a new era in the study of syntax as a formal system with his seminal work *Syntactic Structures*. The driving idea behind this work and the theory it proposed was that any syntactic structure could be created by a finite set of rules, some of which generate structure and others of which transform one structure into another. For instance, a question like *what are you eating?* is "transformed" from a simple declarative, namely *you are eating what?*, whose elements are "base-generated." This was the beginning of the generative tradition.

Subsequent works by Chomsky crystallized major developments in the field. His 1965 book *Aspects of the Theory of Syntax* laid out what was known as the "Standard Theory" and introduced the formal concepts of "deep" versus "surface" structure, deep structure referring to what is base-generated and surface structure referring to the final grammatical utterance, after transformation. In 1970, Chomsky introduced X-bar Theory, which stipulated some universal structural relationships and offered a more visually obvious way of structurally representing semantic modification relations.

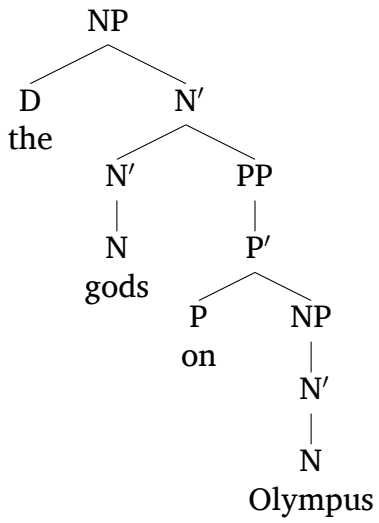
(1)



The above tree exemplifies the most important relationships according to X-bar Theory. X^0 is the "head," which branches from the "bar-level" (the prime mark is pronounced "bar"; originally it was [and sometimes still is] written as $\bar{X}$), which is an intermediate projection of X. XP stands for X-Phrase; it is the "maximal projection." Since a phrase, like *the gods on Olympus*, behaves according to the category of its head (in this case the noun *gods*), the jargon of the theory says that the phrase "projects" from the head (thus the term "maximal projection"). The phrase ZP is in the "specifier" position and YP is in

the “complement” position; WP is an optional adjunct (such as an adjective or adverb), and bar-levels can be multiplied as necessary to accommodate adjuncts. As an example, consider the noun phrase just cited.

(2)



The determiner *the* lies in the specifier position of the noun phrase (NP), which is abbreviated SpecNP; the NP *Olympus* is the complement of the preposition *on*; and the prepositional phrase (PP) *on Olympus* has been adjoined to N. In this early theory, even non-branching levels of projection were stipulated to warrant representation.

In 1981, Chomsky published *Lectures on Government and Binding*, which established the basic form of the current theory, which focuses heavily on the cross-linguistic underpinnings of the syntax of different languages. One of the theory’s potent claims is that there exists a set of syntactic principles and parameters which all languages share. The principles are the same in every language, and the parameters account for structural differences between languages, depending on whether they are “set” one way or another. Hence the name of the framework: Principles and Parameters Theory (P&P).

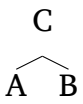
In 1995, Chomsky published *The Minimalist Program*. This work, and the movement of the same name, did not propose a new theory so much as it cleaned up the old one. Most of the tenets of P&P remained in force, but the approach to generation shifted focus

from the structure itself to its lexical entities. X-bar Theory stipulated the existence of a phrase structure into which lexical items were placed; Minimalism stipulates a "bare phrase structure," where the structuring of utterances emerges from the interactions of the lexical items themselves; this does away with extraneous bar levels by positing that structure is only generated as necessary. Though "features" and "operations" had already been part of the theory, Minimalism recast various other theoretical mechanics into these molds.

1.2.1 Syntactic operations: Merge, Move, and Adjoin

A word's features comprise all the individual characteristics that describe its category and potential interactions with other words: "noun" and "plural" are both features, for instance, as well as more abstract characteristics like "question," which in English triggers other words with corresponding features to rearrange themselves into the form of a question (recall the transformation mentioned above). The operations describe how the words arrange themselves, depending on what the sums of their features demand. The operation Merge combines elements into constituents, and constituents into still larger constituents. Here, A and B merge into C.

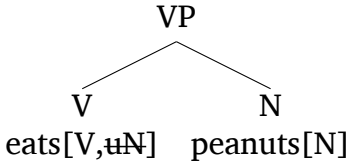
(3)



In an actual syntactic derivation, these operations are driven by the features of the elements. Features like "Noun," "Preposition," or "Verb" are categorical, and are abbreviated in standard ways: [N], [P], and [V], respectively. Some features are "uninterpretable," meaning that they are incomplete until they enter into a "checking" or "Agree" relation with a certain corresponding feature. Uninterpretable features are abbreviated

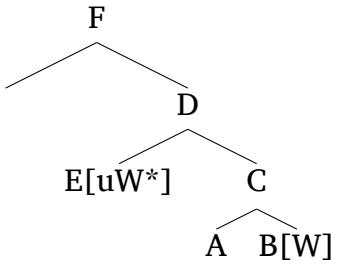
with a lower-case *u* followed by the feature required: for instance, [uN] is an uninterpretable feature that is eliminated once it is combined with a [N], as in the following example.

(4)

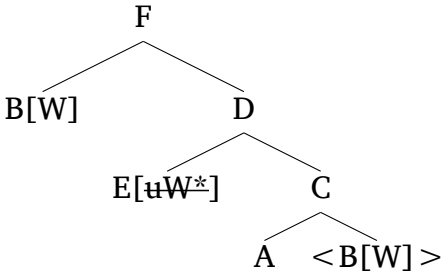


Once the two features' hosts are combined, we say that the uninterpretable feature is "checked" and deleted. Some features, marked with an asterisk, are "strong," meaning that they trigger an operation called Move (or Internal Merge), which extracts an element from lower in the structure. This element then checks the strong feature.

(5) Before Move



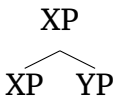
(6) After Move



In the first of these examples, we see that the element E has a strong uninterpretable feature which triggers Move to relocate the relevant feature-bearing structure B into a local relationship. After B undergoes the movement, it leaves behind a "trace," notated as <B> (another common way to designate traces is with a lower-case *t*).

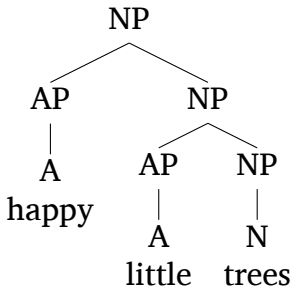
The third major syntactic operation is called Adjoin[1]. It is like Merge, except that it expands structures instead of combining them. Here, YP adjoins to XP, which only results in a larger XP.

(7)



Adjoin is responsible for inserting modifiers like adjective and adverb phrases, which never affect the category of their hosting constituent. The example below shows only two adjuncts, but there is no syntactic limit to the number of adjuncts that can adjoin to a phrase.

(8)



The goal of a syntactic derivation is to achieve full interpretability for a given set of lexical items by applying any and all operations demanded by the requirements of the features.

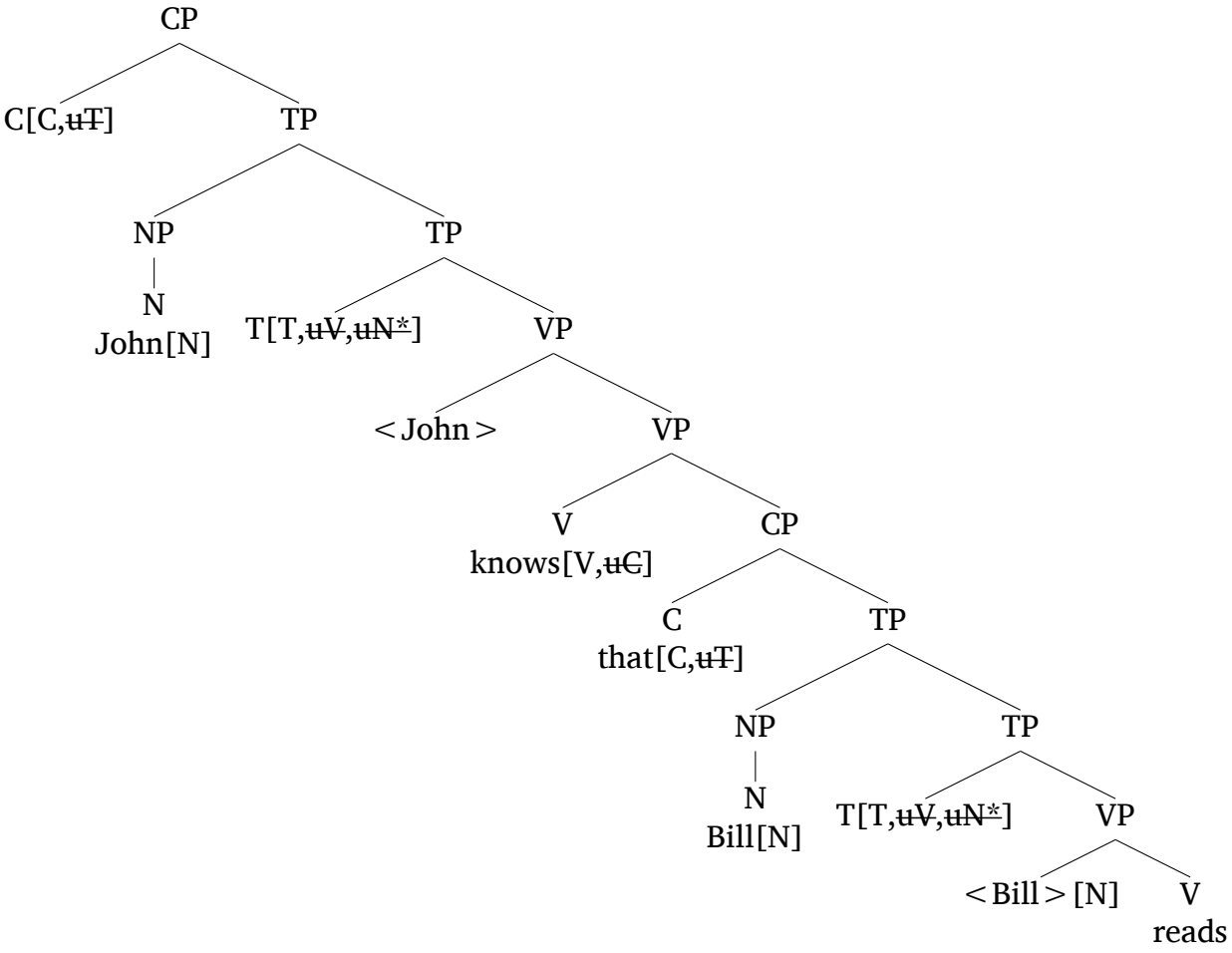
1.2.2 Familiar structures

In order to consolidate the previous theoretical tenets and to more fully observe how they capture real utterances, let us apply them to an English example. In the following tree diagram, we see the familiar skeleton of a simple English sentence. The main (or matrix) clause is licensed by a head labeled C, which stands for "complementizer." This is the

[1]It is a minor concern that Adjoin does not fit well in the Minimalist framework, since its optionality seems to defy the feature-driven structure building which lies at the core of Minimalism. The brief Minimalist view of Adjoin presented here comes from David Adger's *Core Syntax: A Minimalist Approach* (2003: 112-13).

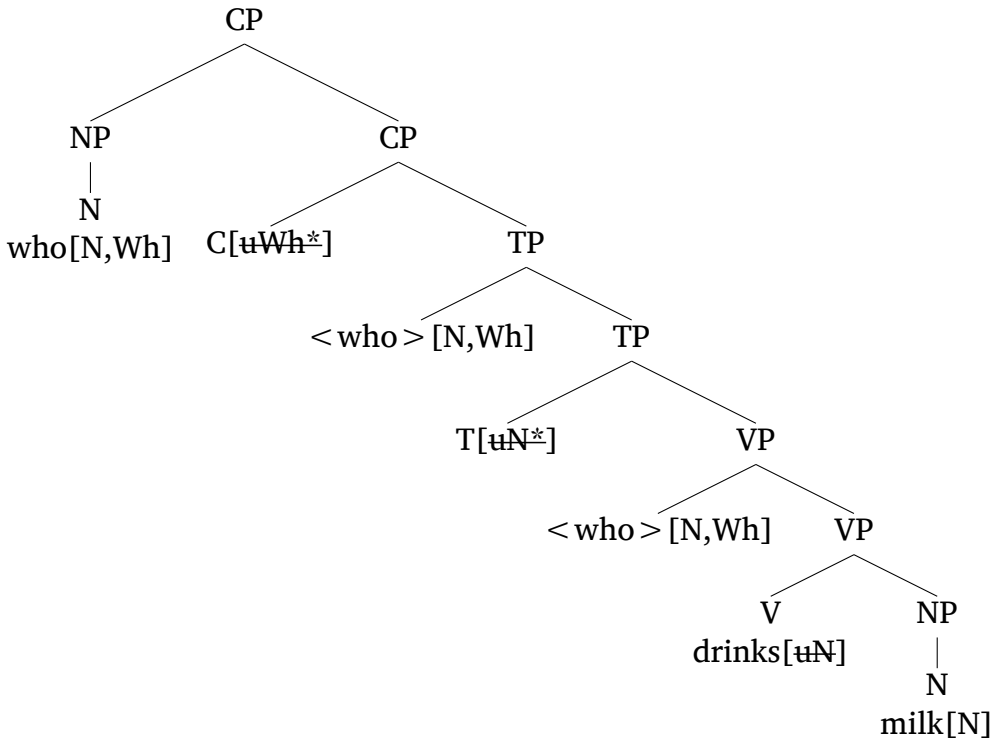
part of speech responsible for embedding clauses (e.g. *that*, *if*, etc.), and there is evidence for the existence of a null complementizer at the top of every sentence. The other novel category is represented by T, which stands for "tense" (some syntacticians use I here, which stands for "inflection"). The specifier of the tense phrase (SpecTP) is the location of the English subject. In the following tree diagram (as in all derivations), we proceed upward from the bottom: verbal arguments combine with the verb to form the VP, the VP combines with the T to form the TP, which in turn combines with the C to form the CP.

(9) John knows that Bill reads



This tree simplifies some theoretical points, but it presents a basic, conventional view of how Minimalism would treat the English sentence in question. Note that the subject of the verb originates, or is "base-generated," in the VP and moves into SpecTP. This particular process is known as the Extended Projection Principle (EPP); it originated from the observation that all English sentences need a subject, but its breadth has increased with the discovery of similar phenomena in other languages. Now, an EPP feature is simply a strong feature which triggers movement of an element into the specifier position of whatever carries it. Let us take a slightly more advanced example, one which illustrates a common phenomenon that occurs in interrogatives: the movement of wh-words to the beginning of the sentence.

(10) who drinks milk?



Here we see the mechanics behind a simple question. As in the previous tree, the subject has to move from the VP into SpecTP in order to check a strong feature on T. But in this example, there is another strong feature on C which must be checked by an element bear-

ing the feature [Wh]. This is the mechanism responsible for "wh-movement,"[2] whereby question words raise into first position. The wh- word *who* leaves two traces, one in its site of base-generation, and one in SpecTP[3].

Other notable categories include focus phrases (FocP) and topic phrases (TopP), whose heads trigger movement of elements which are to be emphasized. More detailed analyses, drawing on evidence from various languages, split the verb phrase into a so-called little-v phrase (vP) and a big-V phrase (VP), the difference being that little-v licenses an external argument (the subject) and V licenses the internal arguments. Together these form what has been termed the "v-shell" (see e.g. Larson 1988, Chomsky 1995, Kratzer 1996).

1.2.3 Syntax and its interfaces

When we diagram a structure, traces and all, we are demonstrating the construction of a mental object, which only later finds its expression in the form of speech. The set of elements before derivation was once called the Deep Structure, or D-structure, and the full object after derivation was called the Surface or S-Structure. The following diagram illustrates the arrangement of the system.

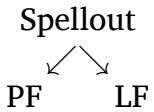
(11) D-structure
↓

[2]Scholars maintain the "wh-" terminology across languages.

[3]For those skeptical of how well these odd abstractions really capture human Syntax, examples in wh- provide some of the most convincing evidence that traces are in fact real. The phenomenon of "wanna-contraction," whereby the collocation *want to* can be combined into *wanna*, is blocked in some dialects where the theory predicts the existence of a trace. See the following examples.

(1) a. who do you want to kiss <who>?
b. who do you wanna kiss <who>?
c. who do you want <who> to <who> kiss you?
d. * who do you wanna <who> kiss you?

It is important to note that *to* is a T head. In the last two examples, *who* must raise first into SpecTP, then into the main clause's SpecCP. Wanna-contraction makes (1d) ungrammatical because it does not yield a place for the second trace of *who*.



The diagram indicates that the D-structure undergoes derivation; once the derivation is complete, the fully interpretable syntactic object undergoes a set of processes called "Spellout," which build its Phonological Form (PF) as well as its semantic, Logical Form (LF). PF and LF are known as interfaces, because they pass the syntactic output to different systems. All of Phonology takes place between Spellout and PF. With the advent of Minimalism, the mechanics of this system were also recast. Instead of a D-structure, the Minimalist analog of this system begins with a "Numeration," which refers to the unordered set of morphemes from which the syntactic structure is built.

It is important to note that a numeration does not necessarily contain all the elements in a sentence. Rather, the process leading from numeration to structure occurs periodically in units called "phases." For example, in a sentence like *John knows that Bill likes peanuts*, the CP *that Bill likes peanuts* is one phase, and *John knows* … is another. Many movements are possible within a phase, but there are further limitations on what can move from one phase to another; most importantly, only one element can move out of a phase, and only out of the so-called "edge" of the phase, which consists of the phase head and its specifier.

The field of Syntax often draws criticism for the abstractness of its representations and the methodology of its investigations. Regarding the first point, it is important to remember that these features and operations are only metaphors. When a syntactician speaks about a structure "transforming" or a word "moving," she is not claiming that such a process actually occurs in the mind of the speaker; rather, these processes are only metaphors that aid in our representations of generation. To address the second point, it is easy to mistake syntactic research for baseless theorizing, because the syntactic experiments conducted to test hypotheses are so relatively simple. Having formed a hypothesis that explains

some syntactic phenomenon, the syntactician uses the hypothesis to generate phrases. If the phrase is judged grammatical by native speakers, the hypothesis has succeeded in modelling syntax. Syntactic hypotheses fail in two ways: either they "overgenerate" by predicting ungrammatical structures to be grammatical, or they "undergenerate" by predicting grammatical structures to be ungrammatical.

1.3 Syntax in the Rigveda

Vedic is a case language with a rich morphological system, much like Latin and ancient Greek (to which it is of course related), though its nouns have more cases (Instrumental and Locative, in addition to the six familiar cases of Latin) and numbers (a dual [more fully expressed than that in Greek] in addition to singular and plural), and its verbs exhibit a much wider range of inflectional possibilities. The language features clitics (particles and reduced forms of pronouns) which act as bound morphemes and can only occur to the right of a host word.

The syntax of Vedic has been studied in the western tradition ever since its importation into European academia, but until the advent of the generative movement spearheaded by Noam Chomsky in the late 1950's, these studies were entirely descriptive and usually incorporated into detailed reference grammars which encompassed phonetics, phonology, morphology, etc., often in a philological context, but with the main goal of aiding students of the language in reading texts. The precursor to what we call the field of Syntax was in these grammars represented by excursuses on word order. Bertold Delbrück devoted only ten pages to word order in his 1888 *Altindische Syntax* (pp 15-25). Whitney's *Sanskrit Grammar* of 1896 (primarily dedicated to Classical Sanskrit, though it offers depictions of Vedic too) is punctuated with notes on word order, each presented under the heading of a certain particle or form, only to explicate its usage. Nor did Macdonell, in his 1910

Vedic Grammar, treat word order separately, though he added a small section which did so in his 1916 abridgment, *A Vedic Grammar for Students* (pp 283-286). These and similar works, besides devoting little time to Vedic word order, also drew their insights not from the poetry of the Vedas, but from the prose of the Brāhmaṇas, because, as Macdonell states, "metrical considerations largely interfere with the ordinary position of words in the Saṁhitās" (1916:283).

The Brāhmaṇas offer us a view of later Vedic syntax, but to consider their investigation a replacement for investigating Rigvedic syntax would be akin to describing the syntax of Shakespeare's English on the basis of current literary criticism concerning his works. The lack of a modern theoretical framework, however, has not much hindered attempts to understand the text nor to reconstruct proto-languages based on Rigvedic evidence. On the one hand, such reconstructions have traditionally focused on phonology and morphology. On the other hand, syntactic investigation can take many forms, not all of which require theoretical support, for example the usage of discourse particles or the composition of certain collocations. The purpose of applying modern theories to ancient languages is twofold: to reach a deeper understanding of the language's mechanics, out of which further insights might be derived; and to bring another language into the purview of the theory.

There is an important caveat that we must observe in this application. For modern languages, the integrity of the theory depends on how well it explains the data, and we are careful to collect uncontaminated data. For ancient languages, our access to data is severely limited, and we must be skeptical of the data's integrity. For instance, modern syntacticians tend to avoid poetry as a representative sample of a language, but for some ancient languages poetry is all we have. Therefore we must be prepared to call into question the data as readily as the theory.

1.4 Outline of this Work

The purpose of this work is to lay the groundwork for systematic syntactic investigations of the Rigveda. Chapter 2 will review the ideas of Hans Henrich Hock (1996) and Mark Hale (1996) concerning the syntax of the Rigvedic left periphery. I hope to show that Hock's prosodic template account is fundamentally deficient for two reasons: first because it is not, as Hock claims, anything like successful templatic accounts for other languages; second because it does not attempt to motivate the particular arrangement of the template proposed, a task which would lend itself to a generative analysis anyway. On the other hand, Hale's generative account explains the data adequately but does not conform well to the theory of syntax it employs. Searching for the best way to emend the account necessitates that we look into languages with phenomena similar to those of the Rigveda.

Chapter 3 will explore syntactic phenomena in other languages, where apparent similarity to Rigvedic could indicate a potential correspondence of their generative accounts. Without native speakers to consult or a deeper baseline of syntactic knowledge, the best identifiable similarities are those which manifest themselves well at the surface. These similarities include the verb-second phenomenon (V2), which parallels the rigid nature of the beginning of the Rigvedic clause, and the free word order phenomenon, which parallels the variety of word orders available in Rigvedic. Of the possible mechanisms behind free word order, one deserves special attention because of its pertinence to poetry; this is the focus of the next chapter.

Chapter 4 addresses the key issue of poetic manipulation, which resembles a language game in that special rules are consciously applied to well-formed output. After showing that well-formed output can and does change for metrical reasons in the composition of poetry, I propose a method for isolating potentially useful data within a poetic corpus by scanning each line of the work and counting the number of times each metrical pattern

occurs. Patterns which occur frequently are the most poetic lines, and therefore the least trustworthy for extracting syntactic information. Patterns which occur rarely are conversely more reliable sources of grammatical insight.

In Chapter 5 we will analyze five syntactic phenomena which manifest themselves in the ordering of words. The purpose of this chapter is to establish the integrity of the method outlined in Chapter 4 by demonstrating a confluence of evidence. If the premise of Chapter 4 is correct, then the syntactic patterns of the language should become more uniform as the frequency of the scansion pattern decreases. And, upon rearranging the words of certain verses, we should expect to discover metrical and grammatical motivations that agree with the statistical trend.

Chapter 6 mirrors Chapter 5: here we turn our attention towards a different set of phenomena, where new, metrically informed evidence of the kind tested in Chapter 5 will allow us to form a clearer picture of the language's syntax, by allowing us to disregard the phantom grammar that results from the poetic process.

Chapters 5 and 6 are alike in their layouts and goals but distinct in their approaches. Each chapter explores individual grammatical phenomena in the Rigveda in order to develop a piecemeal account of the language's syntax. Chapter 5 focuses on exploiting searchable sequences that identify certain grammatical patterns and finding correlations between the arrangements of those patterns and the relative frequency of the scansions they occur in. Establishing that correlation is necessary to demonstrate the efficacy of the method, but not all phenomena can be easily identified and tallied with a computerized search. Chapter 6 deals with grammatical patterns that cannot be easily searched, where rearrangement alone must provide evidence.

Chapter 7 offers suggestions and caveats concerning future research involving the method laid out in the previous chapters. Here we explore a phenomenon in Latin and one in ancient Greek as examples of the method's application outside of Rigvedic.

Chapter 2

Previous approaches to Vedic syntax

2.1 The traditional view of Vedic syntax

The linear order of Vedic Sanskrit is basically Subject-Object-Verb (SOV), but the specifics are more difficult to pin down. In much of the available attestation for Vedic, word order tends to be distorted by the poetic nature of the text. But there is a substantial amount of prose—albeit hundreds of years younger than the Saṁhitās—from which we can more surely determine a natural linear order. Scholars long ago noticed that the ordering of elements was most strictly patterned at the beginning of the Vedic sentence, which is traditionally referred to as the "initial string" but which modern generativists would call the "left periphery." As regards the word order of Vedic initial strings, Macdonell in his *Vedic Grammar for Students* has this to say:

(12) 191.a. The subject begins the sentence ... It may, however, be preceded by a particle like *utá* or occasionally by any other member of the sentence intended to be strongly emphasized ...

> 191.h. Enclitics cannot, of course, begin a sentence. If they belong to a particular word they follow it; otherwise they tend to occupy the second position in the sentence. ... *u, gha, ha, svid,* which refer to the statement of the whole sentence, occupy the second (or third) position in the sentence.
>
> 191.i. Even accented particles for the most part cannot begin a sentence. They either follow the word they emphasize ... or they occupy the second position in the sentence, as emphasizing the whole statement: *aṅgá, áha, íd, kíla, khálu, tú, nú, vái, hí*. The only particles that can begin the sentence are *átha, ápi, utá*; also *ná* if it negatives the whole sentence ...
>
> 191.j. Forms of the pronoun *tá* tend in B. to occupy the first position, especially *sá* when it anticipates a proper name in dialogues, or *tád* as an acc. when famous authorities are quoted ... (Macdonell 1916: 283-6)

The explanation is dense (and by modern standards convoluted), but this basically sets up a schema for the beginning of the sentence, containing a few slots which each accommodate a certain class of words. And so the grammar-book explanation gives us a template something like the following.

(13) a. 1^{st} Position 2^{nd} Position
subject, focus, etc.; *u, gha, ha, svid,* etc.; predicate

b. 1^{st} Position 2^{nd} Position 3^{rd} Position
átha, ápi, utá, ná; subject, focus, etc.; *u, gha, ha, svid,* etc.; predicate

The lists of words in these examples and in MacDonell's text are far from comprehensive. Looking at the data, one finds that the Vedic sentence may begin with *ápi, átho, áthā, ádha, tád, táthā, téna, nú,* as well as some other less common connective words. These correspond roughly to English discourse markers like *then, indeed, therefore, and so, now, furthermore,* etc. Likewise, in addition to *u, gha, ha,* and *svid,* we also find in the second or third position enclitics and the particles *hí, evá, evám, sma, vaí,* etc., which are traditionally called "asseverative particles" and usually have similarly discourse-marking values. More importantly, although they can modify verbs and certain other words, these

adverbial forms function as a class unto themselves. And so the example below, taken from the Kauṣītaki Brāhmaṇa (KB), typifies the Vedic sentence according to the grammar books (all caps indicate focus on an element).

(14) KB 15.1.20

1^{st} Position	2^{nd} Position	3^{rd} Position		
atho	dakṣiṇābhir	vai	yajñaṃ	dakṣayati
so	gift.INS.PL	FOC	worship.ACC.SG	strengthen.3SG.PRS

"so indeed he strengthens the worship with GIFTS"

The placement of certain words in second position is not unfamiliar. A similar phenomenon is observed in Germanic languages: so-called verb-second or V2, which demands that the second constituent in the sentence be the finite verb. In Vedic, although the second position (as shown in [13a]) need not be filled, it is the home of sentential modifiers and reduced forms. But the initial string seems to contain an optional position (as shown in [13b]) which, if filled, kicks the first and second positions down to second and third, respectively.

Scholars have long accepted that Vedic distinguished a special second position for particles, but found it odd that first and second positions should be demoted when a particle occurred at the beginning of the sentence. For this reason, Indo-Europeanists tend rather to fix first and second position according to the words that usually occur there, leaving an optional position at the beginning of the sentence. It has been argued by Indo-Europeanists that this optional position is a special, extra-clausal "nexus" position that accommodates certain connective particles while allowing the following clause structure to remain autonomous (Dunkel 1990, Klein 1991, Hale 1993, Hock 1996), as exemplified in the following examples from the KB and Maitrāyaṇī Saṃhitā (MS).

(15) a. KB 2.6.11

Nexus	1^{st} Position	2^{nd} Position	
	rātryā	u hi	śīrṣant satyaṃ vadati
	night.INS.SG	also indeed	head.LOC.SG truth.ACC.SG speak.3SG

"also indeed by night he speaks truth in his head"

b. MS 1.5.5

Nexus	1^{st} Position	2^{nd} Position	
atho	devā	vai	pratnam
moreover	god.NOM.PL	indeed	ancient.NOM.SG

"moreover the gods [are] indeed the ancient [thing]"

c. MS 4.1.1

Nexus	1^{st} Position	2^{nd} Position	
(a)thaitarhi	devebhyo	eva	enā āpyāyayati
so.now	god.DAT.PL	truly	them.ACC.PL strengthen.3SG

"so at this point truly for the gods he strengthens them"

The descriptive adequacy of this schema suffices for many purposes, such as analyzing cases where habitually adjacent morphemes may combine and reduce into bound morphemes, a process known as grammaticalization. But for other purposes, such as reconstructing older syntactic patterns, there is need for a phrase-structural account.

2.2 Modern approaches to Vedic syntax

In more recent years, the syntax of Vedic has been investigated from a prosodic standpoint by Hans Henrich Hock (1996) and within the generative framework by Hale (1996). Both works concern themselves chiefly with explaining the placement of clitics, both consequently venturing to explain the structure of the Vedic left periphery. To avoid confusion, please note that both works appeared in the same volume and each responds to the other.

2.2.1 Hock's prosodic template

Hock begins his exposition by rejecting the notion that clitic placement must be a syntactic phenomenon. He cites work done on clitic strings in Pashto and Serbo-Croatian, where clitics, diverse in their functions, seem to crowd together into a single syntactic position. To show how the orders of these clitics are best accounted for with morphophonological templates, Hock provides the following for consideration.

(16) a. Serbo-Croatian P2 clitic string template (Hock 1996: 210-11):
li Aux/Cop. D A/G *se je*

where:

li	=	yes/no question particle
Aux/Cop.	=	Auxiliary or copula
D	=	dative pronoun
A/G	=	accusative/genitive pronoun clitic, except reflexive *se*
se	=	"reflexive" accusative/genitive clitic
je	=	3sg.pr. of the verb "to be"

b. Pashto P2 clitic string template (Hock 1996: 212):
xo ba am am me/mo de ye no

where:

xo	=	discourse particle ("indeed, really, of course")
ba	=	modal ("will, might, must, should, may")
am	=	first and second plural pronoun
me	=	first singular possessive pronoun
mo	=	first and second plural pronoun
de	=	modal ("should, had better, let") AND second singular clitic pronoun
ye	=	third person singular/plural pronoun
no	=	discourse particle ("then")

The takeaway here is that a fully syntactic approach could not account for the ordering of these clitic strings: some positions refer to categories, while others accommodate individual clitics, some of which properly belong to categories elsewhere accommodated.

Furthermore these strings are sensitive to phonological constraints: Serbo-Croatian, for instance, does not allow a string to contain two clitics that are homophonous, even though their functions may differ greatly.

Modeling his approach after the foregoing examples, Hock applies the idea of the morphophonological template to the Vedic initial string. His original template is as follows (though I have paraphrased the last sentence).

(17) Hock's 1989 Vedic initial strings template (Hock 1996: 215)

"NEXUS"	1	2	3	4	5
átho	Ý	P	Ṕ	E	Ď
sá	Ď	u	tú	naḥ	
tád		sma	vaí	enam	
Ṕ		ha	…	…	
		…	[RV: Ď]		

where:

NEXUS = Quasi-conjunctional elements such as Ved. Pr. *átho*
Ṕ = accented sentential particle
P = unaccented sentential particle
Ď = accented deictic (including demonstrative *tád, etád,* relative *yá-*, interrogative *ká-*, etc.); in the Rig-Veda this category includes preposition/adverbs (always accented)
E = unaccented pronominal (both deictic and personal)
Ý = other accented elements

All positions except Position 1 are optional, and likewise all positions except Position 1 can be doubled.

Because of the optionality of most positions and their ability to double, few examples in the data conform exactly to the template as it is presented. Consider the following examples (Hock's examples[1] [12a-d] [1996: 215-16]).

[1]The glosses of cited examples have been recast according to the Leipzig glossing rules. Original authors' translations have not been altered.

(18) a. KS 23.2

ádanti	ha	sma	vā́	etásya	purā́nnam
Ý	P	P	Ṕ	Ó	
1	2	2	3	4	
eat.3PL	PCLE	PCLE	PCLE	he.GEN.SG	earlier.food.ACC.SG

"They eat his earlier food." (PCLE = particle)

b. RV 1.186.7a

utá	na	īm	matáyó
Ý	E	E	
1	4	4	
&	we.GEN.PL	he.ACC.SG	thought.NOM.PL

'śvayogāḥ … rihanti
horse.yoked.NOM.PL … lick.3PL

"And our thoughts, yoked like horses, lick him …"

c. RV 1.186.9a[2]

prá	nú	yád	eṣām
Ó	Ṕ	RP	E
1	3	3	4
forth	Pcle	when	they.GEN.PL

mahinā́ cikitré
greatness.INS.SG be.visible.PERF.3PL

"When they have become visible in their greatness …"

d. MS 3.3.10[3]

daívīṁ	ca	vā́vā	asmā	etád
Ý	P	Ṕ	E	Ó
1	2	3	4	5
divine.ACC.SG	&[Pcle]	Pcle	he.DAT.SG	then

víśaṁ mānuṣī́ṁ ca ánuvartamānau karoti
tribe.ACC.SG human.ACC.SG &[Pcle] subservient.ACC.DU make.3SG

"He then makes both the divine tribe and the human one subservient to him."

[2]Hock's example refers to this line as RV 1.186.9b.
[3]I have added the position numbers to this example and emended a typo in *ánuvartamānau*.

Observe that in (18d), when all positions (the nexus excepted) are filled, the pattern of accented and unaccented words alternates. Hock claims that "the evidence of accent alternation supports the view that the template must be accounted for in the Phonological Form (PF), since alternating accentuation is a frequent target of phonological rules" (1996: 220).

But Hock also noticed differences between the initial strings of Vedic prose and those found in the Rigveda; in particular the placement of non-initial "Ď" elements in the Rigveda is more common in Position 3 than it is in 5. To incorporate these and the several other notes formally into the representation of his template, Hock offers the following reformulation.

(19) Reformulation of the 1989 template:

"NEXUS"	1	2	3	4	5
	{ Ď, Ẋ }	(P)	(Ṕ, ⟨Ď⟩)	(E)	(Ď)

Here, the curly brackets indicate that Position 1 does not permit doubling. Parentheses indicate the possibility of doubling. Angled brackets indicate that the enclosed pertains to the Rigveda only.

2.2.2 Problems with Hock's account

Hock's templatic account runs into several theoretical issues. He concedes that the alternating prosodic pattern of the template is not necessarily realized, "even in 'well-behaved' strings, since doubling can introduce several accented or unaccented elements in the same position and since at the same time any string-internal position may remain unfilled" (Hock 1996:227). Thus the prosodic pattern only holds for the template itself. Even so,

it is obvious that clitics, which cannot bear accent, must be incorporated into a prosodic word containing some accented element; so it is easy to see how the very existence of clitics lends itself to the alternating accent pattern which Hock describes. But the pattern itself must also be called into question. According to the literature (Chomsky and Halle 1968:77-9, Kager 1999:142-90), the tendency for accent alternation works at the level of morae, syllables, or feet. To posit, as Hock does, that words with lexical accent alternate with lexically unaccented words is an entirely different sort of claim. Since Hock imagines the template as a filter applied between Spellout and PF, we might assume that the filter passes the form along to the phonology, thus exempting the template from adherence to well-attested phonological principles. But this excuse would only indict the template as unprecedented. As Hock himself notes, Zwicky has said that "a quasi-morphological template with alternating accent would be highly unusual" (1996: 228). Given the weakness of the accent alternation argument, it is best ignored.

Another issue with Hock's account is that, contrary to expectation, it makes no attempt to account for the ordering of clitics. For instance, it is interesting that we find (in the later language) the sequences *u ha, ha sma,* and even *u ha sma,* but never **u sma*, **ha u*, **sma ha*, etc. Although this idiosyncratic clitic behavior seems like the kind of place best suited for a templatic approach,[4] Hock only says that some positions in the template "permit doubling." The omission throws into sharp relief the way Hock's template differs from the accounts on which he bases his method. The Vedic template is not prepared to account for the order of contiguous clitics, which is the sole function of the Serbo-Croatian and

[4]Note also that a templatic approach accounting for these three attested combinations could not follow quite the same combinatorial logic as the template Hock presents. In KB, for instance, *u* and *ha* (but not *sma*) occur in isolation and none is obligatory, so only a template with nesting can capture the situation. In TS, on the other hand, all three occur in isolation, but *u* never cooccurs with *ha* or *sma*, so only a template denoting exclusivity (here, with a slash) can obtain. In RV, each occurs in isolation, and none combine.

(1) KB: (u) (ha (sma))

(2) TS: (u) / ((ha) (sma))

(3) RV: (u) / (ha) / (sma)

Pashto templates cited. Rather, the Vedic template attempts to account for the order of categories that are both syntactically and morphologically distinct. Hock's analysis, under scrutiny, becomes indistinguishable from a rudimentary syntactic account. Furthermore the rough nature of this effectively syntactic account offers little more than description. Without any established theoretical backing, we are hard pressed to derive predictions from the templatic account that can be evinced elsewhere in the language. That is: even if the templatic account is flawless, it simply does not explain enough to be considered a final word on the matter.

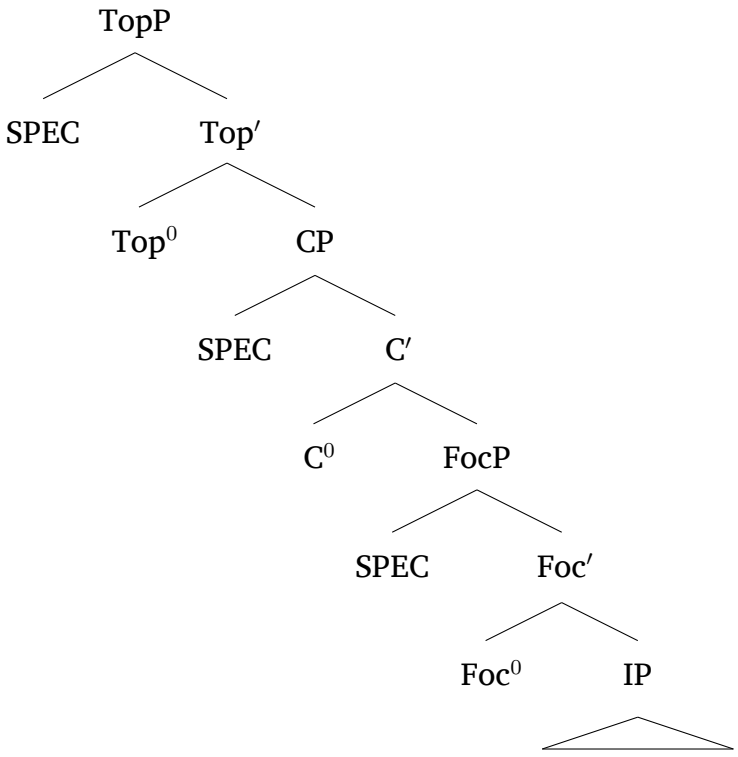
It is also worth noting that, even if this template reflects the reality of the situation and the form given by Hock is correct, it still does not explain how the language arrived at that particular form. Hock counts as an advantage to his type of approach that it "naturally accommodates some of the more idiosyncratic features of clitic strings, such as the fact that syntactically and functionally similar elements may appear in very different string positions." A template may accommodate such facts, but it cannot *explain* them. A different combination of the same templatic elements could yield the same prosodic pattern: Position 2 and Position 4 could be exchanged, as could Positions 1, 3, and 5. If the template is a synchronic reality, then there must also be a diachronic explanation for its form, which would in turn require a more comprehensive synchronic approach.

Mark Hale calls Hock's template "unabashedly stipulative" and criticizes the approach for disregarding syntactic structure altogether (1996: 169). This criticism is (only) irrelevant within the bounds of Hock's argument, since he claims that the template is applied "in a post-syntactic component of 'PF'" (1996: 213), thus allowing it to sweep away previous syntactic derivation. However, Hale's criticism obtains at the level of methodology, in answer to which he offers his own generative account.

2.3 Hale's generative account

Hale's work is based around refuting Hock's prosodic template approach to explaining the Vedic initial string. Hale's proposed structure, shown in (20), is basically a structural reformulation of Hock's template; both are based on straightfoward observations of attested word orders in the Rigveda.

(20)



For instance, Hale justifies the position of (the provisionally labeled) TopP by observing that topicalized material occurs to the left of everything, including complementizers and wh-moved elements, as in the following examples (Hale's examples [4] and [7] [1996: 169-70]).

(21) RV 4.12.2a

idhmáṃ	yás	te	jabhárac	chaśramāṇáḥ
kindling.ACC.SG	REL.NOM.SG	you.CL	bore.PRF.3SG	exerting.himself.NOM.SG

"who, exerting himself, bore the kindling to you" (CL = clitic)

(22) RV 10.114.7c

ā́pnānaṃ tīrthā́ṃ ká ihá prá vocat
attained.ACC.SG course.ACC.SG who.NOM.SG here forth speak.3SG

"who can proclaim here the attained course?"

To the right of CP, Hale notes the occurrence of accented deictics which seem to indicate the existence of some functional projection. Although not entirely comfortable with the label, he identifies this projection as FocP.

Hale goes on to show how this structure can account for data which Hock's template cannot; he provides the following examples (Hale's [22] and [24] [1996: 185]) to showcase its explanatory power.

(23) RV 1.110.2a

ābhogáyam prá yád ichánta aítana
nourishment.ACC.SG forth when seeking.NOM.PL go.PRF.2PL

"when, seeking nourishment, you went forth …"

(24) RV 7.103.2a

divyā́ ā́po abhí yád enam ā́yan
divine.NOM.PL water.NOM.PL around when he.ACC.SG.CL come.impf.3PL

"when the divine waters encircled him"

Unless Hock's Position 1 can be doubled (which he says cannot happen), the initial string elements in these examples are out of position.

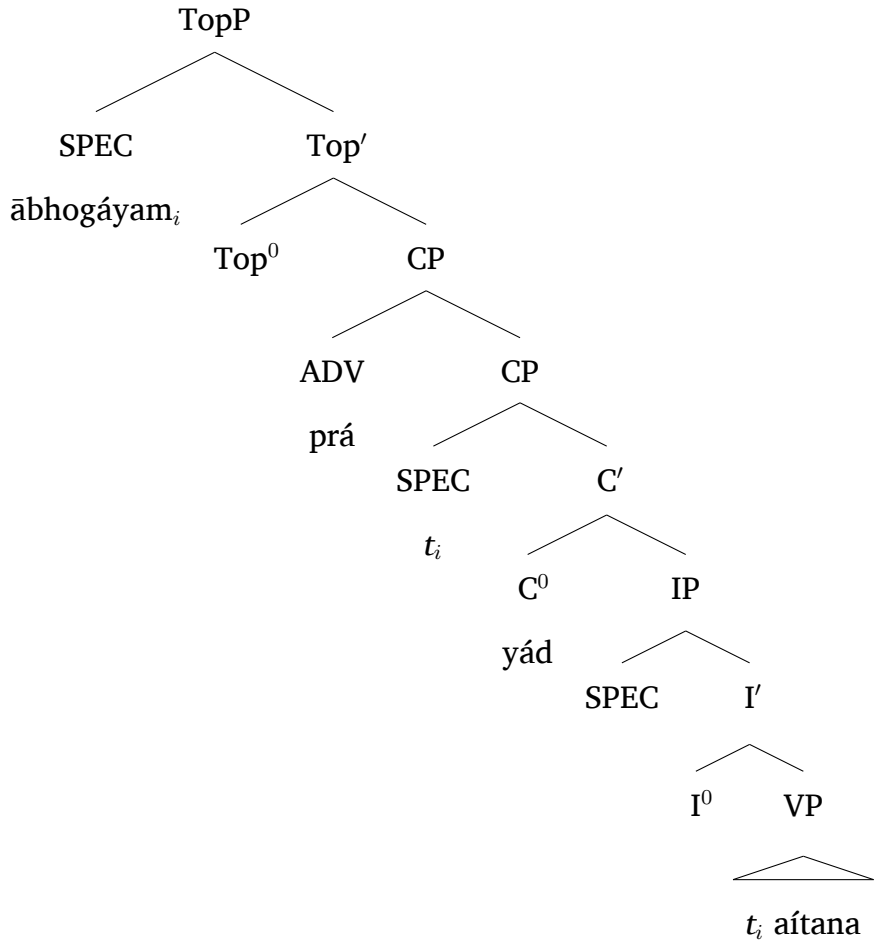
2.3.1 Problems with Hale's account

Although Hale's structure seems to attain descriptive adequacy, it runs into a number of theoretical problems.

The Adjunct Island Constraint

Hale offers the following diagram for the line in (23) (1996: 186). I have added the traces in order to show the movements necessary for deriving the structure.

(25) [5]



It is clear that in order for *ābhogáyam* to occupy SpecTopP, it must have originated within the embedded CP. But the meaning of *yád* here is 'when'; and the following lines show that the CP in this structure is an adjunct to the matrix clause.

[5]Hale gives the following in a footnote to this diagram: "I have simplified the tree somewhat in the following ways: I have not indicated the "traces" left by moved constituents (thus the subject NP, *ābhogáyam ichánta* has moved out of the SPEC,VP slot and in addition *ābhogáyam* has moved out of the subject-NP into the SPEC,TopP position) and I have chosen not to show verb movement to I, although it is possible that it took place in this clause (it would, of course, be string-vacuous)."

(26) RV 1.110.2
ābhogáyam prá yád ichánta aítana / ápākāḥ pŕ̥ñco máma ké cid āpáyaḥ
“when, seeking nourishment, you went forward, crafty ones, as some kind of friends of mine,”

saúdhanvanāsaś caritásya bhūmánā / ágachata savitúr dāśúṣo gr̥hám
“sons of Sudhanvan, after long journeying, you came to the home of liberal Savitar”

But if the CP in question is functioning as an adjunct, then it ought to be impossible to move anything out of it, since this would cause a violation similar to those in the starred English examples below.

(27) a. Johnny laughed when the dog chased the cat
b. * what$_i$ did Johnny laugh when the dog chased t_i?
c. * THE CAT$_i$ Johnny laughed when the dog chased t_i

Whether it be caused by wh-movement or focus-fronting, any movement out of the embedded CP of (27a) causes ungrammaticality. Cross-linguistic observations of this sort[6] have prompted the formulation of the Adjunct Island Constraint (restated below).

(28) Adjunct Island Constraint

Nothing can move out of an adjunct.

Hale’s account predicts structures that violate this principle, in large part because it is based on observations of structures that appear to violate it grammatically. Either the Adjunct Island Constraint does not apply in the Rigveda, or Hale’s account needs to be revised in some way.

[6]Most notably by Ross [1967], who coined the term “island” to describe any phrase out of which elements cannot be moved grammatically.

The Adjunction Prohibition

Another theoretical problem with Hale's account stems from his treatment of the lexical category exemplified by *prá* in (23), repeated here for convenience.

(23) RV 1.110.2a

ābhogáyam prá yád ichánta aítana
nourishment.ACC.SG forth when seeking.NOM.PL go.PRF.2PL

"when, seeking nourishment, you went forth …"

Although presented parenthetically, his assumptions regarding the nature of preverbs have significant bearing on the accuracy of his entire analysis.

Hale analyzes preverbs occurring left of relatives to be adjoined to the CP, which is not a problem for the clause given in (23). But he posits the same structure for all CPs, regardless of other properties.

(29) RV 8.101.3ab

prá yó vām mitrāvaruṇā / ajiró
forth REL.NOM.SG you.VOC.DU.CL Mitra.Varuṇa.VOC.DU swift.NOM.SG
dūtó ádravat
messenger.NOM.SG run.IMPF.3SG

"which swift messenger ran forth to you two, O Mitra and Varuṇa"

In the example above (Hale's example [19]), *prá* is analyzed as it is in (25), as an adjunct to a CP. However, this CP is functioning as an argument (here, the subject), which means it has been semantically selected (s-selected) by a lexical head (the verb). In English, it is impossible for anything to adjoin to an s-selected CP, as the following examples demonstrate.

(30) a. when you go to Italy, who do you visit?

b. * I like [[when you go to Italy] [who you visit]]
c. tomorrow, what will Bill eat?
d. * I know [[tomorrow] [what Bill will eat]]

[7]

In (30a), the CP *who do you visit* is not being s-selected, because it is the main clause. However in (30b), *who you visit* is being s-selected by the verb *like*. This difference in grammaticality is captured by a (supposedly universal) law known as the Adjunction Prohibition (Chomsky 1986: 6, McCloskey 2006).

(31) Adjunction Prohibition

Adjunction to a phrase s-selected by a lexical head is ungrammatical

(30a) allows the adjunction of the CP *when you go to Italy* because the CP *who do you visit* is the main clause and is therefore not s-selected by any lexical head, as it is in (30b). This prohibition, however, also predicts that (29) should be ungrammatical, if indeed *prá* should be analyzed as an adjunct. Therefore it is likely that the equation of preverbs with adverbs cannot stand (for which I hope to give further evidence in the following section), an insight which will require extensive reworking of Hale's model.

Preverbs

Hale makes brief mention of the category of *prá*, noting that such an element is "normally referred to in the Indo-Europeanist literature as a 'preverb' …I take these elements to be adverbs (or PPs with null objects in adverbial function) and to have the distributional

[7]We expect right-adjunction to the CP to be equally ungrammatical, but it is difficult to demonstrate this through example. The sentence *I know what Bill will eat tomorrow* succeeds because *tomorrow* parses as an adjunct to the verb *eat*. The grammatical reading blocks the ungrammatical one.

(1) I know what Bill [[will eat] [tomorrow]]

(2) * I know [[what Bill will eat] [tomorrow]]

range of adverbs …" (Hale 1996: 184). But in that case it is unclear why, in example (23), *prá* should be adjoined to the CP but construed only with the finite verb. We would expect the scope of an adverb to match the level at which it adjoins. The paradox is especially acute in (23), because the intervening participle *ichánta* is also perfectly capable of collocating with *prá*. However, the fact that preverbs lose their accent and are not separable when combined with participles, infinitives, and gerunds (Whitney 1896: 1085) allows one to reliably construe *prá* with *aítana*, but at the same time challenges Hale's assumption that preverbs "have the distributional range of adverbs."

Furthermore, collocations of preverb + verb closely resemble those of English verb + particle in their observed semantic effects. Just as English *blow up* is not intelligible as the semantic addition of [BLOW] and [UP], neither are the meanings of Vedic preverb + verb combinations completely intelligible by combining their meanings. Consider the following selection from the definition of *vac* 'speak' in Grassman's *Wörterbuch zum Rigveda* (1873: 1191).

(32) **vac** [Cu. 620], 1) *reden, sprechen* …

> Mit **ácha** 1) jemand, etwas [A.] für einen andern [D.] oder für sich selbst (med.) *herbeirufen*; 2) jemand [A.] *anrufen, begrüssen* …
> **ádhi** für jemand [D.] *fürsprechen, fürsorgen* …
> **â** 1) jemand [A.] *anrufen*; 2) jemandem [D.] etwas [A.] *aussprechen, zurufen*.
> **úpa** 1) jemand [A.] *ermuntern, antreiben* …
> **prá** 1) etwas [A.] *verkünden, kund machen*, auch 2) mit direkter oder indirekter Rede; 3) Loblied [A.] *aussprechen*; 4) jemand oder etwas [A.] *preisen* …

It is clear that these elements, however they should be treated, ought not to be classified along with adverbs, which do not exhibit similar behavior.

The Phase-Impenetrability Condition

Given the arguments put forth in the previous sections, it seems imperative that we repair Hale's analysis by not treating preverbs as adjuncts to CP. But if a preverb cannot be adjoined at CP, then it must have originated within the CP and been subsequently moved. Now we are left to determine where in the structure the preverb has been moved to. SpecCP could be the landing site, but in a line like (23), where both a preverb and a focused element occur to the left of the complementizer, the filling of SpecCP should make it ungrammatical to extract anything else. This is because the CP constitutes a phase. According to the theory, derivations occur not sentence by sentence, but phase by phase. In order for an element to move from a lower phase into a higher one, it must occupy the phase's edge, which (in the case of a CP phase) comprises SpecCP, C, and any adjuncts to CP. The Phase-Impenetrability Condition (PIC) formalizes this.

(33) Phase-Impenetrability Condition (Chomsky 2001: 13):

> In a phase HP with head H, the domain of H is not accessible to operations outside HP, only H and its edge are accessible to such operations.

Since CPs are posited universally to be phases, the PIC basically says that SpecCP acts as an "escape hatch," which is the only path by which material can leave the CP. In languages like English, this condition helps account for the long-distance movement of embedded wh- words.

(34) [$_{CP}$ what$_i$ did you say [$_{CP}$ t$_i$ that Bob thought [$_{CP}$ t$_i$ John should give t$_i$ to Mary?]]]

In the example above, the wh- word is able to move from its site of base-generation by hopping from one SpecCP to the next, a phenomenon known as "successive cyclicity." Since the traces of the word fill the lower specifier positions, nothing else can occupy them, which accounts for the English bans on things like multiple-wh movement and the cooccurrence of wh-movement with focus or topicalization.

(35) * [$_{TopP}$ to Mary$_j$ [$_{CP}$ what$_i$ did you say [$_{CP}$ t$_?$ that Bob thought [$_{CP}$ t$_?$ John should give t$_i$ t$_j$?]]]

(36) [$_{CP}$ what$_i$ did you say [$_{CP}$ t$_i$ that Bob thought [$_{CP}$ t$_i$ John should give t$_i$ to whom?]]]

(37) [$_{CP}$ to whom$_i$ did you say [$_{CP}$ t$_i$ that Bob thought [$_{CP}$ t$_i$ John should give what t$_i$?]]]

(38) * [$_{CP}$ to whom$_j$ what$_i$ did you say [$_{CP}$ t$_?$ that Bob thought [$_{CP}$ t$_?$ John should give t$_i$ t$_j$?]]]

It is crucial to Hale's analysis that *ābhogáyam* in (23) move through SpecCP on its way to SpecTopP. But if the escape hatch is blocked by a preverb, then this movement should be impossible. It is tempting to assert that in Rigvedic, CP is not a phase, that TopP is, and that the escape hatch function properly belongs to SpecTopP. Such a move would be premature, though, since the integrity of our poetic data is hardly sound enough to warrant overturning universals without a good deal more evidence. There are, however, some workable repairs (such as admitting multiple specifiers) which we will address in the following chapter.

2.4 A most puzzling phenomenon

Up to this point, I have only focused on Hale's difficulty in explaining (23). However, the criticisms expressed in the previous section are not unique to Hale's approach. Indeed it is the verse itself which seems to violate theoretical principles such as the PIC. Nor is it an isolated occurrence. I have found 8 verses where an element properly belonging to

the embedded CP occurs to the left of a preverb that also belongs to that CP: 9.73.6a, 1.110.2a, 1.161.3a, 5.32.1c, 6.15.14c, 5.15.2d, 7.103.2a, 10.123.8a. Let us take each example in turn.

(39) RV 9.73.6a

pratnā́n mā́nād ádhi ā́ yé samásvarañ
ancient.ABL.SG building.ABL.SG out.of to REL.NOM.PL together.sound.IMPF.3PL

"they who sounded together out of the ancient building"

In this example, the adpositional phrase *pratnā́n mā́nād ádhi* properly belongs with the embedded verb *ásvarañ* and seems to have violated the Adjunction Prohibition by moving across the relative pronoun *yé*. Furthermore the verb is combining with two preverbs: *sam* and *ā́*, one of which is occupying the position directly left of the relative, which should also prohibit *pratnā́n mā́nād ádhi* from moving to its observed location.

(40) RV 1.161.3a

agníṃ dūtám práti yád ábravītana
Agni.ACC.SG messenger.ACC.SG back REL.ACC.SG speak.IMPF.2PL

"what you replied to the messenger Agni"

This example incurs the same violations as the previous. The argument *agníṃ dūtám* has been illegally moved out of the embedded CP, even across the preverb *práti* which is blocking the escape hatch.

(41) RV 5.15.2d

jātaír ájātāṁ abhí yé nanakṣúḥ
born.INS.PL unborn.ACC.PL to REL.NOM.PL approached.PRF.3PL

"they who have attained the unborn through the born"

Once again, this example incurs the same violations though in greater number, since *ájātāṁ* is an argument of the verb and *jātaír* is not, thus making them separate constituents. It appears then, that this example contains three separate elements to the left of the relative.

(42) RV 5.32.1c

mahā́ntam indra párvataṃ ví yád váḥ
great.ACC.SG Indra.VOC.SG mountain.ACC.SG apart when open.2SG

"when, O Indra, you opened up the great mountain"

In this example, it is the Adjunct Island Constraint which is violated by the movement of *mahā́ntam párvataṃ* out of the CP, though again we see the added difficulty of having a preverb, here *ví*, blocking the escape hatch.

(43) RV 6.15.14c

ṛtā́ yajāsi mahinā́ ví yád bhū́r
truth.ACC.PL offer.SUBJ.2SG might.INS.SG away when be.2SG

"you will offer truths when you have become manifest with your greatness?"

(44) RV 7.103.2a

divyā́ ā́po abhí yád enam ā́yan
heavenly.NOM.PL water.NOM.PL to when he.ACC.SG come.IMPF.3PL

"when the heavenly waters came to him"

(45) RV 10.123.8a

drapsáḥ samudrám abhí yáj jígāti
drop.NOM.SG sea.ACC.SG to when go.3SG

"when the drop goes to the sea"

As in (42), these three lines appear to violate the Adjunct Island Constraint, because in each one an element has been moved out of an adjoined CP. And each one also contains a preverb in a position which ought to block that CP's escape hatch in any case.

Rigvedic syntax does not seem to conform to the theory, as these examples make apparent. Therefore it is with these most troublesome verses in mind that we ought to approach the task of investigating the language. Any analysis of Rigvedic syntax must account for this phenomenon.

2.5 Conclusion

In this chapter I hope to have shown that Hock's and Hale's accounts contain several theoretical complications which stifle their explanatory power beyond the level of descriptive adequacy. Hock's prosodic template, insofar as it treats syntactic phenomena, cannot replace a generative approach, and Hale's generative treatment (i.) violates the Adjunct Island Constraint, (ii.) violates the Adjunction Prohibition, and (iii.) relies on a misrepresentation of the category of preverb in order not to (iv.) violate the Phase-Impenetrability Condition. Nor does it seem that any small amount of tweaking can remedy these conflicts, since the verses themselves appear to violate supposedly universal constraints. As I have mentioned before, Hale's proposed structures are based on straightforward observations and appear (even despite their theoretical complications) to achieve descriptive adequacy. And regardless of our ability to explain them, we cannot dismiss the phenomena attested in the text without cause. In order to arrive at a more theoretically sound account of the data, I shall now turn to some work done in other languages, which might be brought to bear on the situation in Vedic.

Chapter 3

Parallels in other languages

In the search to reconcile the data from the Rigveda with theoretical explanations of modern (and thus more comprehensive) data, it benefits us to look for parallels in other languages. If one of our difficult problems with the text has already been solved elsewhere, we need only match up that explanation with Rigvedic examples and see how well it fits.

These problems, to summarize Chapter 1, are all generally word order problems. We observe discontinuous constituents, apparent island violations, and a certain degree of variability in the positions of Subject, Object, and Verb. Nevertheless the initial string or left periphery of the Rigvedic CP appears to be more rigid in its formulation, which allowed earlier grammarians to assign numbered positions to its composition (see Chapter 2).

In this chapter, I will briefly examine work done on verb-second and free word order phenomena, ending each look with a comparison to examples from the Rigveda. Finally I will argue that not all these approaches are equally effective. Although several explanations appear to warrant further investigation, the final possibility explored–that of post-syntactic reordering–requires more immediate attention.

3.1 Germanic V2

The rigidity of the Vedic initial string vaguely resembles that of the Germanic verb-second phenomenon (V2), since both involve the strict ordering of elements near the beginning of the clause. The German sentence has traditionally been analyzed as a sequence of positions, into which different kinds of elements may fit. The first position is the Vorfeld, "fore-field," which can host sentential adverbs or elements moved from lower in the clause. After the Vorfeld, the bulk of the sentence's material is included in the Satzklammer, "sentence frame." The Satzklammer begins with the finite verb, ends with the non-finite verb if there is one, and sandwiches the Mittelfeld, "middle-field," in between. The initial positions of Vedic are numbered.

		1^{st} Position	2^{nd} Position	
(46)	a.	rātryā	u hi	śīrṣant satyam vadati
		night	also indeed	head truth speaks

"also indeed by night he speaks truth in his head" (KB 2.6.11)

	Vorfeld	Finite Verb	Mittelfeld	Non-finite Verb
b.	den Hans	wird	Maria morgen	treffen
	the Hans	will	Mary tomorrow	meet

"tomorrow Mary will meet Hans" (Frey 2006: 235)

As this example demonstrates, in Vedic, second position contains a subset of the language's particles; in German, it contains the finite verb. It is possible that the mechanisms underlying these surface phenomena are similar, so explanations of Germanic V2 may yield some insight into the workings of Vedic CPs.

3.1.1 V2 as CP recursion

One of the most popular (pre-Rizzi 1997) explanations for V2 is that the finite verb moves from V to T, then from T to C, with the Vorfeld corresponding to SpecCP. Obviously the verb cannot move into C if there is an overt element occupying it, which explains why in German, V2 does not occur in embedded clauses. The difference is illustrated in the following examples.

(47) a. V2 observed in main clause

[$_{CP}$ den Hans [$_{C'}$ wird$_1$ [$_{TP}$ Maria morgen
the.ACC.SG Hans.ACC.SG will Mary.NOM.SG tomorrow
treffen t_1]]]
meet.INF

"tomorrow Mary will meet Hans"

b. no V2 observed in embedded clause

[$_{CP}$ dass [$_{TP}$ Maria morgen den Hans treffen
that.C) Mary[NOM.SG] tomorrow the.ACC.SG Hans.ACC.SG meet.INF
wird]]
will

"that tomorrow Mary will meet Hans"

In the main clause, the auxiliary verb *wird* moves into C; in the embedded clause, C is already occupied by the complementizer *dass*, so that *wird* cannot move.

This approach does not work equally well for all Germanic languages. In Danish, Icelandic, Yiddish, and others, the account breaks down when applied to embedded clauses, because these languages also exhibit V2 there. Many researchers, including Vikner (1995), deHaan & Weerman (1986: 86), Holmberg (1986: 110), Platzack (1986: 225), and Authier (1992) resolve the issue of embedded V2 by positing CP-recursion.

(48) Danish

vi ved [$_{CP}$ at [$_{CP}$ denne bog har Bo ikke læst]]
we know that.C this book has Bo not read

"we know that Bo has not read this book" (Vikner 1995: 67)

But the idea of CP-recursion in general is supported by the occurrence of complementizer stacking elsewhere, like in Dutch.

(49) Dutch

welk boek of / dat / of-dat Jan gelezen heeft
which book if / that / if-that John read has

"which book John read"

Here we see that the sentence remains grammatical whether the complementizer be *of*, *dat*, or both of them together as *of dat*. Vedic does not exhibit any such overt stacking of complementizers, but the mere fact that they are possible in an Indo-European language should lend some credence to an account positing CP-recursion in Vedic. Therefore let us apply the idea to the troublesome example (23) from Chapter 2.

(50) [$_{CP_1}$ ābhogáyam [$_{C'_1}$ ∅ [$_{CP_2}$ prá [$_{C'_2}$ yád ichánta
nourishment.ACC.SG NULL.C$_1$ forth when.C$_2$ seeking.NOM.PL
aítana]]]
go.PRF.2PL
"when, seeking nourishment, you went forth …"

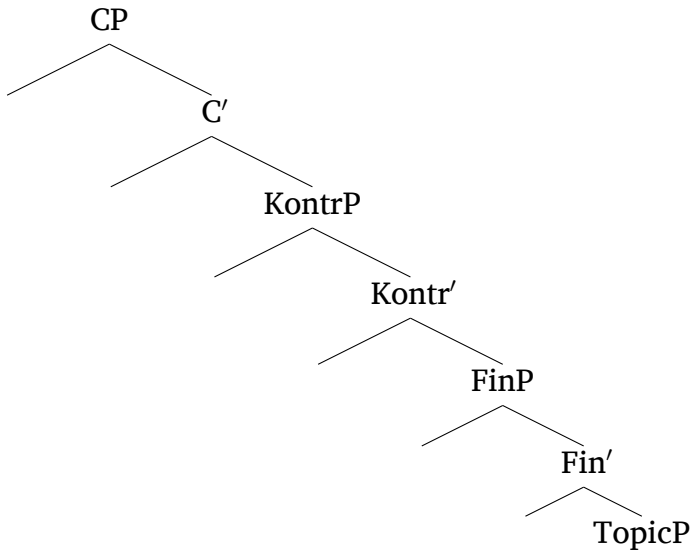
This yields us a Spec position for each element left of *yád*, but it violates the PIC because, with SpecCP_2 being filled by *prá*, *ābhogáyam* should not be able to be extracted. Taking *prá* as an adjunct to CP_2 would no longer violate the Adjunction Prohibition, since it is C_1 that will have been s-selected; agreement could be invoked (probably not without complication) to explain the morphological marking of C_2, but the scopal incongruity of adjoining preverbs at CP would stand.

It is clear that CP-recursion alone cannot explain what is going on here. But if we could take the CP_2 from (50) as something less than a phase, perhaps a "weak phase" or an XP with properties different from those of a normal CP, then these issues could all be resolved. But in order to explore the nature of this hypothetical category, and to determine whether it is the right path to follow, I will now turn to some work by Werner Frey (2006).

3.1.2 Frey's approach to V2

Werner Frey's (2006) account of V2 in German borrows the ideas of structural incorporation of topic and focus, as well as the FinP projection, from Rizzi's (1997) cartographic approach. He argues for a German left periphery (which he refers to more specifically as the "C-domain") of the following shape.

(51) Frey's model of the German left periphery (2006: 254)



In the above structure, SpecKontrP hosts material associated with contrastive focus and SpecFinP can host material moved out of the Mittelfeld to check a pure Extended Projection Principle (EPP) feature (Frey calls this "formal movement" (FM), and chooses Rizzi's FinP because it is not associated with a particular pragmatic interpretation). Since German only allows one element to occur before the finite verb, Frey posits a ban on multiple EPP features, and goes on to argue that the German Vorfeld can be filled in three different ways depending on what EPP feature the C-domain contains: by base-generation of sentential adverbs, via FM, or by focus fronting, as in the following examples (Frey's examples [18c] [2006: 243], [43], and [45] [2006: 255], respectively).

(52) a. base-generation

[$_{CP}$ Kein Wunder [$_{C'}$ spricht$_1$ [$_{TP}$ Peter so gut Französisch t_1]]]]
no wonder speaks Peter so well French

"no wonder Peter speaks French so well"

b. formal movement

[$_{FinP}$ leider$_1$ [$_{Fin'}$ hat$_2$ [$_{TP}$ t_1 [$_{TP}$ keiner dem alten Mann geholfen t_2]]]]
unfortunately has nobody the old man helped

"unfortunately nobody has helped the old man"

c. focus fronting

[$_{KontrP}$ den Max$_1$ [$_{Kontr'}$ meint$_2$ Eva [$_{CP}$ t$''_1$ dass [$_{TP}$ t$'_1$ der Chef t$_1$
the Max means Eva that the boss
mitnehmen sollte]]] t$_2$]]]
to.take.with should

"MAX, Eva thinks that the boss should take along"

Now suppose that, in applying Frey's approach to Rigvedic, we remove his prohibition against multiple EPP features. Consider the following possibilities.

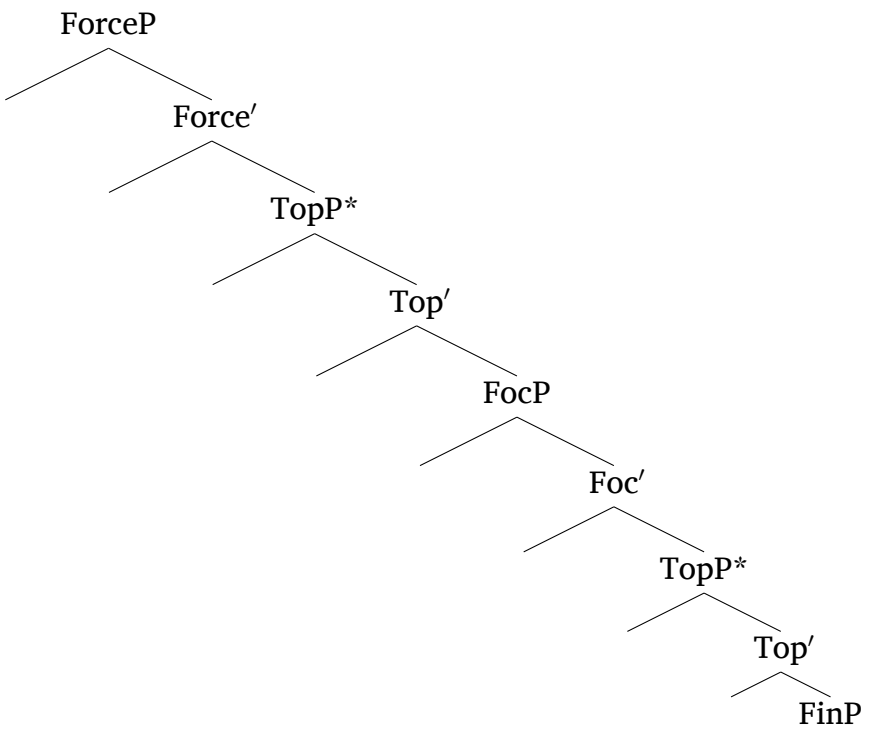
(53) a. [$_{KontrP}$ ābhogáyam$_1$ [$_{Kontr'}$ ∅ [$_{FinP}$ prá$_2$ [$_{Fin'}$ yád [$_{TP}$ t_1 ichánta t_2 aítana]]]]]

b. [$_{CP}$ ābhogáyam$_1$ [$_{C'}$ ∅ [$_{FinP}$ prá$_2$ [$_{Fin'}$ yád [$_{TP}$ t_1 ichánta t_2 aítana]]]]]

In both options, we must posit an EPP feature on the null head which causes *ābhogáyam* to move; in (53a) this would also require a contrastive reading of *ābhogáyam*. More interesting, however, is that *prá* and *yád* end up in FinP, the nature of which complements these elements nicely. Rizzi conceives of the C-domain as a "complementizer system," the top of which faces outward, giving the clause characteristics like question, declarative, relative, etc. The bottom faces inward, characterizing the TP below, hence the name "Finiteness Phrase" (Rizzi 1997: 283). Therefore it is reasonable to propose (at least preliminarily) that *yád* here is not a complementizer but a Fin° head working in concert with a null complementizer, and that this Fin° contains an EPP feature that can be checked by whatever category preverbs happen to be.

At this point we have altered Frey's proposal to more closely resemble Rizzi's, and we must ask ourselves whether it is not better just to adopt Rizzi's structure for Vedic. Besides identifying complementizers like *yád* with Fin° heads, this would require the adoption of a Force Phrase (ForceP), whose head selects the clause type, two Topic Phrases (TopP), and a Focus Phrase (FocP), arranged thus, where the asterisk indicates that each TopP can undergo recursion.

(54)



As far as our previous examples go, the main difference here is the name of the labels: it is now a Top° head responsible for the movement of *ābhogáyam*.

(55) [$_{TopP}$ ābhogáyam$_1$ [$_{Top'}$ ∅ [$_{FinP}$ prá$_2$ [$_{Fin'}$ yád [$_{TP}$ t_1 ichánta t_2 aítana]]]]]

The alterations to Frey's structure, as well as the adoption of Rizzi's structure, may work well for the example given, where *yád* is easily classified as a complementizer or a Fin° head, but neither can explain instances involving an inflected relative in *yá-*, as in the following example.

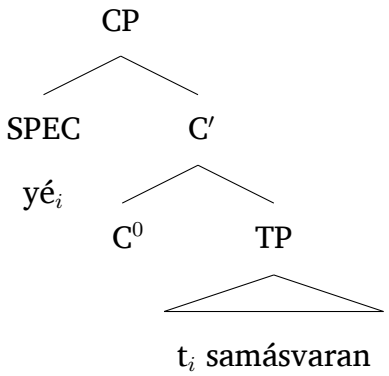
(56) 10.96.2a

hárim hí yónim abhí yé samásvaran
yellow.ACC.SG FOC womb.ACC.SG towards REL.NOM.PL together.sound.3.PL

"those who sang together towards the golden womb"

Here we expect *yé* to have moved into a specifier position from where it is base-generated inside the v-shell. Under any version of Frey's analysis, this leaves the phrase *hárim hí yónim abhí* without any defined place in the structure.

(57) hárim hí yónim abhí yé samásvaran



Likewise in Rizzi's structure, relative pronouns occupy the specifier of ForceP, the highest level of the C-domain, which cannot be preceded by topics (1997: 298). Therefore, for either analysis, we would need to posit yet another phrase level to accommodate all the moved elements.

So it seems that bringing a Germanic V2 account to bear on Rigvedic would not be a straightforward translation of structural analogs. For although the languages exhibit a similar rigidity in the arrangement of their leftmost material, scrutiny reveals that the nature of those arrangements is rather fundamentally different. Let us therefore no longer entertain these treatments as possibilities for Rigvedic.

3.1.3 Multiple Specifiers

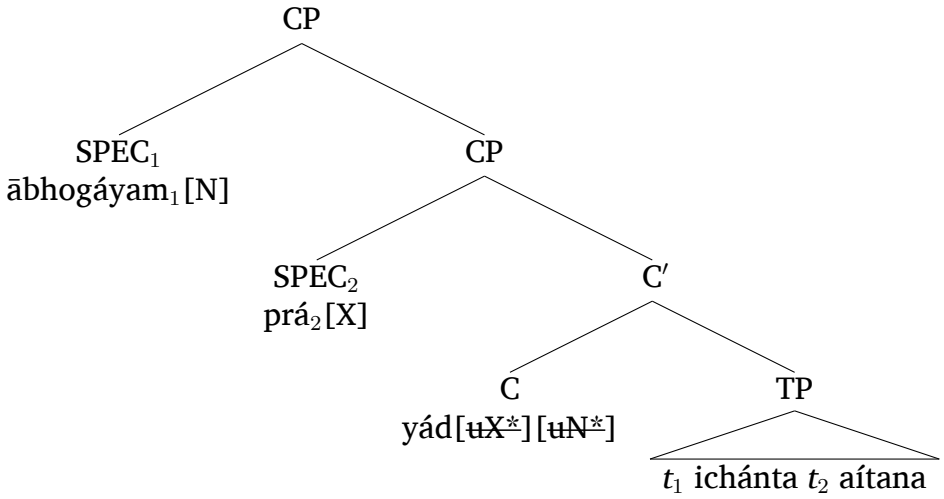
Multiple specifiers are prohibited in X-bar theory, but in his *Minimalist Program*, Chomsky states that "in principle, there might be a series of specifiers" (1995: 245). Chomsky applies his discussion of multiple specifiers to the phenomenon of Icelandic transitive expletive constructions (thus inviting application to Germanic V2), but a more apparent application obtains for Bulgarian, which exhibits multiple wh-movement.

(58) koj$_i$ na kogo$_k$ kakvo$_j$ t$_i$ e dal t$_j$ t$_k$
who.NOM.SG to who.DAT.SG what.ACC.SG be.3.SG given
"who gave what to whom?" (Rudin 1988: 461)

Positing multiple specifiers to CP is one straightforward way to account for this multiplicity. From there, and in accordance with the theory, it can be stipulated that the possibility for multiple specifiers exists as a parameter among languages, being allowed in Bulgarian but not in English.

The ramifications of allowing multiple specifiers are directly relevant to the mapping of the Rigvedic left periphery. If we take Rigvedic to allow multiple specifiers, we can account for example (23) thus:

(59)



The motivation for the movements of *ābhogáyam* and *prá* comes from the strong features on the complementizer *yád*. Based on examples (39-45) in Chapter 2, we can say something about these edge features without going into too detailed a discussion. Most obviously, all these examples exhibit the movement of a preverb, so the complementizer in each must bear a strong uninterpretable feature that can only be checked by the category to which preverbs belong (provisionally labeled X). The complementizer must also bear a strong uninterpretable feature that can be checked by at least two other categories: N (as in the above example) or P (as in [39]).

This account resolves the apparent island violations, because *ābhogáyam* never actually leaves the island; it is still sitting at the left edge of the embedded CP. The account could be falsified by finding matrix clause material intervening between the two moved elements, but we do not find such instances. Therefore it seems worthwhile to entertain this explanation as a viable possibility.

3.2 The free word order phenomenon

Some languages exhibit a great degree of variability in the acceptable arrangements of their constituents. Though much discussed in recent literature (Bayer and Kornfilt 1994, Broekhuis 2000, Fanselow 2001, Fanselow 2003, Hale 1983, Hinterhölzl 2006, Müller and Sternfeld 1994, Pullum 1982, Neeleman 1994, Saito 1992), the original forays into generative syntax left these cases almost entirely untouched, either citing stylistic contamination or leaving the problem for future researchers. Since Rigvedic appears to exhibit some degree of free word order, the phenomenon warrants discussion.

"Free word order" is actually an umbrella term. There are several different phenomena that appear responsible for a language's word order freedom. Languages with very free word order are often described as non-configurational, implying that word order is not an

important aspect of their syntax. The phenomenon of scrambling refers to an optionality of constituent arrangement in an otherwise ordered language, and has been variously explained as syntactic movement, a post-syntactic phonological process (occurring at PF), or post-syntactic stylistic movement (occurring consciously). The boundaries between these phenomena are not always clear, nor are the phenomena themselves particularly well understood.

3.2.1 Non-configurationality

Non-configurational languages are characterized by extremely free word order or extreme discontinuity of constitutents. The Australian language Warlpiri is one such language, as the examples below demonstrate.

(60) Warlpiri (Hale 1983: 6-7)

a. Ngarrkangku ka wawirri pantirni
man.ERG AUX kangaroo spear.NONPAST
"the man is spearing the kangaroo" (ERG = ergative, AUX = auxiliary)

b. Wawirri ka pantirni ngarrkangku.

c. Pantirni ka ngarrkangku wawirri.

Hale notes that as long as the AUX element *ka* takes second position, any permutation of subject, object, and verb is equally acceptable. Kayardild, also spoken in Australia, similarly exemplifies non-configurationality. According to Evans, "the order of phrases in Kayardild is basically free, with all orders attested. Case marking, not word order, codes syntactic relations" (1995: 92). This last sentence should strike us as especially pertinent to Rigvedic, where discontinuous constituents and word order variety seem to depend on the comprehensiveness of the language's inflection.

Could Rigvedic be a non-configurational language? Like Warlpiri, Rigvedic has elements rigid in their adherence to second position, while at the same time exhibiting a great variety of word orders. More generally, however, it may also be too drastic to classify languages as either configurational or non-configurational. Pullum (1982) and others suggest instead that configurationality exists on a spectrum, in which case we ought to rephrase the question to ask instead with what degree of regularity the language adheres to certain arrangements.

So, how important is word order in Rigvedic? In addition to housing several rigid initial positions, Rigvedic has been traditionally described as SOV, not as the result of direct investigation, but by analogy to the Vedic prose of the Brāhmaṇas. More recently, Gonda (1952) and Klein (1994) have looked into Rigvedic word order, specifically verb placement. In a subcorpus of Rigvedic, Klein finds about 62% of sentences to be verb-final, and about 20% to be verb-medial. Given that placing the verb first has the semantic consequence of conferring focus, and that even a more strictly ordered language like English sees non-canonical orderings in its poetry, this statistical preference for verb-finality basically confirms the previous suspicion that Rigvedic is verb-final. But with the percentage of verb finality attached to the claim, we are also prepared to place Rigvedic on a hypothetical spectrum of adherence to verb finality. Then, whether the language should be considered configurational or non-configurational is a matter of defining the terms.

In any case, it will not make sense to explore Rigvedic as a non-configurational language until we have exhausted all other possibilities. We do observe a noteworthy amount of word order freedom, but as long as there are observable patterns, we should begin by looking into these. So our next step must be to ask what syntactic mechanisms could be responsible for the observed variations.

3.2.2 Scrambling

A key component in discussions of so-called "free word order" is the phenomenon of scrambling. Scrambling refers to the seemingly optional reordering of certain kinds of words or phrases in otherwise configurational languages. The phenomenon manifests itself differently in different languages; the differences include 1) whether scrambling is bound within a clause or can occur across a clause-boundary (this is referred to as "long-distance scrambling"), 2) what kinds of elements can scramble, and 3) what topic/focus effects scrambling induces.

The formal study of scrambling began with Ross's landmark dissertation of 1967, in a section about node deletion. Ross's discussion was, in his own words, "highly conjectural," but his insights set the stage for future research. In particular, his assertion that cases of scrambling "are so different from other syntactic rules that have been studied in generative grammar that any attempt to make them superficially resemble other transformations is misguided and misleading," has inspired no shortage of attempts to prove him wrong. And although he wrote optimistically about the possibility of formulating rules for scrambling, he tentatively held the position that it was stylistic in nature, a process that altered well-formed syntactic output, and therefore not a concern for the syntax of a language. Currently there is little agreement concerning the nature of scrambling, the range of phenomena the term should cover, or to what extent different types of scrambling (such as clause-bound versus long-distance) deserve to be classified together.

Among those who treat scrambling within a generative framework, researchers tend to fall into two major camps. One of these positions is that scrambling, despite superficial differences, actually behaves like other well-established types of movement (Müller and Sternfeld 1994, Hinterhölzl 2006, Broekhuis 2000), though scholars differ on which specific types of movement scrambling patterns with. The other position is that scrambling

derives from variation in where elements may be base-generated in the underlying structure (Bayer and Kornfilt 1994, Neeleman 1994, Fanselow 2001, Fanselow 2003). Not all of these ideas are mutually incompatible; scrambling may resemble movement in one language but not in another. And for that reason, we must treat the definition of *scrambling* carefully; in particular, we should choose whether the term should cover the effect or the cause of the observable phenomenon. If it should cover the surface manifestation, then it is possible that some types of scrambling could be explained with movement, others with base-generation, and others as purely stylistic. But if there exists among the causes of the observed phenomenon some unique process that cannot be reduced to established theoretical terms, then it will be useful to reserve the word for that process instead. Also, since the present work deals with poetry, where style exerts a greater influence, let us reserve the term "scrambling" only for syntactic reordering. This will allow for a greater range of discussion about stylistic effects in Rigvedic.

In English, scrambling is typically considered impossible. In German, scrambling is clause-bound, limited to the arguments of the verb within the Mittelfeld. The opposite is true in Russian and Japanese, which exhibit long-distance scrambling.

(61) Clause-bound scrambling

a. Latin

videbo quem scio discipulum cras
see.FUT.1SG who.ACC.SG know.1SG student.ACC.SG tomorrow
"tomorrow I will see a student whom I know"

b. discipulum quem scio videbo cras

c. German

dass der Lehrer das Buch der
that.C the.NOM.SG teacher.NOM.SG the.ACC.SG book.ACC.SG the.DAT.SG
Studentin gab
student.DAT.SG give.PRF.3SG
"that the teacher gave the student a book"

d. dass der Studentin das Buch der Lehrer gab

(62) Long-distance scrambling

a. Russian (Müller and Sternfeld 1994: 333)

Vy posylku$_i$ videli [$_{CP}$ kak zapakovali t$_i$]
you.NOM.PL parcel.ACC.SG sawPL how did.upPL

"you saw how they did up the parcel"

b. Japanese (Saito 1992: 69)

sono hono Hanakoga Tarooga katta to omotteiru
that book.ACC.SG Hanako.NOM.SG Taro.NOM.SG bought C think
(koto)
fact

"Hanako thinks that Taro bought that book"

The Latin example illustrates the kind of permutations one observes in Latin literature. There may be focus effects in the scrambled attestations of Roman authors, but the lack of native speakers makes such an investigation difficult. The German example exhibits a topicalization effect on *der Studentin*: when the noun phrase is scrambled as in (61d), the sentence must be pronounced with a different intonation and the reading contrasts the female student against other possible entities which may have gotten the book from other sources. In the Russian example, the object of *zapakovali* appears outside of the embedded CP to which it formally belongs, though it seems to show no syntactic motivation (focus fronting, etc.) for moving.

Despite the mystery underlying the phenomenon, the usefulness of comparing Rigvedic to scrambling languages is obvious. Thus our understanding of the syntax of Rigvedic may hinge on our understanding of scrambling. So now let us consider the Rigvedic data in this context. Observe the argument orders in the following examples.

(63) Clause-internal scrambling in Rigvedic

a. RV 10.107.8d

etát sárvaṃ dákṣiṇaibhyo dadāti
this.ACC.SG all.ACC.SG Dákṣiṇā.NOM.SG + this.DAT.PL give.3.SG

"Dakṣiṇā gives them all this"

b. RV 10.116.5c

ugráya te sáho bálaṃ dadāmi
mighty.DAT.SG you.DAT.SG power.ACC.SG strength.ACC.SG give.1.SG

“power, strength, I give to mighty you”

Just as in the earlier German example, the arrangement of the arguments of the *give* verb here seems to be quite flexible: the accusative may precede the dative or follow it. More intriguing, however, we also find examples of arguments appearing across clause boundaries.

(64) Long-distance scrambling in Rigvedic

a. 1.161.3a

agníṃ dūtám práti yád ábravītana
Agni.ACC.SG messenger.ACC.SG back REL.ACC.SG speak.IMPF.2.PL

“what you answered to Agni the messenger”

b. 10.96.2a

háriṃ hí yónim abhí yé
golden.ACC.SG FOC womb.ACC.SG towards REL.NOM.PL
samásvaran
together.sound.IMPF.3.PL

“those who sang together towards the golden womb”

Just as in Russian and Japanese, Rigvedic objects seem able to exit their embedded clauses, lending credence to an account of the language that admits of long-distance scrambling. So it appears that modern approaches to Russian and Japanese scrambling will most avail us in our pursuits. However, the nature of the data in question demands special attention. If it is at all possible that some examples of apparent scrambling in Rigvedic may be the result of conscious manipulation on the part of the poet rather than part of the language’s syntax, we must address that first, since it has the potential to contaminate the data.

3.2.3 Post-syntactic reordering

As much as Ross's original hunch–that scrambling is stylistic–has been challenged in recent years, he was not alone in holding this opinion. In *Aspects*, Chomsky says in regard to the free word order phenomenon, "it should be emphasized that grammatical transformations do not seem to be an appropriate device for expressing the full range of possibilities for stylistic inversion," going on to note that stylistic inversion is "tolerated up to ambiguity" (1965: 126-7). Given the breadth of scrambling phenomena discovered and scrutinized in various languages, it would be naive to suggest that all scrambling can be explained as stylistic, especially since it often aligns with topic and focus effects. However, the possibility of conscious, post-syntactic alteration is apparent, and may mimic other instances of scrambling.

Syntacticians rely on the ability to manipulate well-formed linguistic output, in order to create examples of ungrammatical utterances. More useful evidence for post-syntactic manipulation comes to us in the form of common hypercorrections.

(65)

to quickly start running	→	quickly to start running
John's book	→	John his book
between you and me	→	between you and I

In these kinds of examples, the final form of the utterance derives not from the syntactic system of the language but from consciously applying a rule to the output of that system. The common belief that it is "incorrect" to split English infinitives leads to the creation of less natural structures. In the late sixteenth and early seventeenth century, when a spurious etymology stated that the English s-genitive was an informal contraction of *his*, it became stylish to use the "uncontracted" form. The speaker, intending to say *John's*, consciously replaces the word with *John his*, the so-called "his-genitive." And finally, the commonplace correction of *me and you* to *you and I* in schools has led to the creation,

in some English speakers' minds, of a rule that so converts every instance of the phrase (grammatical or not). Over time these kinds of novel constructions can become part of the syntactic system, but on their introduction via hypercorrection, each is an example of post-syntactic, conscious manipulation. Therefore we can establish that conscious reordering does in fact happen, so the question is whether some instances of apparent scrambling could be accounted for in this way, in particular whatever instances we seem to find in a wholly poetic corpus.

3.3 Conclusions

In this chapter we have briefly explored Germanic V2, multiple specifiers, non-configurationality, scrambling, and post-syntactic reordering as possible routes towards explaining syntax in the Rigveda. However, it is the last of these which deserves the most attention, because it is fundamentally different from the others. Since post-syntactic reordering operates on well-formed syntactic structures, it does not interact with other processes at the same structural level, and so the mechanics of its operation would not be discoverable through its effects on other phenomena. In fact its mechanics would seem to be at the mercy of the individual's consciousness and style, relegating its investigation outside the scope of syntax altogether. This distinction from syntax, however, gives post-syntactic reordering the power to contaminate otherwise useful syntactic data. Therefore, although we are not prepared to explore the specifics of its mechanisms, we must be able to identify if and where post-syntactic reordering takes place.

Chapter 4

Getting Syntax out of Poetry

The cardinal difficulty with investigating syntax in the Rigveda is that the corpus does not readily lend itself to serious examination. It is a playful informant, as it were, and if it were composed in a modern language, it would be summarily ignored by syntacticians on the understanding that poetry is not to be trusted. For even if there were no doubt that every structure found in poetry is grammatically *possible*, it is clear that poetic examples alone cannot offer us a clear picture of a language. That is, the language of poetry is, in general, marked.

Therefore we find many questions about Rigvedic syntax that we are unprepared to answer. To illustrate, let us consider the matter of discontinuous DPs. Some languages, like German, tolerate these in certain contexts, whereas other languages, like English, do not.

(66) a. Marco sieht **drei Bücher**
"Marco sees three books"
b. **Bücher** sieht Marco **drei**
"as for books, Marco sees three"
c. Marco sees **three books**
d. * **books**, Marco sees **three**

Modern theories of syntax have afforded us several possible explanations. In German, discontinuous DPs seem to precipitate out of verb-second (V2) phenomena, and so they have been variously explained by appealing to topicalization or an EPP feature. These explanations are especially relevant to Vedic, because (as mentioned previously) Vedic and German seem to show a similar kind of rigidity in their initial positions, and in addition, discontinuous DPs are attested in Rigvedic, as the following examples show.

(67) a. RV 3.11.3a

agnír dhiyā́ **sá** cetati
Agni.NOM.SG mind.INS.SG this.NOM.SG understand.3SG

"this Agni understands with mind"

b. RV 1.41.1c

nū́ cit **sá** dabhyate **jánaḥ**
never this.NOM.SG deceive.PASS.3SG person.NOM.SG

"this person is never deceived"

Possible explanations for these examples could, similarly to those for German, be sought in EPP features or topicalization; or by appealing to left- or right-dislocation; or perhaps, if the discontinuity appears optional and without semantic consequence, the phenomenon of scrambling. If we had only to choose from these possibilities, we might be able to decide which one fits the most data, and from there draw some tentative conclusions about Rigvedic syntax. It seems to me, however, that such exercises will afford us little actual insight until we have dealt with the elephant in the room.

Syntacticians are correct to discard poetic data, but for those who must, out of necessity, bring it to bear on syntactic questions, the first step should be to discriminate among the data and determine the boundaries of grammaticality. People do not speak in sonnets. And to reconstruct syntax entirely from poetry would not necessarily yield an accurate

picture of the language. In this chapter, I will explore what is meant by "style" or "poetic grammar," in order to develop a rubric for extracting meaningful syntactic data out of a poetic corpus.

4.1 Poetic permutations

It is common knowledge that the normal patterns of a language often seem distorted in poetic data. But as Ben Fortson states: "…this problem is sometimes overstated; it is incorrect to suppose – as many have – that poetic texts leave grammar by the wayside, and that poets were able to take 'licenses' willy-nilly. The language of poetry is just as strictly rule-governed as ordinary speech: though certain constructions only occur in poetry (leading some scholars to speak of a poetic grammar), they are still possibilities afforded by the grammar of the language" (2010: 153). Fortson's claim is conservative and sensible, but, as I hope to show, not entirely accurate.

Let us consider Fortson's claim not in the context of poetry, but of television. In season 2, episode 1 of *The Norm Show*, the main character Norm finds himself attempting to annoy an English professor. Consider the following exchange.

(68)

Norm:	Oh well uh, Shelley and ME really appreciate that.
Professor:	"Shelly and me," yes, of course, "Shelly and me."
Norm:	Yeah, ME especially appreciatES that.
Professor:	Ha! Very clever, Norm, very clever, yes.
Norm:	You sure DO AM BE a smart guy!

We are not tempted in this instance to say that Norm's last two utterances are grammatical, because it is clear that he is consciously manipulating their syntax in a language game of his own devising. Consider also the *Star Wars* character Yoda. Yoda's most distinguishing mannerism is his peculiarly affected English.

(69) a. Star Wars: Episode V: The Empire Strikes Back (1980)
Yoda: When nine hundred years old you reach, look as good you will not.

b. Star Wars: Episode III: Revenge of the Sith (2005)
Yoda: Faith in your new apprentice, misplaced, may be.

Rather than leaving out words or speaking with a foreign accent, Yoda distinctively disregards the usual, unmarked word order of English (presumably because his language faculty is different from that of humans). His transformations are not consistent from scene to scene or from film to film, but it is easy to create a system of transformations in order to produce novel Yoda-like utterances. The character's speech patterns have thus become a language game. What is interesting about the Norm and Yoda language games is that, whereas more familiar language games play with phonology, these play with syntax. Nevertheless, similar principles are at work. The game acts as a filter: well-formed linguistic output goes into the game, the game changes the output according to its rules, and in turn outputs an utterance which is not necessarily well-formed.

Poetry seems to be a sort of language game as well. Its rules require a certain metrical pattern or rhyming scheme, and poets seem to alter well-formed linguistic output in order to follow the rules of the game. Phonological alterations are obvious: for example, stressing the *to* of an English infinitive or forcing the pronunciation of *again* as either [əgeɪ̯n] or [əgɛn] depending on which word it needs to rhyme with. There is no reason to suppose that similar alterations of a syntactic nature do not also occur, though they would appear to be more difficult to pin down.

Consider the following English examples, each of them taken from the rhyming couplet at the end of one of Shakespeare's sonnets. I have put in boldface those portions which deviate from unmarked word order.

(70) a. So. 14.13-14
Or else **of thee this I prognosticate**:
Thy end is truth's and beauty's doom and date.

b. So. 27. 13-14
Lo, thus, by day my limbs, by night my mind,
For thee, and for myself, **no quiet find**.

c. So. 98.13-14
Yet seemed it winter still, and, you away,
As with your shadow **I with these did play**.

d. So. 138.13-14
Therefore I lie with her, and she with me,
And in our faults by lies **we flattened be**.

In (70a), the order of constituents in the verb phrase seems to have been strategically rearranged to put *prognosticate* in a position to rhyme with *date* in the following line. The same seems to have happened, *mutatis mutandis*, in the second lines of the next three examples. In (70d), the copula and the participle of the passive construction appear to have been exchanged. If I were to encounter this construction outside the poetic context, I would at least question its grammaticality, nor would I naturally produce such an arrangement. But of course, my judgments alone are not enough.

The contemporary English ear being perhaps unattuned to the grammatical nuances of Early Modern English, we can nevertheless explore Shakespeare's usage by performing corpus searches. Let us take the pattern *-ed be* from (70d).

The following list was generated by searching all of Shakespeare's works with the regular expression, "[e']d be[. ,]", which returns any instance where a word ending in *-'d* or *-ed* is followed by the word *be*. That search returned 43 results, all of them instances of inversion taking the form of a participle in *-ed* followed by the auxiliary *be*. I then sorted through the results to remove any obviously grammatical examples of inversion:

interrogatives, optatives, and imperatives. What remains is a set of only 10 instances. In each of these 10 examples, Shakespeare seems to have inverted the passive construction only in order to achieve a rhyme or to maintain a metrical pattern.

(71) Love's Labour's Lost, [IV, 3]:
I would forget her; but a fever she
Reigns in my blood and will **remember'd be**.

(72) Macbeth, [IV, 1]:
Macbeth shall never **vanquish'd be** until
Great Birnam wood to high Dunsinane hill
Shall come against him.

(73) Passionate Pilgrim:
Therefore I'll lie with love, and love with me,
Since that our faults in love thus **smother'd be**.

(74) Rape of Lucrece:
But cloudy Lucrece shames herself to see,
And therefore still in night would **cloister'd be**.

(75) Richard II, [V, 3]:
Against them both my true joints **bended be**.

(76) Sonnet 138:
Therefore I lie with her and she with me,
And in our faults by lies we **flatter'd be**.

(77) Sonnet 142:
Be it lawful I love thee, as thou lovest those
Whom thine eyes woo as mine importune thee:
Root pity in thy heart, that when it grows
Thy pity may deserve to **pitied be**.

(78) Tempest, [V, 1]:
As you from crimes would **pardon'd be**,
Let your indulgence set me free.

(79) Titus Andronicus, [II, 1]
Chiron, thy years want wit, thy wit wants edge,
And manners, to intrude where I am graced;
And may, for aught thou know'st, **affected be**.

(80) Two Gentlemen of Verona, [IV, 2]:
Who is Silvia? what is she,
That all our swains commend her?
Holy, fair and wise is she;
The heaven such grace did lend her,
That she might **admired be**.

In addition to this list, a second search was performed, this time using the regular expression, "be [^]*[e']d[. ,]", which returns instances of *be* followed immediately by any word ending in *-'d* or *-ed*, the vast majority of which are participles in passive constructions. This second search returned 1108 results, spread out across all kinds of more and less poetic environments.

It is therefore clear that Shakespeare vastly preferred the familiar passive construction of the form *be -ed*, despite having found 10 metrically convenient occasions to alter their order, outside the context of grammatical inversion. So, to what extent shall we consider these 10 examples to be "possibilities afforded by the grammar of the language"? In order to explore this gray area, consider the following two sets of English examples[1].

(81) a. I put the kettle on the stove.
b. ? The kettle on the stove I put.
c. ? On the stove put I the kettle.
d. ? Put I on the stove the kettle.
e. ?? On the stove put the kettle I.
f. ?? I the kettle on the stove put.

(82) a. John put Jane in a corner.
b. ?? Jane in a corner John put.

[1]These grammaticality judgments are my own.

c. * In a corner put John Jane.
d. * Put John in a corner Jane.
e. * In a corner put Jane John.
f. * John Jane in a corner put.

(81a) shows the unmarked order for a simple English sentence, and the examples below it offer a smattering of permutations that ought to be possible in English poetry; note that these utterances are, if not unacceptable, at least less acceptable than the first, or perhaps of variable acceptability, depending on context. But now observe the situation in (82). Here the acceptability of the alternative arrangements deteriorates much more drastically, although in fact these two sets are completely parallel. That is, every sentence in (81) has the same basic syntactic structure as its corresponding example in (82); the only differences are morphological and semantic. Therefore the discrepancy in judgments between these sets indicates that some extra-syntactic factors are affecting our calculations of grammaticality. For instance, in (81), the personal pronoun is marked for case, so there can be no ambiguity as to the subject of *put*; and the context helps coerce the correct interpretation: our real world knowledge of common kitchen scenarios seems to be seeping into our grammaticality judgments. On the other hand, the examples in (82) do not offer any such clues, so we are forced to wonder whether our judgments of the examples in (81) (and possibly even those in (82)) are really grammaticality judgments at all. Perhaps they could more accurately be called "intelligibility" judgments.

4.2 Intelligibility versus grammaticality

The syntactic value of grammaticality necessitates–by definition–that each element in a syntagm exist in a paradigmatic relationship with other elements of the same category. That is, NPs must be interchangeable with other NPs, CPs with other CPs, etc. regardless of their differences in meaning: the concept is illustrated by Chomsky's (1957) famous

sentence *#colorless green ideas sleep furiously*, which is completely unintelligible, and yet grammatical. Along similar lines, I contend that the sentence ??*I the kettle on the stove put* is completely intelligible, but ungrammatical. The relationship seems to parallel that of rectangles and squares: the set of utterances which are intelligible (through grammar, context, code, vel sim.) contains the subset of utterances which are intelligible through grammar. The difference between grammaticality and intelligibility seems negligible in most syntactic investigations: researchers are careful to avoid data which might have been consciously processed. Poetry, on the other hand, is almost always consciously processed, so in mining poetry for syntactic information, negotiating the difference between intelligibility and grammaticality is a necessary component of the investigation.

So how are we to go about finding the fine line between these two values? For a language like English, we could easily play with the context of the utterances, as in (81) and (82), present native speakers with poetic structures embedded in prose, or any number of methods that exploit our access to native speakers. But for an old language attested only in poetry, we need to be more clever.

4.3 Exploiting metrical variation

The hymns of the Rigveda, as previously mentioned, were composed in accordance with quantitative metrical patterns, meaning that the scansion of the verse is determined not by where the lexical accents fall (as in qualitative meter), but by how long each syllable is pronounced. Syllables containing long vowels or a vowel followed by multiple consonants take more time to say and are denoted as "heavy," their shorter counterparts being called "light." The effect of a quantitative meter thus resembles Morse code with its various patterns of long and short sounds. The basic rules of quantitative scansion mirror the phonological reality of morae. A mora is a basic unit of phonological length. For example,

a short vowel is one mora long, while a long vowel is two morae long. Consonants can also constitute morae, but not always. To understand why, a familiarity with the structure of the syllable is necessary.

The syllable comprises three main parts: first the onset, followed by the nucleus, and finally the coda. Vowels and syllabic consonants occupy the nucleus; this is the only obligatory part of the structure. A single consonant may occupy the onset, and the coda may contain multiple consonants. The chief difference between the onset and the coda is that the onset never constitutes a mora, whereas those in the coda do. Thus the sequences V̄, V.V, CV.CV, CVC, and VC are all two morae in length. In these terms, a light syllable is a one mora syllable; a heavy syllable contains two or more morae.

In traditional Indo-European poetry, and therefore in the Rigveda, it is the cadence of the verse where the metrical pattern is most rigidly adhered to, even though the quantity of the last syllable in the line (as well as the first syllable in the line) is indifferent (these are known as “anceps” syllables). The beginning of the verse tends to show a preference for long syllables, with short syllables showing up more frequently towards the end, and most Vedic meters in general tend towards an iambic rhythm. Nevertheless, in every meter employed, Vedic verses exhibit a great amount of variation (Arnold 1905: 7-9).

The three most common metrical patterns are laid out below. The first four or five syllables form the opening; the last four or five form the cadence. In the triṣṭubh and jagatī meters, the opening is followed by a caesura and a “break” that consists of three or two syllables, depending on whether the opening has four or five syllables, respectively. Since these meters comprise three parts, they are commonly referred to as trimeter verses. The chief difference between triṣṭubh and jagatī is the number of syllables. Triṣṭubh is 11 syllables, whereas jagatī is 12; the extra syllable adds a beat to the cadence, giving each verse type a distinctive rhythm. In this way, the triṣṭubh takes on a trochaic pattern,

while the jagatī is iambic. The gāyatrī meter is dimeter, meaning it contains only two parts: an opening and a cadence. In the following representations, 'H' denotes a heavy syllable, 'L' a light syllable, and 'A' an anceps syllable. The break and the caesura are also marked (| and ||, respectively), and it is important to note that both of these must coincide with word-boundaries.

(83) Common meters in the Rigveda

	dimeter
gāyatrī	A H A H | L H L A

	trimeter
triṣṭubh	A H L H H || L L | H L H A
	or
	A H L H || L L H | H L H A
jagatī	A H L H H || L L | H L H L A
	or
	A H L H || H L L | H L H L A

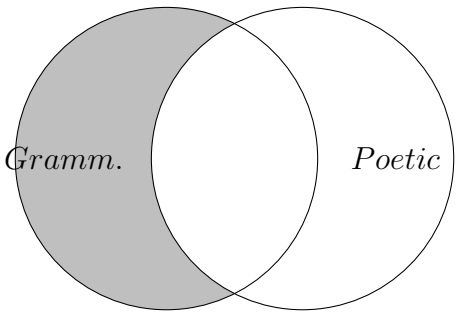
Every hymn deviates from its prescribed meter here and there, and some lines are much less well-behaved than others. Consider the following examples.

(84) a. RV 1.1.1a
agním īḷe puróhitaṃ A **L** H H | L H L A

b. RV 1.27.3c
pāhí sádam íd viśvā́yuḥ A **L** L **L** | **H** H **H** A

(84a) for instance, only deviates from the gāyatrī prescription once (in bold), while (84b) deviates four times. It is obvious that there must be some amount of deviation which would render a given poem defective: if, say, the meter deviates too often for a listener to determine the intended pattern or any pattern at all. Of course we cannot determine the exact value of that amount, but acknowledging that there is such a value allows us to infer that every verse lies at some point on a spectrum of metrical quality. Therefore we can state that the line given in (84a) is to some degree metrically preferable to the line in (84b).

Now, it is safe to say that the poet is working towards two main goals. One is that he must make himself understood, so he cannot stray too far from the patterns of his speech. The other goal is to fit a metrical pattern, so he cannot stray too far from the arrangement of heavy and light syllables which is prescribed for the line. And since these hymns were created and preserved by professionals, where one of these goals is not met, we should expect to see the other fulfilled. The only assumption we must make is that a professional Vedic bard would not both obfuscate his meaning and use an irregular rhythm, but that he would rather make grammatical concessions for the sake of meter, or metrical concessions for the sake of grammar. Just as Shakespeare deviates from his usual word order when strategizing rhymes and stress patterns, so it is reasonable to suppose that the Vedic poets did the same to fit their own patterns. This mentality of composition would lead to the situation illustrated by the Venn diagram below: all of the corpus is intelligible, but the circle on the right represents the portion of the corpus that conforms well to its poetic format; the circle on the left represents the portion of the corpus that conforms best to the grammatical patterns of the language.



(85)

To form a complete picture of the syntax and poetics of the corpus, we must know which parts of it fall into each of these sections. But without a complete understanding of the language's syntax, we cannot discern for just any given instance whether the poet is

sacrificing grammaticality for meter (the far right section of the diagram) or achieving both simultaneously (the middle section). On the other hand, our understanding of the corpus's metrical patterns is far greater, so by isolating lines that are metrically poor, we may find truer depictions of the syntax of the language. Therefore it is the shaded section of the diagram we should focus on, where according to my hypothesis meter has been sacrificed for the sake of grammaticality.

Edward Arnold, in his seminal work on Vedic Meter, anticipated such an investigation over a century ago: "It is difficult to think that a professional bard should without motive have left his verse with an irregular rhythm, when any European scholar, without serious practice of the art of versification, can put it into order for him with hardly a perceptible alteration in the meaning. It is also difficult to think that professional reciters and their instructors could by mere accident have left stanzas in a shape which must make them a perpetual burden to the memory. In these 'irregularities' there may be meanings not easily recognized, and for this reason they deserve to be carefully studied. (1905: 21)" It seems, then, that a necessary step in the investigation of Vedic syntax should be to reduce the corpus by boiling off the most metrically perfect portions. But in order to accomplish this, we must first find a way to quantify the quality of various metrical patterns.

4.3.1 Quantifying metrical quality

It would be tedious work to scan each line of the Rigveda looking for metrical irregularities, but thanks to the work of Barend A. van Nooten and Gary B. Holland, who created the original *Rig Veda: a Metrically Restored Text*; and to Karen Thomson and Jonathan Slocum, who further edited and published the electronic version of this work; we have a digital version of the text which lends itself to being easily and quickly scanned by computer programs. The programs themselves are modest Linux shell scripts employing a brute-force search and replace process which appends to the right of each line its

scansion as a string of Hs and Ls bordered by As, as in examples (84a) and (84b). One of these programs generated a scanned version of the Rigveda. Another counted the number of times each pattern occurred, and appended the number to the right of the scansion, yielding a version of the text taking the following form.

(86) 1.001.01a agním īḷe puróhitaṃ :ALHHLHLA: 1979
1.001.01b yajñásya devám r̥tvíjam :AHLHLHLA: 3316
1.001.01c hótāraṃ ratnadhā́tamam :AHHHLHLA: 4930 …

The resulting version of the corpus not only tags each line with its metrical frequency; it also allows us to search for certain metrical patterns or lines containing a certain number of syllables.

4.3.2 Reducing the corpus

Since the optimal versions of each metrical pattern are known to us, at least in part, by the relative magnitude of their frequency, we can safely correlate infrequency with poor meter and then (per hypothesis) with more reliably grammatical arrangements. Having found the frequency of each line's metrical pattern, we now also have an easy way to isolate the worst lines for separate study. Appendix B is a subcorpus: a list of all the lines of 8, 11, and 12 syllables whose scansions represent the first percentile of metrical frequency.

Uses for this kind of metrical discrimination abound. For example, isolating the metrically infrequent lines brings to the fore lines which may require further emendation. Thus upon checking the program's accuracy, several lines appeared to have been incorrectly scanned. The problem was not with the program, however, but with the lines themselves.

(87) 1.023.24d índro vidyāt sahá ṛ̥ṣibhiḥ :AHHHLLLLA: 1
1.031.01a tuvám agne prathamó áṅgirā ṛ̥ṣir :ALHHLLHHLHLA: 161
3.043.05c kuvín ma ṛ̥ṣim papiv̐āṃsaṃ sutásya :AHLLHLLHHLHA: 2
4.042.08b saptá ṛ̥ṣayo daurgahé badhyámāne :ALLLHHLHHLHA: 1
8.008.06a yác cid dhí vām purá ṛ̥ṣayo :AHLHLLLLA: 1
8.070.14a bhū́ribhiḥ samaha ṛ̥ṣibhir :ALHLLLLLA: 1
8.100.06d apā́vṛ̥ṇoḥ śarabhā́ya ṛ̥ṣibandhave :AHLHLLHLLLHLA: 1
9.068.07b sóma ṛ̥ṣibhir matíbhir dhītíbhir hitám :ALLLHLLHHLHLA: 2
10.013.04c bṛ̥haspátiṃ yajñám akṛ̥ṇvatá ṛ̥ṣim :AHLHHLLHLLLA: 12
10.023.07b táva ca indra vimadásya ca ṛ̥ṣeḥ :ALLHLLLHLLLA: 3
10.107.06a tám evá ṛ̥ṣiṃ tám u brahmā́ṇam āhur :AHLLHLHHHLHA: 2

The disyllabic *a,ā+ṛ̥* must sometimes be read as *ar,ār* (Arnold 1905:289), though it is never written this way in the manuscripts. The metrically restored text used for this project should account for this contraction, but these examples seem to have escaped notice in the editing process. Emendation from *a,ā+ṛ̥* to *ar,ār* yields significantly more frequent metrical patterns for most of these lines.

(88) 1.023.24d índro vidyāt sahá rṣibhiḥ :AHHHLHLA: 4930
1.031.01a tuvám agne prathamó áṅgirā rṣir :ALHHLLHHLHA: 351
3.043.05c kuvín ma rṣim papiv̐āṃsaṃ sutásya :AHHHLLHHLHA: 1388
4.042.08b saptá rṣayo daurgahé badhyámāne :AHLHHLHHLHA: 683
8.008.06a yác cid dhí vām purá rṣayo :AHLHLHLA: 3316
8.070.14a bhū́ribhiḥ samaha rṣibhir :ALHLLHLA: 691
8.100.06d apā́vṛ̥ṇoḥ śarabhā́ya rṣibandhave :AHLHLLHHLHLA: 662
9.068.07b sóma rṣibhir matíbhir dhītíbhir hitám :AHLHLLHHLHLA: 662
10.013.04c bṛ̥haspátiṃ yajñám akṛ̥ṇvatá rṣim :AHLHHLLHLHA: 2313
10.023.07b táva ca indra vimadásya ca rṣeḥ :ALLHLLLHLHA: 80
10.107.06a tám evá rṣiṃ tám u brahmā́ṇam āhur :AHHHLHHHLHA: 52

Thus the exercise of tagging and sorting the corpus by metrical frequency proves immediately useful. My purpose for the process in this work is to explore syntactic variations, but I hope that in the future this method will offer various other insights into other metrical texts.

To show how this reduction may aid in syntactic investigation, let us consider again the troublesome example from Chapter 2. But this time, we can also consider the frequency of its scansion, and thus the likelihood that the poet may have tampered with its grammar.

(89)

RV 1.110.2a	meter	occurrences
ābhogáyam prá yád ichánta aítana	AHLHLLHHLHLA	662

This line employs the third most frequent pattern for a 12-syllable line, placing it in the 74^{th} percentile. Therefore this line ranks relatively low in the realm of grammatical trustworthiness. For comparison, consider the following stanza.

(90)

RV 1.10.6	meter	occurrences
tám ít sakhitvá īmahe	AHLHLHLA	3316
táṃ rāyé táṃ suvī́riye	AHHHLHLA	4930
sá śakrá utá naḥ śakad	AHLLLHLA	621
índro vásu dáyamānaḥ	AHLLLLHA	10

It is clear from the frequencies of their scansions which of these lines should attract our scrutiny. Likewise, we see that the discontinuous DPs showcased in (67) both occur in lines with extremely frequent scansion and so are not to be trusted as sources of grammatical insight. To illustrate the point further, let us try shuffling the words of (67).

(91)

a.

RV 1.41.1.c	meter	occurrences
nū́ cit sá dabhyate jánaḥ	AHLHLHLA	3376

b.

Some possible permutations	meter	occurrences
nū́ cit sá jáno dabhyate	AHLLHHLA	11
nū́ cid dabhyate sá jánaḥ	AHHLHLLA	27
nū́ cij jáno sá dabhyate	AHLHLHLA	3316
sá jáno nū́ cid dabhyate	ALHHHHLA	29
sá jáno dabhyate nū́ cit	ALHHLHHA	37

If we rearrange the words to keep the DP together, we cannot form a line with popular scansion, except by collocating *sá jánaḥ* in the exact reverse of its normal order. We can draw two conclusions from this exercise: first we can tentatively posit that *jáno sá* is ungrammatical as a variation of *sá jánaḥ*; more generally we can conclude that the attested

line does not constitute evidence of grammatical discontinuous DPs in Rigvedic, since the poet clearly had metrical motivation to break up the phrase.[2] Of course he would have had more methods at his disposal than simple rearrangement, such as finding synonyms etc., but of all the available ways by which a poet might improve a line, rearranging the order of words is both obvious and easily replicated by modern scholars, even those "without serious practice of the art of versification."

4.4 A method for syntactic exploration

In this chapter, I hope to have shown that the difference between grammaticality and intelligibility is real and must be acknowledged and scrutinized if we are to navigate a corpus containing consciously manipulated material.

Therefore, in order to investigate syntax in a corpus of poetry alone, it is necessary to categorize utterances by how well they conform to the poetic format. Utterances that conform to the format well are unreliable because it is unclear whether the syntax has been distorted. Utterances that contradict the poetic format, especially where simple, obvious alterations can improve them, are likely to betray natural syntactic patterns. For the purpose of investigating syntax in the Rigveda specifically, this is the method I propose: to consider observations of syntactic phenomena within their metrical contexts, identifying possible metrical motivation for post-syntactic alteration; and having isolated the metrically worst lines in the Rigveda, to compare their apparent grammatical patterns against those of more metrically preferred lines. By following these principles, and wield-

[2]N.B.: There are two rearrangements that fare better than the original:

sá nṹ cid dabhyate jánaḥ	AHHHLHLA	4930
jáno nṹ cit sá dabhyate	AHHHLHLA	4930

But these place *nṹ cit* in a completely abnormal position.

ing the ability to quantify any given line's relative metrical optimality, I believe we can form a clearer picture of the syntax of the language. In the next chapter, we will explore several grammatical phenomena in the Rigveda using evidence from metrical frequency.

At the very least, the contribution of a scanned version of the Rigveda with scansion frequency annotations should help ease the development of certain future Rigvedic investigations, since it allows a researcher to search for lines based on their metrical patterns or to quickly compile metrical statistics.

Chapter 5

A statistical method for discriminating grammatical patterns

Though it is possible that Rigvedic was unique among the languages of the world in a way that would cause us to reevaluate certain claims to linguistic universality, it is much more likely that Rigvedic was not extraordinarily different from other languages. Having called into question the integrity of the data, and furthermore having pared the data down according to the likelihood of post-syntactic conscious manipulation, we can now begin a fresh syntactic inquiry of the language.

Note, however, that many of the most well-established facts about Rigvedic are not at all challenged by this new method. For instance, Rigvedic is particularly morphologically rich and, like Latin and some Romance languages, does not require the expression of subject pronouns. The extent of this phenomenon in the corpus makes it effectively self-evident. Nor could the method of investigation outlined in Chapter 4 approach this particular point, since to do so would require far more extensive reworkings of lines than simple rearrangements of existing elements. Nor can the method contribute more to

the analysis of finer-grained processes like compounding, and it should be applied much more carefully to investigations of clitic behavior, because these phenomena interface more closely with the morphology and phonology of the language. Comparing the frequency of patterns between the corpus and subcorpus may yet aid in these investigations, but not necessarily evidence from potential rearrangement, since in these cases it would mean altering word choice and morpheme boundaries.

It will first be necessary to support the principles explored in the previous chapter with a statistical foundation, before we can reliably correlate poor meter with good grammar. This task–the purpose of this chapter–will involve searching for variations in grammatical patterns (such as word order) and mapping those variations onto their distribution among lines of differing metrical optimality. To accomplish this mapping, we will need to catalog the occurrences of two competing grammatical patterns in a table like the following.

(92)

scansion	frequency	rank	Type A tokens	Type B tokens
ALHHHHHA	1000	1	5	3
AHLHHHHA	600	2	3	2
AHHLHHHA	50	3	2	2
AHHHLHHA	20	4	1	2
AHHHHLHA	10	5	0	3

This example table, if it described actual data from the corpus, would show that as meter becomes worse, the probability of finding a token of type A decreases, while that of finding a type B token increases. That kind of correlation would indicate that the pattern expressed by type A may be merely a product of metrical convenience, and that type B expresses the grammatical pattern, since it arises with the relaxation of conscious, poetic manipulation. It is unlikely that we will find such distributions in the actual corpus, and there may be several kinds of correlations among different pairs of types. For example, we should expect to find similar frequencies for each token in the highest ranked lines, if the metrical shape of both types is similar. If they are dissimilar, we should expect the metrical pattern of each line to determine which type is favored. In both these instances,

we should expect the grammatical pattern to be favored more as the lines descend in rank. If the types exhibit free variation, we should expect to find whichever type the meter favors, and no instances where rearrangement can improve it.

The task of defining the relationship between meter and syntax is greatly accelerated by the automated tagging of the corpus, which was accomplished via the computer script described in the previous chapter. Nevertheless we are at the mercy of several complicating factors: bluntly, some pattern searches are easier to automate than others. Consider for instance the polysemy of an ending like *-i*: by itself this could indicate a neuter plural a-stem noun, a third person singular present active indicative verb, a neuter singular i-stem noun, a locative singular noun, and many other things. Furthermore, a search for words ending in *-i* will also return any words that only *happen to end* with *-i*, among them words with longer endings like *-nti* or *-mahi*. Therefore, the clearest and most easily obtained results will come from searches that target longer, more distinctive pieces of morphology; these are the focus of the present chapter. Though we are forced to limit this phase of the investigation along these lines, it will be sufficient so long as we can establish a link between metrical and grammatical patterns.

After drawing parametric conclusions from the data collected with this method, we may be able to extrapolate some generalizations on the nature of phrase structure in Rigvedic, according to the principles of Universal Grammar. By employing the implications that some parameter settings exhibit with respect to each other crosslinguistically, we may be able to bridge some of the gaps introduced by the limitations of the corpus.

5.1 The position of the genitive with regard to its head noun

Lacking a tagged corpus, it is nevertheless possible to search for distributions of various word orders using regular expressions, by targeting subsets of grammatical phenomena which feature more distinctive morphology. It would be tedious, for example, to compile every genitive noun in the corpus in order to canvass their positions with regard to their head nouns, because genitives from different declensions end in various ways, and these often resemble unrelated morphemes. In general, the polysemy of shorter endings is greater. However, many plural genitives end distinctively in the sequence, $\bar{V}$ + nām. Regular expressions allow us to search for this basic pattern while allowing a certain degree of freedom at any specified point.

(93) "(ā|ā́|ū|ū́|ī|ī́|r̄|r̄́)[ṇn](ā́|ā)[mṃnṇñṅ] "

This expression searches for a sequence of four characters: first, any of the long vowel options specified in the parentheses, followed by either of the nasal consonants in the square brackets, followed by either the accented or unaccented long a, followed by any of the nasals in the final set of square brackets, followed by a space. It will return any words ending in -ānā́m, -ū́ṇāñ, -īnāṃ, etc. So although it is not possible to automate the discovery of all genitive nouns, we can do so for all genitive nouns matching this particular pattern, with little interference due to homophonous morphology. The cross-section of genitives yielded thus can be analyzed "by hand" to determine whether it fits the "genitive X" or "X genitive" pattern.

Since the frequency of a particular metrical pattern is only relevant with regard to other lines where the possibility of that pattern exists, we must only exploit meter in comparing like against like: octosyllabic lines against octosyllabic lines, hendecasyllabic against hendecasyllabic, and dodecasyllabic against dodecasyllabic.

In the following tables, all uses of the genitive were considered which depend upon another noun: the possessive, partitive, objective, subjective, etc. and none of those uses in which the genitive is an argument of a verb or preposition. Instances where the genitive depends on an interrogative noun were also excluded. When the genitive was an adjective adjoined to a genitive noun, the constituent noun phrase was considered. The leftmost column denotes the ranking of each set of lines according to the frequency of their metrical configurations. The two adjacent columns count the number of tokens from each grammatical pattern. So in the first row of the first table, the data tells us that lines exhibiting the most frequently occurring metrical rhythm account for 33 instances of genitive plurals in $\bar{V}$ + nām preceding their head nouns, and 2 instances of the same following their head nouns.

(94) Genitive distribution in 8-syllable lines

scansion	frequency	rank	genitive X	X genitive
AHHHLHLA	4930	1	33	2
ALHHLHLA	1979	2	4	0
AHHLLHLA	1362	3	11	0
AHHHHHLA	108	4	0	2
AHHHLHHA	92	5	3	0
AHHHHLHA	85	6	1	3
AHHHHLLA	75	7	1	0
AHLHHLHA	68	8	1	1
AHHHHHHA	64	9	0	3
AHLHHHHA	54	10	2	1
ALHHLHHA	37	11	0	1
ALHHHLHA	33	12	1	2
AHHLHLHA	32	13	0	1
AHHLLHHA	30	14	1	0
AHHLHLLA	27	15	1	0

The multiple subdivisions of the corpus reduce the sample size in data like this, but we should always expect to find far fewer tokens in the sets of lines ranked lower than the first handful. In the table above, the top three rows represent 90 percent of all 8-syllable lines, while rows 4 through 15 represent the other 10 percent. Tallying the results of the 90 percent together, the tokens of the most metrically preferred lines, we see an overwhelming preference for the preceding genitive. However in the bottom 10 percent, following genitives are about equally as common.

Further analysis of the top ranked sets of lines reveals a metrical motivation for their overwhelming preference towards the genitive-X pattern. The metrical shape of a genitive plural noun must be at least three syllables, the last two both being heavy. By homing in on the tell-tale -HH ending, we can break down each of the top three metrical patterns according to the number of positions they contain which might be able to host a word matching these quantities. The following breakdowns show where it is possible to find genitive plurals in the top 3 ranked lines: the position of the -HH ending is in boldface; the underline indicates the minimum size of the genitive.

(95) Rank 1 metrical pattern
contains two possible places for a genitive plural:
A**HH**HLHLA
AH**HH**LHLA

(96) Rank 2 metrical pattern
contains one possible place for a genitive plural:
AL**HH**LHLA

(97) Rank 3 metrical pattern
contains one possible place for a genitive plural:
A**HH**LLHLA

Since the top ranked pattern affords more places to host words of this particular shape, it is not surprising to find more genitive-X tokens in those lines: if its noun phrase is contained within the pāda, the genitive plural can only occur at the beginning, providing a metrical motivation to postpone its head noun.

A similar situation is found in applying the same search and breakdown to lines of 12-syllables.

(98) Genitive distribution in 12-syllable lines

scansion	frequency	rank	genitive X	X genitive
AHLHHLLHLHLA	1190	1	3	8
AHHHHLLHLHLA	650	2	22	11
AHHHLLHHLHLA	523	3	6	1
AHHHLLLHLHLA	468	4	8	1
AHLHHLHHLHLA	211	5	2	0
AHHHHLHHLHLA	209	6	3	0
AHHHLHLHLHLA	183	7	2	0
ALHHHLLHLHLA	139	8	1	0
ALHHHLHHLHLA	69	9	0	1
AHLLHLHHLHLA	38	10	0	1
ALLHHLLHLHLA	35	11	0	1
AHHHLHHHLHLA	21	12	0	1
AHHHHLLLLHLA	9	13	1	0
ALHHLHHHLHLA	6	14	1	0
ALHHHHHHLHLA	5	15	1	0
AHHHHHLHLLLA	1	16	0	1

Here again it is clear that the distribution in the top ranked sets correlates with the number of locations in the metrical pattern which could host a genitive plural token.

(99) Rank 1 metrical pattern
one place for genitive plural:
AHL**HH**LLHLHLA

(100) Rank 2 metrical pattern
three places for genitive plural:
A**HH**HHLLHLHLA
AH**HH**HLLHLHLA
AHH**HH**LLHLHLA

(101) Rank 3 metrical pattern
two places for genitive plural:
A**HH**HLLLHLHLA
AH**HH**LLLHLHLA

(102) Rank 4 metrical pattern
three places for genitive plural:
A**HH**HLLHHLHLA
AH**HH**LLHHLHLA
AHHHLL**HH**LHLA

We can conclude that in metrically preferred lines, word orders are indeed subject to poetic necessity. It follows then, that the metrically less preferred lines are also less subject to poetic influence. Nor is this due to the virtues of their particular metrical patterns, but rather to the sheer variety of patterns they exhibit: there are only a few ways to be a good line, but many ways to be a bad one. The metrical cost of rearrangements is simply lower in the bad range and higher in the good range.

As for the integrity of the method in question: if it has succeeded in uncovering a spectrum of grammatical trustworthiness, we expect to find that the worse ranked lines contain the most grammatical language. And as a corollary to that expectation, we would also expect those lines to show clearer patterns.

Just such a pattern emerges when we scrutinize the lower-ranked occurrences of the x-genitive ordering. In almost all of these instances, the genitive seems to be the object of a verbal element in the x, as the following examples illustrate.

(103) Objective genitives following verbal nouns

a. RV 1.27.1c
samrā́jantam adhvarā́ṇām AHHLHLHA 32
rule.PTCP.ACC.SG ceremony.GEN.PL
'the one ruling over the ceremonies'

b. RV 1.3.11a
codayitrī́ sūnṛ́tānāṃ ALHHHLHA 33
inciter.NOM.SG liberal.gift.GEN.PL
'inciter of liberal gifts'

c. RV 8.46.2c
vidmá dātā́raṃ rayīṇā́m ALHHHLHA 33
know.PRF.1PL giver.ACC.SG wealth.GEN.PL
'we know [you as the] the giver of wealth'

d. RV 1.188.11a
purogā́ agnír devā́nāṃ AHHHHHHA 54
fore.goer.NOM.SG agni.NOM.SG god.GEN.PL
'Agni, going at the fore of the gods'

e. RV 1.4.8b

ghanó vr̥trā́ṇām abhavaḥ AHHHHLLA 68
slayer.NOM.SG obstacle.GEN.PL be.IMPF.2.SG

'you became the slayer of obstacles'

f. RV 10.166.1c

hantā́raṃ śátrūṇāṃ kr̥dhi AHHHHHLA 108
slayer.ACC.SG enemy.GEN.PL make.IMP

'make [me] the slayer of [my] enemies'

In all of these examples, the noun on which the genitive depends is patently verbal in nature: it is a participle in 1.27.1c, and an agentive noun in every other case[1]. Furthermore, we can rearrange these lines to see whether alternative word orderings would perform better or worse within the parameters of the scansion.

	RV 1.27.01	scansion	scansion frequency
	observed:		
(104)	samrā́jantam adhvarā́ṇām	AHHLHLHA	32
	rearranged:		
	adhvarā́ṇām samrā́jantam	ALHHHHHA	13

[1]There are other similar cases involving nouns with a questionable degree of verbal influence. In the following examples, we observe the x-genitive order, but the noun is not morphologically derived from a verb.

(1) Objective genitives following other nouns

a. RV 1.44.2b = 8.11.2c

ágne rathír adhvarā́ṇām AHLHHLHA 64
agni.VOC.SG charioteer.NOM.SG ceremony.GEN.PL

'O Agni, [you are] charioteer of the ceremonies'

b. RV 8.16.1a

prá samrā́jaṃ carṣaṇīnā́m AHHHHLHA 85
forth great.king.ACC.SG folk.GEN.PL

'[promise] forth the supreme king of the folk'

Even though they are not morphologically deverbative, the nouns *rathíṣ*, 'charioteer' and *samrā́j* 'great king' are agent nouns, so it is not surprising that they would seem to pattern with verbal nouns in the syntax.

	RV 1.4.8b	scansion	scansion frequency
	observed:		
	ghanó vr̥trā́ṇām abhavaḥ	AHHHHLLA	66
(105)	rearranged:		
	vr̥trā́ṇām ghanó abhavaḥ	AHHLLLLA	14
	ábhavo vr̥trā́ṇām ghanáḥ	ALHHHHLA	28
	vr̥trā́ṇām abhavo ghanáḥ	AHHLLHLA	1375

In the first of these rearrangements, we see that the poet would not have greatly improved or worsened the line by choosing the alternative arrangement. The same is true for the last of these examples, though here we also observe that the poet passed up the opportunity to arrange the line with a very good scansion. Perhaps he was trying to preserve the x-genitive order for his verbal noun, perhaps he preferred not to place the main verb between the noun and its genitive, or maybe he was affected by a combination of factors. In any case, the results of this investigation seem to suggest that the natural ordering for this construction was genitive-x, except where the genitive was semantically the object of the noun, in which case the natural order was x-genitive.

5.2 The position of the gerund with regard to its subject

The Vedic gerund is a perfect active verbal adjective which would translate into English as "having X-ed." According to Tikkanen, "Although the sentence-initial (or pre-gerundial) position of the (shared or main clause) subject is the rule in later Vedic and post-Vedic Sanskrit, post-gerundial position of the subject is nearly as frequent in the Ṛg- and Atharvaveda. (1987)" A situation like this stands out as a prime candidate for a metrically informed analysis. Given the evidence from later Vedic sources, it seems likely that post-gerundial subjects result from metrical convenience rather than from grammatical license. To test that hypothesis, let us first consider the distribution of both types in the context of metrical frequency. In the following table, gerunds functioning substantivally were excluded. Only gerunds modifying an expressed subject were considered.

(106) Gerund vs. subject distribution in 8-syllable lines

scansion	frequency	rank	subject gerund	gerund subject
AHHHLHLA	4930	1	3	0
ALHHLHLA	1979	2	0	3
AHHHLHHA	92	3	3	0
AHHHHHHA	54	4	1	0
AHLHLHHA	53	5	1	0
AHLHHHHA	43	6	2	0
AHHLLHHA	30	7	2	0

Among 8-syllable lines, the trend is clear with a slight deviation in the second ranking. Of those three gerund-subject instances, two postpose the subject to the beginning of the following line, forming what may be an introductory clause with the same grammatical status as its English translation. Both of these examples, along with their translations, are presented below.

(107) a. RV 8.92.6ab
asyá pītvā́ mádānā̃ṃ ALHHLHLA 1979
this.GEN.SG drink.GND intoxicant.GEN.PL
"having drunk of the intoxicants of this one
devó devásya ójasā AHHHLHLA 4930
god.NOM.SG god.GEN.SG power.INS.SG
god, the god with power…"

b. RV 9.23.7ab
asyá pītvā́ mádānā̃ṃ ALHHLHLA 1979
this.GEN.SG drank.GND intoxicant.GEN.PL
"having drunk of the intoxicants of this [one],
índro vr̥trā́ṇi apratí AHHHLHLA 4930
Indra.NOM.SG obstacle.ACC.PL irresistible.ACC.PL
Indra [smote] irresistible obstacles…"

The third gerund-subject example, presented below, offers a chance for us to analyze alternative arrangements of the line in which it occurs.

(108) a. RV 1.4.8a
asyá pītvā́ śatakrato ALHHLHLA 1979 (rank 2)
this.GEN.SG drank.GND Śatakratu.NOM.SG

"Śatakratu, having drunk of this"

b. RV 1.4.8a rearranged

asyá śatakrato pītvā́	ALLHLHHA	3
śatakrato asyá pītvā́	AHLHHLHA	64
śatakrato pītvā́ asyá	AHLHHHHA	43

As the rearrangements demonstrate, the poet had a metrical motivation to choose the gerund-subject order for this line, so we cannot accept the example as good, grammatical evidence. Let us therefore look further down the list. There is a large gulf between the second and third-ranked line patterns. Occurring only 92 times, the third-ranked line pattern here contains only subject-gerund tokens; the following example is one of these.

(109) a. RV 10.85.29c

kr̥tyaíṣā́	padvátī	bhūtvī́
witchcraft.NOM.SG + this.NOM.SG	foot.having.NOM.SG	become.GND

AHHHLHHA 92 (rank 3)

"this witchcraft, having gotten feet"

b. RV 10.85.29c rearranged

bhūtvī́	kr̥tyaíṣā́	padvátī	AHHHHHLA	108

Here we have a situation where exchanging the gerund with its subject affects the scansion very little, so it is reasonable to suppose that the attested arrangement is the grammatical one. Further down the list, in the-sixth ranked line pattern, we find the following example.

(110) a. RV 8.100.8c

dívaṃ	suparṇó	gatvā́ya AHLHHHHA 43 (rank 6)
heaven.ACC.SG	fine.winged.NOM.SG	go.GND

"the fine-winged one having gone to heaven"

b. RV 8.100.8c rearranged

dívaṃ gatvā́ya suparṇó	AHHHLLHA	55
suparṇó dívaṃ gatvā́ya	AHHLHHHA	12
suparṇó gatvā́ya dívaṃ	AHHHHLLA	68
gatvā́ya dívaṃ suparṇó	AHLLHLHA	20
gatvā́ya suparṇó dívaṃ	AHLLHHLA	11

None of these possible arrangements fares very differently from the attested verse, which would seem to indicate that the subject-gerund order is the preferred pattern.

Among 11-syllable lines, the situation is likewise very clear: though there are instances of gerund-subject order, they are restricted to the highest ranked scansion.

(111) Gerund vs. subject distribution in 11-syllable lines

scansion	frequency	rank	subject gerund	gerund subject
AHLHHLLHLHA	2313	1	3	4
AHHHLLHHLHA	1388	2	1	0
AHHHLLLHLHA	1231	3	1	0
AHHLLLHHLHA	379	4	1	0
AHLLHHLHLHA	16	5	1	0
AHLHLLHHHHA	12	6	1	0
AHHLHLLHHLA	3	7	1	0

The distribution of tokens in the top ranked line pattern shows us how, overall, both the subject-gerund and the gerund-subject types find a decent degree of representation in the text. We also see that the lower ranked lines show a clear preference for the subject-gerund order. The following example, taken from the top ranked line, shows how rearrangement affects a gerund-subject occurrence.

(112) a. RV 10.157.4a
hatvā́ya devā́ ásurān yád ā́yan AHLHHLLHLHA
kill.GND god.NOM.PL Asura.ACC.PL when come.IMPF.3PL
2313 (rank 1)

"when the gods came, having killed the Asuras"

b. RV 10.157.4a rearranged
devā́ hatvā́ya ásurān yád ā́yan AHHHLLLHLHA 1231

The effect of rearrangement on the scansion of this line is negative though not detrimental.

There are not many examples among 12-syllable lines, and all of these show the subject-gerund arrangement.

(113) Gerund vs. subject distribution in 12-syllable lines

scansion	frequency	rank	subject gerund	gerund subject
AHLHHLLHLHLA	1190	1	1	0
AHHHLLHHLHLA	523	2	1	0
AHHHLLHLHLHA	3	3	1	0
AHHLLLHHHHLA	1	4	1	0

The consensus here as well as the patterns outlined above all point towards the conclusion that the gerund naturally follows its subject, and only poetically precedes it.

5.3 Enclisis to vocatives

In one chapter of his dissertation, "Issues in the Placement of Enclitic Personal Pronouns in the Rigveda," Wenthe endeavors to explain the syntax underlying a peculiar phenomenon: enclisis to a vocative noun. It is typically observed that syntax is blind to vocatives, i.e. that their occurrences are in some sense extra-syntactic and unlicensed. One implication of this situation is that we should not expect them to host enclitics. However, "out of 737 lines which contain unaccented vocatives adjacent to enclitic personal pronouns, only 73 vocatives precede the enclitic (roughly one in ten) (Wenthe 2013: 62)."

Let us analyze a cross-section of these instances within the context of scansion frequency. The 373 occurrences of the enclitic pronoun *te* in eight syllable lines breaks down thus.

(114) enclisis of *te* to vocatives in 8-syllable lines

scansion	frequency	rank	Voc.-te	X-te
AHHHLHLA	4930	1	2	134
AHLHLHLA	3316	2	16	84
ALHHLHLA	1979	3	2	45
AHHLLHLA	1362	4	1	28
ALHLLHLA	691	5	0	11
AHLLLHLA	621	6	0	2
ALLHLHLA	238	7	0	4
AHLHLLLA	168	8	0	1
AHHHLLLA	152	9	0	3
AHHHHHLA	108	10	0	5
AHHHLHHA	92	11	0	7
AHHHHLHA	85	12	0	3
ALHHLLLA	81	13	0	2
AHLHHHLA	75	14	0	1
AHLHHLLA	71	15	0	3
AHHHHLLA	68	16	0	1
AHHHHHHA	54	17	0	2
AHLHLLHA	53	18	0	5
AHLHHHHA	43	19	0	3
AHHLHLLA	27	20	0	2
ALLLLHLA	25	21	0	1
ALLHLLLA	24	22	0	1
ALHHLLHA	21	23	0	1
AHHLLLHA	15	24	0	1
AHLLHHLA	11	25	0	1
ALLLLLHA	2	26	0	1

Here we see that *te* is only hosted by vocatives in the most metrically optimal lines. The number of occurrences of the token (in either configuration) drops off sharply after the handful of highest ranked lines, as expected, but it is fairly well represented in the long tail of metrically inferior lines. We see a similar distribution among 11-syllable lines, where *te* occurs 464 times, as the following tables[2] demonstrate.

[2]Since there are only a few tokens to contextualize in each table, they have been abbreviated to save space. A full list of lines containing tokens can be found in Appendix C.

(115) enclisis of *te* to vocatives in 11-syllable lines, abbreviated

scansion	frequency	rank	Voc.-te	X-te
AHLHHLLHLHA	2313	1	1	55
various	1670 to 351	2 to 13	0	340
AHHLHLLHLHA	307	14	1	6
ALHHLLLHLHA	287	15	0	4
AHLLHLLHLHA	241	16	1	6
various	223 to 1	17 to 30	0	50

(116) enclisis of *te* to vocatives in 12-syllable lines, abbreviated

scansion	frequency	rank	Voc.-te	X-te
AHLHHLLHLHLA	1190	1	0	21
AHLHLLHHLHLA	662	2	3	20
AHHHHLLHLHLA	650	3	2	14
AHLHLLLHLHLA	624	4	2	8
AHHHLLHHLHLA	523	5	2	19
AHHHLLLHLHLA	468	6	1	19
AHLHLHLHLHLA	224	7	1	7
various	211 to 1	8 to 28	0	59

We see the same distribution for *te* among twelve syllable lines. Out of 178 occurrences therein, *te* is hosted by a Vocative three times in the second-ranked pattern, twice in the third through fifth, and once in the sixth and seventh[3].

Enclisis to vocatives is almost entirely restricted to metrically preferred lines. In fact there are only six lines with frequency values below 100 which also exhibit enclisis to a vocative. Of these, three are hypometric lines (1.120.6b, 5.035.2a, 10.160.5d). The remaining three lines (1.120.1a, 8.2.3c, 9.106.7c) do not seem to betray any other common characteristic. They might constitute evidence in favor of grammatical enclisis to vocatives, except that the overwhelming majority of enclitics hosted by vocatives occur in lines with very high frequencies; nor can these three lines be rearranged into better scansions while keeping the enclitic from being hosted by the vocative.

[3] 1.52.10b áyoyavīd bhiyásā vájra indra te :AHLHLLHHLHLA: 662
9.72.4d śúcir dhiyā́ pavate sóma indra te :AHLHLLHHLHLA: 662
9.72.5b anuṣvadhám pavate sóma indra te :AHLHLLHHLHLA: 662
1.55.7c yámiṣṭhāsaḥ sā́rathayo yá indra te :AHHHHLLHLHLA: 650
9.86.28c áthedáṃ víśvam pavamāna te váśe :AHHHHLLHLHLA: 650
9.107.20a utā́háṃ náktam utá soma te dívā :AHHHLLLHLHLA: 468
6.43.1c ayáṃ sá sóma indra te sutáḥ píba :AHLHLHLHLHLA: 224

There seems to be no good evidence in favor of grammatical enclisis to vocatives. Therefore the phenomenon is more plausibly a result of poetic influence.

5.4 The position of *áchā* with regard to its object

Macdonell, in his *Vedic Grammar for Students*, says that "when used with substantives the genuine prepositions as a rule follow their case, while the prepositional adverbs precede it (1916: 285)." Let us explore this claim by applying the metrical method to one of these elements.

The adposition *áchā*, which Macdonell classifies as a prepositional adverb, tends to be attracted to the beginning or end of its pāda, obscuring our judgment of what its natural position may be. However, analyzing its distribution in the context of metrical quality, we observe that *áchā* actually behaves as a postposition more frequently as the probability of poetic manipulation decreases. There are not many occurrences of *áchā* among 8-syllable lines, but the tokens we do find establish the aforementioned pattern.

(117) Placement of *áchā* with regard to its object in 8-syllable lines

scansion	frequency	rank	áchā X	X áchā
AHHHLHLA	4930	1	6	6
AHLHLHLA	3316	2	4	0
AHLHLLLA	168	3	2	0
AHHHHLHA	85	4	0	1
AHHHLLHA	55	5	0	1
ALHHLLHA	21	6	0	1

Although the majority of instances here show *áchā* preceding its object, these carry less weight because of the metrical environments where they occur. 11-syllable lines furnish more tokens to plot, and with one exception[4] corroborate the trend found in the 8-syllable lines.

[4]The counterexample in the twelfth-ranked line deserves a brief excursus. The adposition *áchā* takes *samudrám* for its object 5 times in the Rigveda: 1.130.5b, 3.33.2b, 6.30.4d, 9.64.16b, and 9.66.12a. In all five instances, *áchā* precedes *samudrám*. In RV 9.64.16b and 9.66.12a, this could easily be attributed to the lines' highly ranked scansions, both of which suffer greatly when *áchā* and *samudrám* are exchanged.

(1) a. RV 9.64.16b

áchā samudrám āśávaḥ AHLHLHLA 3316
to sea.ACC.SG swift.NOM.PL

"swift to the sea"

b. RV 9.64.16b rearranged
samudrám áchā āśávaḥ AHLHHHLA 75

c. RV 9.66.12a

áchā samudrám índavo AHLHLHLA 3316
to sea.ACC.SG drop.NOM.PL

"the drops, to the sea..."

d. RV 9.66.12a rearranged
samudrám áchā índavo AHLHHHLA 75

But 3.33.2b suffers not at all when the phrase is reversed, and 1.130.5b and 6.30.4d are actually improved by the change.

(2) a. RV 1.130.5b

áchā samudrám asr̥jo ráthāṁ̃ iva AHLHLLLHLHLA 624
to sea.ACC.SG set.loose.2SG chariot.ACC.PL like

"you set them loose to the sea, like chariots"

b. RV 1.130.5b rearranged
samudrám áchā asr̥jo ráthāṁ̃ iva AHLHHLLHLHLA 1190

c. RV 6.30.4d

ávāsr̥jo apó áchā samudrám AHLLLLHHLHA 223
set.loose.2SG water.ACC.PL to sea.NOM.SG

"you set loose the waters to the sea"

d. RV 6.30.4d rearranged
ávāsr̥jo apó samudrám áchā AHLHLHLHLHA 512

So it would seem that, rather than being a counterexample to the evidence, this handful of examples may indicate that *áchā samudrám* is a formula.

(118) Placement of *áchā* with regard to its object in 11-syllable lines

scansion	frequency	rank	áchā X	X áchā
AHLHHLLHLHA	2313	1	1	5
AHLHLLHHLHA	1670	2	3	1
AHHHHLLHLHA	1472	3	2	1
AHHHLLHHLHA	1388	4	2	3
AHHHLLLHLHA	1231	5	1	1
AHLHHLHHLHA	683	6	1	1
AHHHHLHHLHA	483	7	4	1
AHHHLHLHLHA	470	8	1	1
AHHLLLHHLHA	379	9	0	2
ALHHHLLHLHA	360	10	0	1
ALHHLLLHLHA	287	11	0	1
AHLLLLHHLHA	223	12	1	0
ALHHHLHHLHA	161	13	0	1
ALHHLHLHLHA	84	14	0	1
AHLHLLHHHHA	12	15	0	1

(119) Placement of *áchā* with regard to its object in 12-syllable lines

scansion	frequency	rank	áchā X	X áchā
AHLHHLLHLHLA	1190	1	1	1
AHHHHLLHLHLA	650	2	2	0
AHLHLLLHLHLA	624	3	1	0
AHHHLLHHLHLA	523	4	2	1
ALHHLLHHLHLA	161	5	0	1
ALHHLLHLLHLA	6	6	0	1
AHHHLLHHLLLA	5	7	0	1

Once again, by analyzing individual examples in detail, we can see that the prevalence of one of the types that we see emerging in the lowest ranked lines is indeed the result of a dwindling poetic influence. Where the scansion is good and we suspect the arrangement to be ungrammatical, we find that rearrangement results in poorer scansion.

(120) a. RV 9.107.12d

áchā kóśam madhuścútam AHHHLHLA 4930
to cup.ACC.SG honey.dripping.ACC.SG

"to the cup dripping with honey"

b. RV 9.107.12d rearranged
kóśam áchā madhuścútam ALHHLHLA 1979
kóśam madhuścútam áchā AHLHLLHA 53

c. RV 1.6.6b

áchā vidádvasuṃ gíraḥ AHLHLHLA 3376
to finding.wealth.ACC.SG song.NOM.PL

"songs to the one finding wealth"

d. RV 1.6.6b rearranged
vidádvasuṃ áchā gíraḥ AHLLHHLA 11

Conversely, where the scansion is poor, we only observe the arrangement we suspect to be grammatical. Rearrangements of these lines do not significantly improve them, which we expect since the poet appears to have taken the opportunity to rearrange his words where doing so would improve their scansion.

(121) a. RV 1.2.2b

tuvā́m áchā jaritā́raḥ AHHHLLHA 55
you.ACC.SG to praiser.NOM.PL

"the praisers to you"

b. RV 1.2.2b rearranged
áchā tuvā́m jaritā́raḥ AHLHLLHA 53

c. RV 4.1.2b

devā́m̐ áchā sumatí́ yajñávanasaṃ AHHHLLHHLLLA 5
god.ACC.PL to favor.INS.SG loving.sacrifice.ACC.SG

"[bring] with favor to the gods the one who loves the sacrifice"

d. RV 4.1.2b rearranged
áchā devā́m̐ sumatí́ yajñávanasaṃ AHHHLLHHLLLA 5

So the Rigvedic *áchā* seems to be a postposition, despite Macdonell's observation. Looking at the tables above, however, it is easy to see how such misapprehensions can develop. Without noticing the tell-tale shift towards one type in the lowest-ranked lines, we are at the mercy of raw numbers, which, rather than an accurate picture of the grammar, more closely reflect the simple ratio of metrical slots into which certain arrangements can be fit.

5.5 The position of the copula in predicate nominative constructions

The verb in Rigvedic tends to occur finally, as in Latin, a similarity which invites us to consider another possible parallel. In Latin, the copula or "be" verb, unlike other verbs, occurs between its subject and the nominative noun or adjective in constructions of the type *X is Y*, i.e. predicate nominative constructions. So it is reasonable to suppose that Rigvedic, since it is genetically related to Latin, might share this feature. And indeed, a cursory glance at the distribution of the 'be' verb *as-* seems to confirm that hypothesis. But without investigating the metrical environments of those occurrences, we cannot know how great a role the poetic filter may have played in altering the natural distribution.

In order to explore the distribution of the copula in the context of metrical frequency, it benefits us to limit our scope to examples with expressed subjects. This of course means that first and second person examples will be the easiest to isolate, since the subject cannot be anything other than the personal pronoun. There are only 28 examples of *asmi* 'I am' in the Rigveda. The overwhelming majority of these examples show the expected predicate nominative pattern: *(ahám) asmi* X. However, most occur in metrically preferred lines and not many of them express the first person subject. The tables below demonstrate the paucity of the data (there are no occurrences in 12-syllable lines), though the little information they contain does point toward one particular type.

(122) Final vs. medial copula *asmi* in 8-syllable lines

scansion	frequency	rank	ahám X asmi	ahám asmi X
AHHHLHLA	4930	1	1	0
ALHLLHLA	691	2	0	2
ALHLLLHA	7	3	0	1

(123) Final vs. medial copula *asmi* in 11-syllable lines

scansion	frequency	rank	ahám X asmi	ahám asmi X
AHHHHLLHLHA	1472	1	1	0
AHHHLLHHLHA	1388	2	0	1
AHLHLLLHLHA	1374	3	0	2

A trend emerges, but the sample size is minuscule. The second person singular is more fruitful, though again we face the problem that only a handful of the tokens occur in lines with infrequent scansions. The following tables catalog the positions of *asi* in lines with an expressed subject.

(124) Final vs. medial copula in 8-syllable lines

scansion	frequency	rank	t(u)vám X asi	t(u)vám asi X
AHHHLHLA	4930	1	1	1
AHLHLHLA	3316	2	7	0
ALHHLHLA	1979	3	3	0
AHHLLHLA	1362	4	2	1
ALHLLHLA	621	5	3	3
ALLHLLLA	24	6	0	1
ALLLHLHA	3	7	0	1

With so few examples, it is important to note the size of the difference between rankings five and six: the fifth ranked scansion here occurs 621 times, the sixth occurs 24 times, and the seventh occurs 3 times. There are only 4 examples in 11-syllable lines.

(125) Final vs. medial copula in 11-syllable lines

scansion	frequency	rank	t(u)vám X asi	t(u)vám asi X
AHHHHLLHLHA	1472	1	0	2
AHHHLLLHLHA	1231	2	1	0
ALLHLLHHLHA	133	3	0	1

In 12-syllable lines, the distribution breaks down thus.

(126) Final vs. medial copula in 12-syllable lines

scansion	frequency	rank	t(u)vám X asi	t(u)vám asi X
AHLHHLLHLHLA	1190	1	4	1
AHLHLLLHLHLA	624	2	1	0
AHHHLLHHLHLA	523	3	2	0
AHHHLLLHLHLA	468	4	1	1
AHHHLLLHLHLA	161	5	2	0
AHLHHLLLLHLA	13	6	0	1

Here again, the difference in scansion frequency in the lower ranks is great: the fifth ranked scansion occurs 161 times; the sixth occurs 13 times. With so few data points in the area where we need them, we cannot draw any conclusions at all without looking for evidence from rearrangement. There we consistently find that exchanging the copula and the predicate nominative yields the result we predict based on the metrical environment. In those few instances where the scansion is poor, the observed arrangement is always the one we predict to be grammatical: *t(u)vám asi* X.

(127) a. RV 8.71.2c
tuvám íd asi kṣápāvān ALLLHLHA 3
you.NOM.SG FOC be.2SG earth.protector.NOM.SG
"YOU are the Earth-protector"

b. RV 8.71.2c rearranged
tuvám íd kṣápāvān asi ALHLHHLA 13

c. RV 8.11.2a
tuvám asi praśásiyo ALLHLLLA 24
you.NOM.SG be.2SG praiseworthy.NOM.SG
"you are praiseworthy"

d. RV 8.11.2a rearranged
tuvám praśásiyo asi AHLLLHLA 621

Where the scansion is good and we suspect the arrangement to be ungrammatical, we find that rearrangement mars the line's scansion.

(128) a. RV 5.13.6b
devā́ṃs tvám paribhū́r asi AHHLLHLA 1362
god.ACC.PL you.NOM.SG surrounding.NOM.SG be.2SG

"you surround the gods"

b. RV 5.13.6b rearranged
devā́ṃs tvám asi paribhū́r AHLLLLLA 5

c. RV 8.11.1a

tvám agne vratapā́ asi AHHLLHLA 1362
you.NOM.SG Agni.VOC.SG law.protector.NOM.SG be.2SG

"O Agni, you are the law-protector"

d. RV 8.11.1a rearranged
tvám agne asi vratapā́ AHHLHLLA 27

e. RV 8.23.30a

ágne tuváṃ yaśā́ asi AHLHLHLA 3316
Agni.VOC.SG you.NOM.SG glorious.NOM.SG be.2SG

"words"

f. RV 8.23.30a rearranged
ágne tuváṃ asi yaśā́ḥ AHLLLLLA 5

Although the copula's tendency towards medial position was only hinted at in the catalogs of distribution by metrical frequency, the evidence from rearrangement seems to corroborate the hypothesis that Rigvedic predicate nominative constructions naturally place the copula between the subject and the nominative noun.

5.6 Conclusion

In this chapter, I hope to have shown that meter and grammar often compete for accurate expression, and that verses with less frequently occurring metrical patterns show more consistency in their syntactic arrangements. None of the tables or rearrangements used in this chapter establishes the correlation by itself, especially since their sample sizes are too small to be significant individually. But the confluence of all these tables, the fact that their tokens tend towards one type as metrical frequency declines, supports the overarching correlation between poor scansion and more natural grammar.

Having established the efficacy of this method of investigation, we can now apply it to grammatical phenomena which do not so easily lend themselves to computerized searches. Chapter 6 will provide further remarks on syntactic structures in the Rigveda.

Chapter 6

Further remarks on grammatical patterns in the Rigveda

In this chapter I will highlight the merits of the method of Chapter 4 by remarking on a few observed phenomena in Rigvedic, namely its SOV word order, wh- movement, discontinuous constituents, and apparent scrambling, any of which could potentially be attributed to poetic manipulation. Therefore it will be necessary to inform future investigations of these phenomena with a preliminary conclusion, based on metrical analysis, as to whether the observation represents a grammatical process or a common post-syntactic alteration. I then turn to a less well established area of syntax: the left periphery.

The left periphery represents a cohesive complex of syntactic phenomena. Here the density of overlapping data more easily allows one solution to provide evidence for the next. Coupling generative assumptions with metrically informed observations, we will see that, contrary to the preliminary conclusions of Chapter 2, the Rigvedic left periphery does indeed behave in accordance with theory, exhibiting a structure similar to that responsible for V2 in German.

6.1 SOV

Rigvedic had long been described as SOV, but Gonda (1952) and Klein (1994) have demonstrated this statistically. In a subcorpus of Rigvedic, Klein finds about 62% of sentences to be verb-final, and about 20% to be verb-medial. He further categorizes the types of verb-medial sentences according to what material has been extraposed to the right of the verb. The following passages, for instance, exemplify the extraposition of single verbal arguments.

(129) RV 1.8.4c AHHLLHLA 1362

sāsahyā́ma pr̥tanyatáḥ
conquer.OPT.1PL foe.ACC.PL

"let us conquer [our] foes" (OPT = optative)

(130) RV 1.5.8c AHHHLHLA 4930

tuvā́ṃ **vardhantu** no gíraḥ
you.ACC.SG strengthen.IMP.3PL our song.NOM.PL

"let our songs strengthen you"

(131) RV 1.8.9 AHLHLHLA 3316

sadyáś cit **sánti** dāśúṣe AHHHLHLA 4930
immediate INDF be.3PL worshipper.DAT.SG

"they are immediate for the worshipper"

As can be seen, none of these lines lends itself to grammatical trustworthiness, because they exhibit popular scansion patterns. Therefore, let us consider examples with less frequent scansion.

(132) RV 1.38.9c ALLHLHHA 3

yát pr̥thivím̐ viundánti
when earth.ACC.SG drench.3.PL

“when they drench the earth”

(133) RV 9.86.12b AHHHHLHHLHLA 209

ágre vācó agriyó góṣu gachati
in.front.of hymn.GEN.SG foremost.NOM.SG cow.LOC.PL go.3SG

“at the forefront of the speech he goes, at the head of the cows”

The lower frequency counts of their scansions indicate that these lines might provide some grammatical insight. We can assume that the poet would have chosen the best metrical arrangement that maintains interpretability. But if no arrangement fits the prescribed meter well, giving the poet the freedom to place the verb medial or final, it is reasonable to assume that he would choose the placement that most aligns with the syntax of his language. The above lines, when rearranged to be verb-medial, exhibit more preferred scansions.

		scansion	scansion frequency
(134)	yát viundánti pr̥thivím̐	ALHHLLLA	81
	ágre vācó gachati góṣu agriyó	AHHHHLLHLHLA	650

It is impossible to inhabit the mind of the poet, who must often have had to negotiate the trade-off between meter and grammar, but these examples seem to constitute further evidence that Rigvedic was an SOV language, since that is the arrangement attested despite the fact that it resulted in inferior scansion. The lines above stood to be improved by placing the verb medially, but apparently not enough to license a distortion of the natural arrangement.

This is not to insinuate that sentence-medial verbs do not tend to occur in lines with inferior scansion; there are many such examples. Usually, however, the medial position of the verb can also be explained by the adverbial nature of the following element (e.g.

RV 9.86.1b), a marginal improvement in scansion (e.g. RV 5.2.1d, 2.25.4a, 6.65.2b, 9.97.34c), gapping (e.g. RV 10.89.8d), or wordplay (e.g. RV 9.113.5b). Those which are not so easily explained (e.g. RV 1.191.2b), I will take up later in this chapter.

6.2 Wh-movement

Without troubling ourselves to compare corpus with subcorpus, it is apparent that a wh-form in *ká-* almost always begins the sentence it occurs in. And whereas we observe preverbs raising into a position directly left of relatives in *yá-*, we never see this with *ká-*, even in the most metrically perfect lines. In the subcorpus, wh- forms in *ká-* are not very frequent, but those that do occur adhere strictly to a pattern consistent with wh-movement. In the following table, it is easily observed that the wh- forms (shown in boldface) are fronted.

(135) Wh- words in first position

line		scansion	scansion frequency
1.120.1b	**kó** vāṃ jóṣa ubháyoḥ	AHHLLLA	4
1.121.1a	**kád** itthā́ nr̥̄́mṇ̥ḥ pā́taraṃ+ devayatā́ṃ	AHHHHLHHLLA	4
4.25.1a	**kó** adyá · náriyo devákāma	AHL·LLHHLHA	9
5.53.1b	**kó** vā purā́ sumnéṣu āsa marútām	AHLHHHHLLLA	2
8.66.10a	**kád** ū mahī́r ádhr̥ṣṭā asya táviṣīḥ	AHLHLHHHLLLA	2
10.40.2a	**kúha** svid doṣā́ **kúha** vástor aśvínā	AHHHHLLHHHLA	2
10.50.3a	**ké** té nára indara+ yé ta iṣé	AHLLHLLHLLA	5
10.99.1a	**káṃ** naś citrám iṣaṇyasi cikitvā́n	AHHLLHLLLHA	2

(136) Wh- words out of first position

line		scansion	scansion frequency
1.88.3c	yuṣmábhyaṃ · **kám** marutaḥ sujātās	AHL·HLLHLHA	3
1.169.5b	praṇetā́raḥ · **kásya** cid r̥̄tāyóḥ	AHHL·HLLLHA	2
1.184.1c	nā́satiyā **kúha** cit sántāv aryó	ALLHLLHHHHA	1
2.42.1d	mā́ tvā **ká** cid abhibhā́ víśvyā vidat	AHHLLLHHHLA	1
3.45.1c	mā́ tvā **ké** cin ní yaman víṃ nā́ pāśíno	AHHHLLHHHHLA	4
5.83.9d	yát **kíṃ** ca pr̥̄thivyā́m ádhi	AHLLHHLA	11

The apparent exceptions in the second table are of two types. Most of these exhibit the indefinite use of *ká* when it is collocated with *ca* or *cit*, which are analogous to the English collocations *whatever*, *whoever*, etc.; *kám* in 1.88.3c is an adverbial derivative (Macdonell 1916: 225).

It is not unreasonable to assume, given these observations, that Rigvedic exhibits movement of wh- elements into SpecCP, as English does.

6.3 Discontinuity

Some languages, to a greater or lesser extent, tolerate the discontinuity of certain phrases. German, for example, allows topicalization to break up a determiner phrase (DP), which is impossible in English, though English allows certain kinds of DPs to be split by CPs.

(137) Discontinuous DP in German

Bücher habe ich **drei** gelesen
book.PL.ACC have.1SG me.NOM.SG three read

"I have read three books"

(138) Discontinuous DP in English
here is the **picture** that I framed **of the two of us**

The Rigveda is riddled with discontinuous DPs, such as *ebhír arkaír* 'with these songs' in the following line. Note the metrical infrequency of those arrangements which keep the DP together; most instances of discontinuity, such as the following, do not constitute good evidence for the phenomenon in the syntax of Rigvedic, because they betray metrical motivation.

(139) RV 4.3.15a

ebhír bhava sumánā agne arkaír
this.INS.PL be.IMP graciousNOM.SG Agni.VOC.SG song.INS.PL

"be gracious, O Agni, with these songs"

RV 4.3.15a	scansion	scansion frequency
ebhír bhava sumánā agne **arkaír**	AHLLLLHHLHA	223
other possible permutations		
ebhír arkaír bhava sumánā agne	ALHHLLLLHHA	0
ebhír arkaír sumánā bhava agne	ALHHLLHLLHA	5
sumánā bhava ebhír arkaír agne	ALHLLHLHHHA	0
sumánā bhava ebhír arkaír agne	ALHLLHLHHHA	0
sumánā bhava agne ebhír arkaír	ALHLLHHHLHA	5

Paring down the corpus and using metrical data as evidence will allow us to make either a case against the grammaticality of discontinuous phrases in Rigvedic or a more reliable case in their favor. As it turns out, the latter possibility seems to hold, for even among lines with very infrequent scansions, we still observe discontinuity.

(140) RV 1.52.4d ALHLLHLHLHLA 3

śúṣmā índram **avātā́**
snortings.NOM.PL Indra.ACC.SG unextinguishable.NOM.PL
áhrutapsavaḥ
whose.breaths.are.undivertable.NOM.PL

(141) RV 10.26.9a AHLHHLA 7

asmā́kam ūrjā́ **rátham**
our might.INS.SG chariot.ACC.SG

And although neither line can be improved by rearrangement, these are not the only possible arrangements the poet could have chosen.

(142) RV 1.52.4d rearranged
índraṃ śúṣmā avātā́ áhrutapsavaḥ AHHLLHLHLHLA 16

(143) RV 10.26.9a rearranged
asmā́kam rátham ūrjā́ AHHLLHA 15

As demonstrated above, it would have been entirely possible for the poet to maintain the contiguity of the DPs without further damaging the meter of the line. These situations are pervasive in the subcorpus, and so it seems that discontinuous DPs are indeed grammatical in Rigvedic. However, having yet to find an instance where rearrangement significantly improves the lines, we can say that discontinuity in DPs must have been optional. For, if the poet were ever obligated to split a DP at the expense of the meter, then rearrangement might be able to improve the line. But if the poet always had the option to split a DP or keep it intact, we should expect him always to have chosen whichever had the better scansion (except where semantic consequences like topicalization etc. must be considered).

6.4 Scrambling

Scrambling was explored in Chapter 3 as a possible explanation for the instability of word order in Rigvedic. If it is defined to encompass post-syntactic processes, operating on well-formed syntactic output, scrambling is obviously ubiquitous in the Rigveda. This is why, in this work, I limit the definition of scrambling to encompass only syntactic processes, like those which operate in Modern German and Russian. Such processes may have been as common a phenomenon in spoken Rigvedic as in those modern languages. An investigation into the existence of a *grammatical* scrambling phenomenon in Rigvedic is therefore warranted.

It may, however, be very difficult to determine whether optional, grammatical scrambling exists in Rigvedic. For it is obvious that the rich case system of the language allows the poet a great degree of freedom for consciously rearranging syntactic objects within the constraint of intelligibility, and that this freedom mirrors the effects of any would-be grammatical scrambling. If grammatical scrambling exists, we may observe different

kinds of arrangements in the metrically inferior lines, but only in situations where our own rearrangement cannot improve the meter of the line. This is because grammatical scrambling would be just another tool to the poet: if two arrangements (one scrambled, one unscrambled) are equally grammatical, then he should always choose the one that makes the best verse. We might sometimes expect to find interactions with information structure (topic and focus effects) in those cases, but these would be difficult to discern given the poetic nature of the corpus and the lack of native speakers. If grammatical scrambling does not exist, we may observe among the metrically inferior lines a preference for one particular kind of arrangement. In fact the subcorpus of metrically dispreferred lines shows a strong tendency towards placing the dative before the accusative, as in the following examples.

(144) a. RV 1.103.4d ALHHLLHHLLA 2

yád dha sūnúḥ śrávase nā́ma dadhé
when FOC “son” glory.DAT.SG name.ACC.SG give.PRF-3.SG

“when he gave [himself] the name ‘son’ for glory!”

b. RV 6.67.11d AHHLHLLHLLA 5

dhr̥ṣṇúṃ yád ráṇe vr̥̊ṣaṇaṃ yunájan
bold.ACC.SG when battle.DAT.SG bull.ACC.SG yoke.3.PL.SUBJ

“when they will yoke the bold bull for battle”

c. RV 10.175.3c AHLLHHLA 11

vr̥̊ṣṇe dádhato vr̥̊ṣṇiyam
bull.DAT.SG putting.NOM.PL virility.ACC.SG

“granting virility to the bull”

This tendency toward dative-accusative arrangement indicates that this is the unmarked word order. So we may tentatively posit that grammatical clause-bound scrambling like the kind found in German does not occur in Rigvedic, though this says nothing against a type of scrambling that could account for discontinuous constituents.

In Chapter 3, we also noted that long-distance scrambling appeared to be grammatical in Rigvedic. The relevant examples are repeated here.

(145) Long-distance scrambling in Rigvedic

a. 1.161.3a

agníṃ dūtám práti yád ábravītana
Agni.ACC.SG messenger.ACC.SG back REL.ACC.SG speak.IMPF.2.PL

"what you answered to Agni the messenger"

b. 10.96.2a

háriṃ hí yónim abhí yé
golden.ACC.SG FOC womb.ACC.SG towards REL.NOM.PL
samásvaran
together.sound.IMPF-3.PL

"those who sang together towards the golden womb"

In these examples, we see nouns and preverbs crossing a clause-boundary to escape an embedded CP. This could be considered long-distance scrambling, though I will avoid that term when dealing with the phenomenon; instead I will only discuss the arrangement in terms of the movements which bring it about. Since these effects occur at the edges of embedded CPs, we can enfold them in the discussion of the left periphery, which is the purpose of the following section.

6.5 The Rigvedic left periphery

In Chapter 2, I showed that Hale's model of the left periphery, though it achieved descriptive adequacy, did not conform to theoretical principles. Now that we are freed from the burden of modeling consciously manipulated (i.e. contaminated) data, it may be possible to account for the structures found in the subcorpus of metrically inferior lines in a way that accords with the theory.

As I mentioned in Chapter 2, Hale's account deviated from the theory in order to explain a construction in which a complementizer was preceded by two elements originating within the embedded CP.

(146) RV 1.110.2a AHLH||LL|HHLHLA 662

ābhogáyam$_i$	prá$_j$	[yád	t$_i$	ichánt-a	t$_j$	aítana]
nourishment.ACC.SG	forth	when		seeking.NOM.PL		go.IMPF.2SG

"when, seeking nourishment, you went forth …"

The implications of assuming these constructions to be grammatical are far-reaching, so we ought to be fairly certain of their grammaticality. But after paring down the corpus to isolate metrically inferior lines, one notices the absence of *any* such patterns resembling that in (146). Indeed this particular construction exists only in more metrically preferred, less trustworthy lines, all of which are presented below (brackets have been added).

(147)

line		scansion	scansion frequency
9.73.6a	pratnā́n mā́nād ádhi á́ [yé samásvarañ]	AHHHLLHHLHLA	523
1.110.2a	ābhogáyam prá [yád ichánta aítana]	AHLHLLHHLHLA	662
1.161.3a	agníṃ dūtám práti [yád ábravītana]	AHHHLLLHLHLA	468
5.32.1c	mahā́ntam indra párvataṃ ví [yád váḥ]	AHLHLHLHLHA	512
6.15.14c	ṛ̊tā́ yajāsi mahiná ví [yád bhū́r]	AHLHLLLHLHA	1374
5.15.2d	jātaír ájātāṁ́ abhí [yé nanakṣúḥ]	AHLHHLLHLHA	2313
7.103.2a	divyā́ ā́po abhí [yád enam ā́yan]	AHHHLLLHLHA	1231
10.123.8a	drapsáḥ samudrám abhí [yáj jígāti]	AHLHLLLHLHA	1374

Furthermore, the attested occurrences of those patterns betray metrical motivation. If we rearrange these lines to look like what we see in the metrically inferior subcorpus, the quality of their scansions invariably fails, just as these rearrangements of (146) fail.

(148) a.

RV 1.110.2a	scansion	scansion frequency
ābhogáyam prá yád ichánta aítana	AHLHLLHHLHLA	662
other possible permutations		
prá yád ābhogáyam ichánta aítana	ALHHLLHHLHLA	161[1]
prá yád ichánta ābhogáyam aítana	ALHHLHHLLHLA	4
prá yád ichánta aítana ābhogáyam	ALHHLHLLHHLA	0
prá yád aítana ābhogáyam ichánta	ALHLLHHLLHHA	0
prá yád aítana ichánta ābhogáyam	ALHLLHHLHHLA	0

b.

RV 6.15.14c	scansion	scansion frequency
ṛ̊tā́ yajāsi mahiná ví yád bhū́r	AHLHLLLHLHA	1374
other possible permutations		
ṛ̊tā́ yajāsi ví yád mahiná bhū́r	AHLHLLHLLHA	19
ṛ̊tā́ yajāsi ví yád bhū́r mahiná	AHLHLLHHLLA	14

[1]This metrical pattern seems to work well enough, but the positioning of *ābhogáyam* prevents the line from achieving a good caesura. The caesura, which requires a word boundary, occurs after the fourth or fifth syllable in the line, but the nearest word boundaries in this example are after the second syllable and after the sixth.

	5.15.2d	scansion	scansion frequency
	jātaír ájātām̐ abhí yé nanakṣúḥ	AHLHHLLHLHA	2313
	other possible permutations		
	abhí yé jātaír ájātām̐ nanakṣúḥ	ALHHHLHHLHA	161[2]
c.	abhí yé jātaír nanakṣúḥ ájātām̐	ALHHHLHLLHA	3
	abhí yé ájātām̐ jātaír nanakṣúḥ	ALHLHHHHLHA	2
	abhí yé ájātām̐ nanakṣúḥ jātaír	ALHLHHLHHHA	0
	abhí yé nanakṣúḥ ájātām̐ jātaír	ALHLHLLHHHA	2
	abhí yé nanakṣúḥ jātaír ájātām̐	ALHLHHHHLHA	2

Therefore we can be justified in disregarding these examples as intelligible but ungrammatical, which alleviates much of the complication faced in Chapter 3. The impetus for positing multiple specifiers is gone, and the left periphery's resemblance to that of German becomes closer.

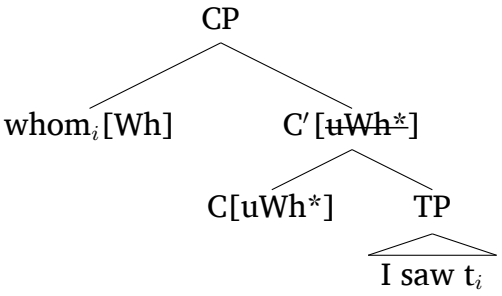
The evidence of the metrically inferior lines does not require an account of multiple extraction. However, it does strongly suggest that movement *of a single element* out of the embedded CP to a position immediately left of the relative pronoun must be grammatical in Rigvedic. Not only do we observe such patterns in the more trustworthy subcorpus, but we also find instances where the poet's choice of whether to move such an element would not have affected the frequency of the line's scansion.

		RV 4.55.2b	scansion	scansion frequency
		observed:		
(149)	a.	ví yád uchā́n viyotā́ro ámūrāḥ	ALHHLHHLLHA	13
		rearranged:		
		yád **ví** uchā́n viyotā́ro ámūrāḥ	ALHHLHHLLHA	13
		RV 6.67.11c	scansion	scansion frequency
		observed:		
	b.	ánu yád gā́va sphurā́n r̥jipyáṃ	ALHHHLHLHA	5
		rearranged:		
		yád gā́va **ánu** sphurā́n r̥jipyáṃ	AHLLHLHLHA	8

[2]This metrical pattern seems to work well enough and achieves a good caesura, however the scansion of the attested arrangement is far better preferred.

And so we must account for this movement in the syntax. SpecCP is the most obvious candidate for the landing site, but it can only host the moved element if it is not occupied by the relative pronoun itself, as it is in English. The following tree diagram demonstrates the situation in English.

(150) English: *this is the person whom I saw*

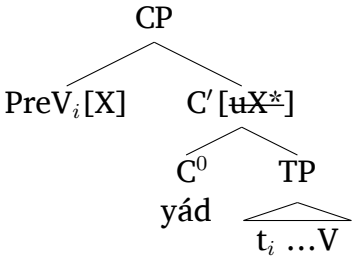


Here we see that the strong, uninterpretable wh- feature on C triggers the phrase containing the answering wh- feature to move. Since an entire phrase is moving, it has to be housed in SpecCP. With the wh- feature on C now checked, no other such movements can occur. There are many possible solutions to this raising problem, but the following explanation should account not only for the raising of preverbs but also for several other key observations of the relative's behavior.

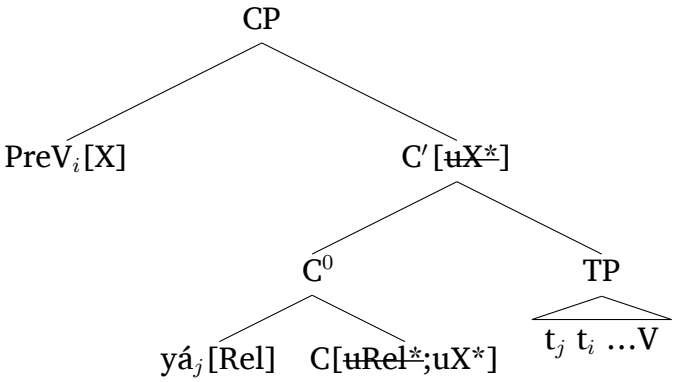
I will now argue that *yá-* does not occupy SpecCP at all, but rather C itself. We expect this to be the case for complementizers derived from the pronoun, but observations of both kinds of clauses indicate that the complementizers and the inflected relative pronouns appear to share the same distribution. The mechanisms by which they find themselves in C, however, must be different, the complementizers being base-generated there and the inflected relatives undergoing head-movement into C (like the finite verb in German V2). There must be a strong uninterpretable feature on the C of embedded clauses that triggers head-movement of the relative into C; let us provisionally label this [uRel*]. In addition

there must be a strong feature on the C of embedded clauses that triggers the movement of an element into SpecCP; let us provisionally label this [uX*]. Thus the skeleton of Rigvedic's clause structure seems to be as follows.

(151) Complementizer base-generated in C



(152) Relative moved into C



As we discussed earlier, it is easily established that Rigvedic exhibits wh-movement, and we can ascribe to it the usual landing site of SpecCP without controversy. But whereas *ká-* is never preceded by a raised preverb, preverb raising seems to be obligatory with *yá-*.[3] Once again, this is not so surprising where we expect *yá-* to have been base-generated in C, leaving SpecCP open as a landing site, but we see the same compulsory raising to be triggered by the inflected relative. Thus it would seem that although interrogatives in Rigvedic are true wh- words (like in English), relatives are not (unlike in English).

[3]Exceptions to this rule can be found, but insofar as the exceptions follow patterns of their own, they warrant more careful investigation into their specific mechanisms rather than an overhaul of the general rule. For example, the verb *ud* is unusually closely collocated with its usual preverb *ví*; they do not separate for any reason, including the attraction of the relative.

This *yá*-in-C analysis predicts a ban on pied-piping, the phenomenon which in English is responsible for the optionality of preposition stranding with wh- relatives.

(153) a. that is the book [in [which]]$_i$ I found the note t$_i$
b. that is the book [which]$_i$ I found the note [in [t$_i$]]

The preposition in these English examples has the option of following its wh- object into SpecCP, which is only possible because the specifier position can accommodate phrases. If the relative head alone had been moved into C (as I am proposing for Rigvedic), only the second (surface) structure would be possible. If this is the case for Rigvedic, then we should not expect to find any such material raising along with the inflected relative. Finding evidence to bear on this prediction is difficult: only a handful of inflected relatives act as objects of adpositions, and those that do occur in metrically favorable lines. All of these, however, do show stranded prepositions.[4]

(154) Relative adposition stranding
a. RV 1.23.17b AHHHLHLA 4930

yā́bhir vā sū́riyaḥ sahá
REL.INS.PL or sun.NOM.SG with
"or [those] with which the sun [is]"

b. RV 8.92.20a AHHLLHLA 4930

yásmin víśvā ádhi śríyo
REL.LOC.SG all.NOM.PL over glory.NOM.PL
"over whom all glories [are]"

The *yá*-in-C analysis also makes predictions about how the phenomenon of "successive cyclicity" might appear in Rigvedic. In English, successive cyclicity is what allows structures like the following.

[4]There are also a few apparent counterexamples in 1.141.5a, 2.16.2a, for which see Grassmann's ninth definition for yá- (1873:1065). The possible counterexample in 1.18.7a, *yásmād ṛté ná sídhyati*, 'without whom [it] does not succeed,' is ambiguous: the adposition *ṛté* may or may not have moved.

(155) this is the book [$_{CP}$ which$_i$ you said [$_{CP}$ t_i he wanted t_i]]

Here we see that the relative pronoun in the lowest SpecCP, since it has been moved to the edge of that phase, is accessible to the next higher phase and can move again, thus the two traces. However in Rigvedic, if *yá*-in-C is true, we would expect the next higher phase to target just the relative pronoun *yá-* in C (the phase-head, which is part of the edge of the phase) for movement, possibly leaving the raised preverb in SpecCP stranded because it does not bear the [uWh] feature the probe in the higher phase is looking for. We might speculate that successive cyclicity in Rigvedic could lead to a chain of stranded preverbs.

No discussion of the left periphery would be complete without an exposition of topic and focus. Unfortunately, the explanation of this particular area of the left periphery is inordinately affected by a lack of native speakers. The semantic/pragmatic effects of topic and focus can be subtle, and the context of the hymns is not always helpful in determining whether a particular fronting was intended to convey contrast or presentation. Poetic manipulation also interferes with our understanding of Rigvedic topic and focus because we cannot always know whether an element was moved in the syntactic derivation or afterwards. Topicalization and focus fronting could also be seen as grammatical (not just intelligible) metrical conveniences, like word choice.

That said, paring down the corpus and the ability to search for metrically indifferent arrangements, will aid us in the investigation of focus phenomena, but it is especially fortunate that Rigvedic contains a number of overt particles whose functions and distributions can help us to map topic and focus in the left periphery. One of the most common exemplars is the focus particle *íd*. This particle usually cooccurs with fronting, and directly follows the element on which it confers its sense. The following examples typify its usage.

(156) Usage of *íd*

a. RV 1.27.3c

pāhí sádam íd viśvā́yuḥ
protect.2.SG.IMP constantly FOC all.life.ACC.SG
“protect [us] CONSTANTLY, for [our] entire life”

b. RV 8.071.02c

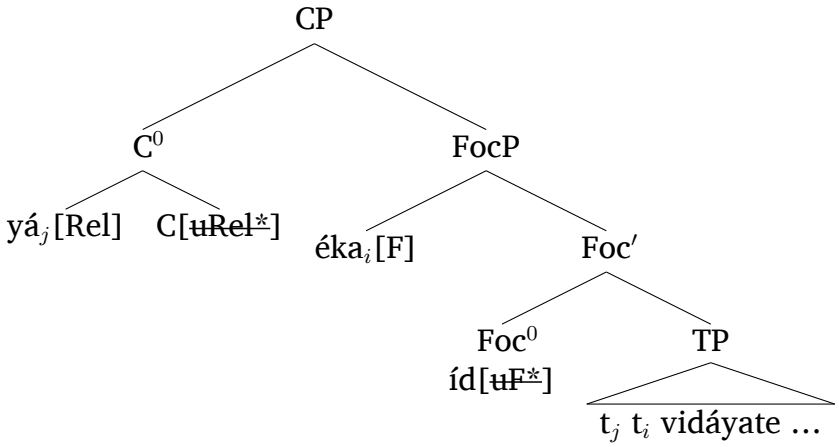
tuvám íd asi kṣápāvān
you.NOM.SG FOC be.2.SG guardian.NOM.SG
“YOU ALONE are the guardian”

The crucial observation for this particle is that it can also occur within an embedded clause, yielding the surface order *yá- X íd* …. And we do not observe fronted elements with *íd* occurring left of the relative, focusing extracted material, as in * *X íd yá-* …. These facts point to the existence of a focus phrase (FocP) directly below CP, of which *íd* is one possible head.

(157) RV 1.84.7a

yá éka íd vidáyate …
REL.NOM.SG alone FOC distribute.3SG
“he who ALONE distributes …”

(158)



The above analysis accounts for the behavior of *íd* within relative clauses. Interestingly, we nowhere find focus fronting with *íd* cooccurring with the raising of elements into the embedded SpecCP, as in: *X yá- Y íd* …. If no examples can be found, or if more evidence comes to light, then there may be a blocking effect to investigate. Until then, however, we may predict that such structures could be grammatical but are unattested.

At this point a clear picture of the Rigvedic left periphery comes into view. The wh-forms in *ká-* must be categorically distinct from relatives in *yá-*. There must be a strong uninterpretable feature on the C of embedded clauses that triggers head-movement of the relative into C, and there must be a strong feature on the C of embedded clauses that triggers the movement of an element into SpecCP. We are left to speculate on the specific nature of that feature (which we labeled [uX*]). It must be formulated so as to account for the attraction of preverbs or nouns from within the TP downstairs, in which regard the structure greatly resembles V-to-T-to-C and XP-to-SpecCP analyses proposed to explain German V2.

6.6 Conclusion

In this chapter, I hope to have provided further evidence in favor of the grammaticality of SOV, wh-movement, and discontinuous constituency in Rigvedic, and to have cast doubt on the grammaticality of Germanesque argument scrambling. While establishing the grammaticality of an observed phenomenon is a necessary first step towards formulating it in a syntactic account, this support only scratches the surface of these phenomena. However, in the account of the Rigvedic left periphery presented here, I hope to have not only demonstrated the power of this method of investigation for discriminating grammatical from ungrammatical patterns in poetry, but also to have formulated a theoretically consistent account.

The accuracy of these claims and the efficacy of the method by which I arrived at them represent a potentially important development for the syntactic reconstruction of Indo-Iranian. It remains to expand this method both longitudinally, by continuing to apply it and through application to refine the method itself; and laterally, by applying the method to other languages.

Chapter 7

Conclusion

7.1 Future research

A great advantage of the investigation method laid out in this work is that it can apply *mutatis mutandis* to a poetic corpus in any language; of course the specifics of those investigations would depend on the poetic tradition of the language. But insofar as poetry resembles a language game, altering well-formed syntactic output to conform to an artificial pattern, applying the premise of this method–that metrical optimality correlates inversely with grammatical accuracy–will allow us to sort through verses and separate the grammatical wheat from the poetic chaff.

7.1.1 Getting syntax out of Latin poetry

The quantitative meters of Latin poetry work somewhat differently from those of Vedic. For one thing, they do not fix the number of syllables but rather the number of feet. This allows for a different–and in some ways greater–degree of metrical freedom, such

that the parameters of a "good" line are looser and more easily attained. Rather than striving towards one or two canonical verse patterns, Latin poets worked within a flexible framework. For example, dactylic hexameter (the meter of Latin epic poetry) prescribes a verse of 6 feet, the first 5 of which may be either dactyls or spondees[1], the last being a spondee. The examples below showcase the two extremes of these possibilities.

(159) Latin dactylic hexameter

spondaic	H H | H H | H ‖ H | H H | H H | H A
dactylic	H L L | H L L | H L ‖ L | H L L | H L L | H A
	etc.

Poets like Vergil and Ovid were able to follow these guidelines fairly precisely, so that their poetry consists almost entirely of well-behaved lines. That is not to say that some patterns will not be more frequent than others, but it does change the dynamic of the analysis: there are only 5 feet which can vary between dactyl and spondee, allowing for only 32 different scansion patterns for well-behaved lines[2]. Furthermore, less well-behaved lines may be too rare to count on for grammatical insights, at least within the work of a single author.

[1]The overwhelming majority of dactylic hexameter lines show a dactyl in the fifth foot. Spondees in this position are rare but do occur.

[2]In treatments of Latin verse, commentators typically note that certain syllables must be read with the opposite natural length of the vowel, rather than that the meter might be defective. In Aeneid 8.98, for example, the *u* of *prŏcŭl*, which is short by nature and by position, occupies a place in the scansion which ought to be long. The opposite can also be true, as in Aeneid 7.359, where the first *a* of *Lāvīnĭa* is long by nature, but the meter requires it to be short.

Aeneid 8.98
cum muros arcemque procul ac rara domorum HH HH HLL **LH** HLL HA
Aeneid 7.359
exsulibusne datur ducenda Lavinia Teucris HLL HLL HH **HLH** HLL HA

Even so, we can draw conclusions by observing the distribution of tokens, and comparing alternative arrangements of the lines in which they occur, in order to discover metrical motivations for word-order variation. Let us take the use of the Latin copula with predicate adjectives as an example. We should expect to find the order Noun-Adjective-Copula (Adams 1994: 14), as in the following examples.

(160) Cato

a. De Agricultura 4.1

frons occipitio prior est
face.NOM.SG back.of.the.head.ABL.SG prior be.3SG

"the face is preferable to the back of the head"[3]

b. De Agricultura 41.1

ea optuma est
it.NOM.SG best.NOM.SG be.3SG

"it is best"

(161) Cicero

a. Pro Rosc. 57

hoc populo gratissimum est
this.NOM.SG people.DAT.SG most.gracious.NOM.SG be.3SG

"this is most gracious for the people"

b. Pro Sul. 39

hoc perspicuum est
this.NOM.SG evident.NOM.SG be.3SG

"this is evident"

However, the epic poets use multiple arrangements for predicate adjectives, such as those presented below.

(162) Noun-Adjective-Copula: Ovid's Metamorphoses 1.612

bos quoque formosa est
cow.NOM.SG also beautiful.NOM.SG be.3SG

"the cow is also beautiful"

[3]This phrase is a proverb, with the sense that more work is done when the master is present (see Oxford Latin Dictionary s.v. *occipitium*).

(163) Adjective-Noun-Copula: Ovid's Metamorphoses 1.214

longa mora est
long.NOM.SG delay.NOM.SG be.3SG

"long is the delay"

(164) Adjective-Copula-Noun: Vergil's Aeneid 1.341

longa est iniuria
long.NOM.SG be.3SG injury.NOM.SG

"long is the injury"

(165) Noun-Copula-Adjective: Ovid's Metamorphoses 2.663

pater est mihi nempe biformis
father.NOM.SG be.3.SG meDAT.SG truly of.two.forms.NOM.SG

"my father is truly of two forms"

Based on the prose comparanda, we can suppose that these poets' natural arrangement for this construction would have been the same as Cicero's, Caesar's, and Pliny's. But, having established the inverse link between poetic optimality and grammatical accuracy, we can demonstrate the metrical motivation exerted on these examples by rearranging them. In the tables below, the altered feet are shown in boldface.[4]

(166) Metamorphoses 1.214

original verse	scansion
longa mora est. quantum noxae sit ubique repertum	HLL HH HH HLL HLL HA
rearrangement	
mora longa est. quantum noxae sit ubique repertum	**LL** HH HH HH **LL** HLL HH

(167) Aeneid 1.341

original verse	scansion
germanum fugiens. longa est iniuria, longae	HH HLL HH HH HLL HH
rearrangement	
germanum fugiens. iniuria longa est, longae	HH HLL HH HLL **HH** HH

(168) Metamorphoses 2.663

original verse	scansion
tota tamen quare? pater est mihi nempe biformis	HLL HH HLL HLL HLL HA
rearrangements	
tota tamen quare? pater biformis est mihi nempe	HLL HH **HLH LHL** HLL HA
tota tamen quare? mihi nempe pater biformis est	HLL HH HLL HLL **HLH LA**
tota tamen quare? mihi nempe biformis est pater	HLL HH HLL HLL **HLH LA**

[4]In these examples, the entire line has been provided in order to show the full metrical context.

In the first of these examples, the rearrangement leads to two entirely defective feet; in the second, it places a spondee in the fifth foot. While spondees in the fifth foot do occur, poets greatly preferred to have a dactyl in that position. Since the last example uses more words, it has many more possibilities for rearrangement. However it is not necessary to analyze all of these possibilities, because multiple will fail for the same reasons. For instance, in any arrangement beginning with *pater*, *est* must come second, because any other word in the sentence would cause the second syllable of *pater* to be long, thus yielding a bad foot. Nor can *est* end this line, because none of the other words in the sentence end with a syllable that is long by nature, so none of those possibilities could achieve the final spondee. So it is clear that in these instances, the poets, ever striving to conform to their medium, had no obvious path towards what we suspect to be the natural, grammatical expression of predicate adjective constructions, and therefore consciously altered their utterances.

7.1.2 Getting syntax out of Greek poetry

As is the case with Vedic, some of the oldest attestations of Greek come to us in the form of poetry, namely the *Iliad* and the *Odyssey*. The language of these epics, commonly referred to as Homeric, is an amalgam of dialects and periods, but its archaic nature makes it one of the cornerstones of Indo-European linguistics (Fortson 2010: 249).

As with Latin, we can see how metrical considerations seem to affect word order in Homeric Greek, even without a full treatment of the corpus's scansion. For example, let us observe the distribution of the infinitive *εἶναι*, 'to be.' In the prose of Thucydides (writing in the fifth century BCE), *εἶναι* occurs both within clauses and at the ends of clauses, though he uses it within the clause about twice as often. The same is true for Herodotus (also writing in the fifth century BCE), except that he uses *εἶναι* within the clause three times as often. The following examples give both arrangements.

(169) Herodotus, Histories 1.8

ἐνόμιζέ οἱ εἶναι γυναῖκα πολλὸν πασέων
consider.IMPF.3SG he.DAT.SG be.INF woman.ACC.SG by.far all.GEN.PL
καλλίστην.
most.beautiful.ACC.SG

"he considered [her] to be by far the most beautiful woman of all" (AOR = aorist)

(170) Herodotus, Histories 2.9

... ὡς ἐγὼ ἐπυνθανόμην ... τὰ δὲ πρὸς τὴν
as me.NOM.SG learn.AOR.1SG theACC.PL but towards the.ACC.SG
ἠῶ λιβανωτοφόρα αὐτοῦ τὰ τέρματα
east.ACC.SG bearing.frankincense.ACC.PL there theACC.PL boundary.ACC.PL
εἶναι.
be.INF

"...as I learned...the eastern boundaries there to be rich in frankincense."

To explain this distribution there may be some stylistic influence, grammatical free variation, or a syntactic difference between medial and final instances of *εἶναι*. In any case, a survey of these authors' prose might answer these questions to our satisfaction. However, we could not without reservation apply those findings to the language of the epics, since they were composed hundreds of years earlier and in particular because their syntax appears to differ from the later prose. When we investigate the distribution of *εἶναι* in Homeric Greek, we find two patterns. In the overwhelmingly more frequent pattern (45 out of 61 non-repeated occurrences in the Iliad), *εἶναι* occurs at the end of a verse, which typically coincides with the end of a clause, as in the following examples.

(171) Iliad 1.91

ὃς νῦν πολλὸν ἄριστος Ἀχαιῶν εὔχεται εἶναι
REL.NOM.SG now by.far best.NOM.SG Achaean.GEN.PL boast.3SG be.INF

"...who now boasts to be the best by far of the Achaeans"

(172) Iliad 11.20

τόν ποτέ οἱ Κινύρης δῶκε ξεινήϊον
REL.ACC.SG once he.DAT.SG Kinyras.NOM.SG give.AOR.3SG guest.gift.ACC.SG
εἶναι
be.INF

"...which Kinyras once gave him to be a guest-gift"

Here, as in Latin, the meter is dactylic hexameter. When *εἶναι* occurs at the end of the line, it makes up the final spondee in the scansion. But since the poet is free to place spondees anywhere, it may seem too great a coincidence that this particular spondee tends to show up clause-finally. Furthermore, in a significant minority of cases, (11 non-repeated lines out of 61), *εἶναι* does not occur finally but rather before a line-final trisyllabic sequence, where it forms the metrical structure HLLHA. These instances, presented below, appear to be formulaic in nature.

(173) Non-final *εἶναι* in the Iliad:

a. 5.173: οὐδέ τις ἐν Λυκίῃ σέο γ᾽ εὔχεται εἶναι ἀμείνων.
b. 6.350: ἀνδρὸς ἔπειτ᾽ ὤφελλον ἀμείνονος εἶναι ἄκοιτις,
c. 6.388: τείρεσθαι Τρῶας, μέγα δὲ κράτος εἶναι Ἀχαιῶν.
d. 8.229: πῇ ἔβαν εὐχωλαί, ὅτε δὴ φάμεν εἶναι ἄριστοι,
e. 9.103: αὐτὰρ ἐγὼν ἐρέω ὥς μοι δοκεῖ εἶναι ἄριστα.
f. 12.103: οἳ γάρ οἱ εἴσαντο διακριδὸν εἶναι ἄριστοι
g. 12.215: νῦν αὖτ᾽ ἐξερέω ὥς μοι δοκεῖ εἶναι ἄριστα.
h. 13.735: αὐτὰρ ἐγὼν ἐρέω ὥς μοι δοκεῖ εἶναι ἄριστα:
i. 15.108: κάρτεΐ τε σθένεΐ τε διακριδὸν εἶναι ἄριστος.
j. 23.595: ἐκ θυμοῦ πεσέειν καὶ δαίμοσιν εἶναι ἀλιτρός.
k. 23.669: πυγμῇ νικήσαντ᾽, ἐπεὶ εὔχομαι εἶναι ἄριστος.

In each of these cases, *εἶναι* forms part of a dactyl in the fifth foot (the diphthong *αι* here is treated as a short vowel plus a glide consonant). So it appears that the position of the infinitive in all these examples is subject not exclusively to the grammar of the language, but also to the meter of the line. It appears that the poet's syntax compels him to place the infinitive at the end, but for the sake of the meter he may exchange it with the preceding word, so long as that word has the metrical shape LHL or LHH.

7.2 Contributions and problems

For those interested in the syntax underlying poetry, there has always been an unstated assumption that we must choose between two extremes: either we may discard evidence from word order in poetry, or we may take all of it at face value. But these options hardly satisfy our common sense, let alone our curiosity. The general goal of this work has been to explore a third option: that by analyzing the poetry in depth, we may be able to grade the evidence and limit ourselves to studying the best of it.

The method I have laid out for Rigvedic will continue to uncover syntactic truths about the language the more it is applied to the corpus. And although the specifics of that method will need to be modified when it is applied to a different language or poetic format, there is nothing in principle that limits its power to the Rigveda.

The main problem in pursuing this mode of inquiry is that it is a single tool which works best in concert with others. The lack of a tagged Rigvedic corpus stifles the depth and breadth of our searches, forcing us to select for analysis only a small number of salient constructions. With additional searching, or with the creation of a tagged corpus, the method proposed in this work should allow us to attain deeper insights into the syntax of this difficult text.

References

Adams, J.N. 1994. *Wackernagel's law and the placement of the copula "esse" in classical Latin*. Cambridge: Cambridge Philological Society.

Adger, David. 2003. *Core Syntax: A Minimalist Approach*. New York: Oxford University Press.

Arnold, Edward. 1905. *Vedic metre in its historical development*. Cambridge: University Press.

Authier, Jean-Marc. 1992. "Iterated CPs and Embedded Topicalization". *Linguistic Inquiry* 23.2:329–336.

Bayer, Josef, and Jaklin Kornfilt. 1994. "Against scrambling as an instance of Move-alpha". In *Studies on scrambling. Movement and non-movement approaches to free-word-order phenomena*, ed. by N. Corver and H. van Riemsdijk, 17–60. Berlin: Mouton de Gruyter.

Broekhuis, Hans. 2000. "Against feature strength. The case of Scandanavian object shift." *Natural Language and Linguistic Theory* 18:673–721.

Bruce Helford, Cheryl Holliday, Norm MacDonald (Writers), and Steve Zuckerman (Director). 1999. *Norm vs. Love*. Television series episode. American Broadcasting Company.

Chomsky, Noam. 1969. *Aspects of the Theory of Syntax*. Cambridge, MA: The M.I.T. Press.

— . 2001. “Derivation by Phase”. In *Ken Hale: A life in language*, ed. by M. Kenstowicz, 1–52. Cambridge, MA: MIT Press.

— . 1981. *Lectures on Government and Binding*. Dordrecht: Foris Publications.

— . 1957. *Syntactic Structures*. Paris: Mouton & Co.

— . 1995. *The Minimalist Program*. Cambridge, MA: The M.I.T. Press.

Chomsky, Noam, and Morris Halle. 1968. *The Sound Pattern of English*. New York: Harper & Row.

deHaan, Germen, and Fred Weerman. 1986. “Finiteness and Verb Fronting in Frisian”. In *Verb Second Phenomena in Germanic Languages*, ed. by Hubert Haider and Martin Prinzhorn, 77–110. Dordrecht: Foris.

Delbrück, Bertold. 1888. *Altindische Syntax*. Halle: Verlag der Buchhandlung des Waisenhauses.

Dunkel, George. 1990. “J. Wackernagel und die idg. Partikeln *so, *-ke, *-kem und *an”. In *Sprachwissenschaft und Philologie: Jakob Wackernagel und die Indogermanistik heute*, ed. by Heiner Eichner, 100–130. Wiesbaden: Ludwig Reichert.

Evans, Nicholas. 1995. *A Grammar of Kayardild: With Historical-comparative Notes on Tangkic*. Berlin: Walter de Gruyter.

Fanselow, Gisbert. 2001. “Features, theta-roles, and free constituent order”. *Linguistic Inquiry* 32:405–437.

— . 2003. “Free constituent order: a minimalist interface account”. *Folia Linguistica* 37:191–231.

Fortson, Benjamin. 2010. *Indo-european language and culture: an introduction*. 2nd ed. Singapore: Wiley-Blackwell.

Frey, Werner. 2006. “Contrast and movement to the German prefield”. In *The Architecture of Focus*, ed. by V. Molnár and S. Winkler, 235–264. Berlin: Mouton de Gruyter.

Gary Kurtz (Producer), & Irvin Kershner (Director). 1980. *Star Wars Episode V: The Empire Strikes Back*. Motion picture. Lucasfilm.

Glare, P.G.W., ed. 1996. *Oxford Latin Dictionary*. Oxford: Clarendon Press.

Gonda, Jan. 1952. *Four Studies in the Language of the Veda*. The Hague: Mouton.

Grassmann, Hermann. 1873 [1967]. *Wörterbuch zum Rigveda*. Wiesbaden: Harrassowitz.

Hale, Ken. 1983. "Warlpiri and the grammar of non-configurational languages". *Natural Language & Linguistic Theory* 1 (1): 5–47. http://dx.doi.org/10.1007/BF00210374.

Hale, Mark. 1996. "Deriving Wackernagel's Law: Prosodic and syntactic factors determining clitic placement in the language of the Rigveda". In *Approaching Second: Second position clitics and related phenomena*, ed. by Aaron Halpern and Arnold Zwicky, 165–197. Stanford: CSLI.

Hinterhölzl, Roland. 2006. *Scrambling, Remnant Movement, and Restructuring in West Germanic*. New York: Oxford University Press.

Holmberg, Anders. 1986. "Word Order and Syntactic Features in the Scandinavian Languages and English". PhD thesis, University of Stockholm.

Kager, Rene. 1999. *Optimality Theory*. New York: Cambridge University Press.

Klein, Jared. 1994. "Remarks on the Position of the Verb in the Rigveda". *Indo-Iranian Journal* 37:97–119.

Kratzer, Angelika. 1996. "Severing the external argument from its verb". In *Phrase structure and the lexicon*, ed. by Rooryck and Zaring, 109–137. Dordrecht: Kluwer Academic Publishers.

Larson, Richard K. 1988. "On the double object construction". *Linguistic Inquiry* 19:335–391.

Macdonell, Arthur A. 1916. *A Vedic Grammar for Students*. [Repr. Delhi: Low Price Publications, 2009.]

McCloskey, James. 2006. “Questions and questioning in a local English”. In *Cross-Linguistic Research in Syntax and Semantics: Negation, Tense and Clausal Architecture*, ed. by Paul H. Portner, 86–126. Washington, D.C.: Georgetown University Press.

Müller, Gereon, and Wolfgang Sternfeld. 1994. “Scrambling as A-bar Movement”. In *Studies on Scrambling. Movement and non-movement approaches to free-word-order phenomena*, ed. by Norbert Cover and Henk C. van Riemsdijk, 331–385. Berlin: Mouton de Gruyter.

Müller, Max. 1860. *A History of Ancient Sanskrit Literature*. [Repr. Varanasi: The Chowkhamba Sanskrit Series Office, 1968.]

Neeleman, Ad. 1994. “Scrambling as a D-structure phenomenon”. In *Studies on scrambling. Movement and non-movement approaches to free-word-order phenomena*, ed. by N. Corver and H. van Riemsdijk, 387–429. Berlin: Mouton de Gruyter.

“Open Source Shakespeare”. 2014. Visited on 01/20/2014. `http://www.opensourceshakespeare.org`.

Platzack, Christer. 1986. “COMP, INFL, and Germanic Word Order”. In *Topics in Scandinavian Syntax*, ed. by Lars Hellan and Kirsti Koch Christensen, 185–234. Dordrecht: Reidel.

Pullum, Geoffrey K. 1982. “Free word order and phrase structure rules”. In *Proceedings of the Twelfth Annual Meeting of the North Eastern Linguistic Society*, ed. by James Pustejovsky and Peter Sells, 209–220. Amherst, MA: Graduate Linguistics Student Association, University of Massachusetts.

Rick McCallum (Producer), & George Lucas (Director). 2005. *Star Wars Episode III: Revenge of the Sith*. Motion picture. Lucasfilm.

Rizzi, Luigi. 1997. “The fine structure of the left periphery”. In *Elements of Grammar: Handbook in Generative Syntax*, ed. by Liliane Haegeman, 281–337. Dordrecht: Kluwer.

Ross, John. 1967. “Constraints on variables in syntax”. PhD thesis, MIT.

Rudin, Catherine. 1988. “On Multiple Questions and Multiple WH Fronting”. *Natural Language Linguistic Theory* 6.4:445–501.

Saito, Mamoru. 1992. “Long Distance Scrambling in Japanese”. *Journal of East Asian Linguistics* 1.1:69–118.

Thomson, Karen, and Jonathan Slocum. 2009. “The Rigveda: Metrically Restored Text”. `http://www.utexas.edu/cola/centers/lrc/RV/RV00.html`.

Tikkanen, Bertil. 1987. *The Sanskrit Gerund: A Synchronic, Diachronic, and Typological Analysis*. Helsinki: the Finnish Oriental Society.

Van Nooten, Barend, and Gary B. Holland, eds. 1994. *Rig Veda: a Metrically Restored Text with an Introduction and Notes*. Cambridge, MA: Harvard University Press.

Vikner, Sten. 1995. *Verb Movement and Expletive Subjects in the Germanic Languages*. Oxford studies in comparative syntax. Oxford: Oxford University Press.

Wenthe, Mark. 2012. “Issues in the Placement of Enclitic Personal Pronouns in the Rigveda”. PhD thesis, University of Georgia.

Whitney, William Dwight. 1896. *Sanskrit Grammar*. [Repr. Mineola, NY: Dover Publications Inc., 2003.]

Zwart, Jan-Wouter. 1998. “Review: The Minimalist Program”. *Journal of Linguistics* 34:213–226.

Appendices

Appendix A

A shell script for scanning Vedic text

```
#!/bin/bash
# Vedic scanner
#This is one of the programs used to scan the Rigveda.  Although they all
#follow the same basic method, it was necessary to produce several versions
#in order to best deal with final -e and -o before a following vowel. The
#corpus was first separated: all lines containing -e_V or -o_V were sequestered,
#the remaining lines were then scanned according to the search and replace
#method below, with every -e- and -o- scanning as H. The version of the program
#presented here was made to scan the sequestered data in two ways, once with
#all -e/o_V scanning as H, and once with them all scanning as L. Each version's
#resulting metrical pattern was then counted against the previously scanned
#corpus, and the higher number chosen. The two sets were then recombined and
#recounted to form the single scanned, counted corpus.
#This extra complication allows -e/o_V the freedom to scan as either light
#or heavy depending on what the better meter demands.
```

```
while read stringZ #This takes each line from the file one at a time
#and takes it through the following process.

do

stringY=$stringZ #Copying the string will allow us to append the
#scansion to the Vedic verse.

stringZ=${stringZ:10} #Delete the first 10 characters of the line,
#which indicate the mandala, hymn, and verse.

stringZ=${stringZ//.} #Delete characters which don't affect scansion.
stringZ=${stringZ//-}
stringZ=${stringZ//+}
stringZ=${stringZ//°}
stringZ=${stringZ//†}
stringZ=${stringZ//\'}
stringZ=${stringZ//0}
stringZ=${stringZ//1}
stringZ=${stringZ//2}
stringZ=${stringZ//3}
stringZ=${stringZ//4}
stringZ=${stringZ//5}
stringZ=${stringZ//6}
stringZ=${stringZ//7}
stringZ=${stringZ//8}
stringZ=${stringZ//9}
```

```
stringZ=${stringZ//H} #Delete previous scansion if there is any.
stringZ=${stringZ//L} #(this makes rescanning easier)
stringZ=${stringZ//\:}

stringZ=":"$stringZ":" #Add borders for easy reference.

stringZ=${stringZ//ph/c} #We must first replace the consonants
stringZ=${stringZ//bh/c} #transcribed with multiple letters,
stringZ=${stringZ//dh/c} #since each component of these must also
stringZ=${stringZ//th/c} #be treated as a single consonant.
stringZ=${stringZ//kh/c}
stringZ=${stringZ//gh/c}
stringZ=${stringZ//ṭh/c}

stringZ=${stringZ//ch/\cc} #Digraphs which represent two morae
stringZ=${stringZ//ḍh/\cc}
stringZ=${stringZ//ḷh/\cc}

stringZ=${stringZ//ḥ/c} #Replace visarga and anusvara with 'c'
stringZ=${stringZ//ṃ/c}
stringZ=${stringZ//m/c}

stringZ=${stringZ//r̥/H} #Since 'r' is used for both a vowel and
stringZ=${stringZ//r̄/H} #a consonant, we must treat all such with
stringZ=${stringZ//r̆/H} #vocalic diacritics first.
stringZ=${stringZ//r/a}
```

```
stringZ=${stringZ//ŕ/a}
stringZ=${stringZ//l/a}

stringZ=${stringZ//k/c} #Replace every remaining consonant with 'c.'
stringZ=${stringZ//g/c}
stringZ=${stringZ//ṅ/c}
stringZ=${stringZ//c/c}
stringZ=${stringZ//j/c}
stringZ=${stringZ//ñ/c}
stringZ=${stringZ//t/c}
stringZ=${stringZ//d/c}
stringZ=${stringZ//n/c}
stringZ=${stringZ//ṭ/c}
stringZ=${stringZ//ḍ/c}
stringZ=${stringZ//ṇ/c}
stringZ=${stringZ//p/c}
stringZ=${stringZ//b/c}
stringZ=${stringZ//m/c}
stringZ=${stringZ//v/c}
stringZ=${stringZ//y/c}
stringZ=${stringZ//r/c}
stringZ=${stringZ//ḷ/c}
stringZ=${stringZ//l/c}
stringZ=${stringZ//ṣ/c}
stringZ=${stringZ//ś/c}
stringZ=${stringZ//s/c}
stringZ=${stringZ//h/c}
```

```
stringZ=${stringZ//a̋/vv} #Replace disyllabic long vowels with 'vv'.
stringZ=${stringZ//ã/vv}
stringZ=${stringZ//ĩ/vv}
stringZ=${stringZ//ī/vv}
stringZ=${stringZ//ũ/vv}
stringZ=${stringZ//ű/vv}
stringZ=${stringZ//õ/vv}
stringZ=${stringZ//ő/vv}
stringZ=${stringZ//ő/vv}
stringZ=${stringZ//ō/vv}
stringZ=${stringZ//ẽ/vv}
stringZ=${stringZ//ē/vv}

stringZ=${stringZ//ai/H} #Replace long vowels except e and o
stringZ=${stringZ//aí/H} #with 'H' since these will scan heavy.
stringZ=${stringZ//au/H}
stringZ=${stringZ//aú/H}
stringZ=${stringZ//a̋ /H}
stringZ=${stringZ//ā/H}
stringZ=${stringZ//ū/H}
stringZ=${stringZ//ī/H}

stringZ=${stringZ//a/v} #Replace short vowels with 'v'.
stringZ=${stringZ//à/v} #<-- precombined accent
stringZ=${stringZ//à/v} #<-- combining accent
stringZ=${stringZ//á/v}
```

```
stringZ=${stringZ//i/v}
stringZ=${stringZ//ì/v}
stringZ=${stringZ//í/v}
stringZ=${stringZ//ì/v}
stringZ=${stringZ//ï/v}
stringZ=${stringZ//u/v}
stringZ=${stringZ//ü/v}
stringZ=${stringZ//ú/v}

stringZ=${stringZ// } #Delete spaces.
stringZ=${stringZ//  } #(there appear to be 2 kinds of space used)

#The string is now a series of 'c's and 'v's with some 'H's that
#have already been "scanned."

#At this point the script will copy the string in order to try it out
#with eo_V scanned as L_V and as H_V
stringA=$stringZ

stringA=${stringA//ev/Hv} #To be sure that e and o scan heavy
stringA=${stringA//ov/Hv} #before other vowels
stringA=${stringA//év/Hv}
stringA=${stringA//èv/Hv}
stringA=${stringA//èv/Hv}
stringA=${stringA//óv/Hv}
stringA=${stringA//òv/Hv}
stringA=${stringA//òv/Hv}
```

```
stringA=${stringA//oe/HH} #only affects 2 lines
stringA=${stringA//eó/HH} #only affects 1 line
stringA=${stringA//óe/HH} #only affects 1 line
stringA=${stringA//eH/HH}
stringA=${stringA//oH/HH} #update to reflect praghrya e/o
stringA=${stringA//éH/HH}
stringA=${stringA//èH/HH}
stringA=${stringA//èH/HH}
stringA=${stringA//óH/HH}
stringA=${stringA//òH/HH}
stringA=${stringA//òH/HH}

stringZ=${stringZ//ev/vv} #To be sure that e and o scan light
stringZ=${stringZ//ov/vv} #before other vowels
stringZ=${stringZ//év/vv}
stringZ=${stringZ//èv/vv}
stringZ=${stringZ//èv/vv}
stringZ=${stringZ//óv/vv}
stringZ=${stringZ//òv/vv}
stringZ=${stringZ//òv/vv}
stringZ=${stringZ//oe/vH} #only affects 2 lines
stringZ=${stringZ//eó/vH} #only affects 1 line
stringZ=${stringZ//óe/vH} #only affects 1 line
stringZ=${stringZ//eH/vH}
stringZ=${stringZ//oH/vH} #update to reflect praghrya e/o
stringZ=${stringZ//éH/vH}
stringZ=${stringZ//èH/vH}
```

```
stringZ=${stringZ//èH/vH}
stringZ=${stringZ//óH/vH}
stringZ=${stringZ//òH/vH}
stringZ=${stringZ//òH/vH}

stringA=${stringA//e/H} #Scan e's and o's as heavy
stringA=${stringA//o/H}
stringA=${stringA//é/H}
stringA=${stringA//è/H}
stringA=${stringA//è/H}
stringA=${stringA//ó/H}
stringA=${stringA//ò/H}
stringA=${stringA//ò/H}

stringZ=${stringZ//e/H} #Scan e's and o's as heavy
stringZ=${stringZ//o/H}
stringZ=${stringZ//é/H}
stringZ=${stringZ//è/H}
stringZ=${stringZ//è/H}
stringZ=${stringZ//ó/H}
stringZ=${stringZ//ò/H}
stringZ=${stringZ//ò/H}

#We are now ready to replace syllables heavy by position with 'H'.

stringZ=${stringZ//vcccccc/H}
stringZ=${stringZ//vccccc/H}
```

```
stringZ=${stringZ//vccc/H}
stringZ=${stringZ//vcc/H}

stringZ=${stringZ//H/H} #Some combining diacritics may have migrated
stringZ=${stringZ//H/H} #onto some 'H's; this will clean up the string.

stringZ=${stringZ//v/L}        #Any leftover 'v's become 'L's and the
stringZ=${stringZ//c}         #leftover 'c's are deleted.

stringZ=${stringZ//\:H/\:A} #Replace first and last scans with 'A'
stringZ=${stringZ//\:L/\:A} #for "anceps."
stringZ=${stringZ//H\:/A\:}
stringZ=${stringZ//L\:/A\:}

stringZ=${stringZ//\:f/\:A} #I have no idea why this is necessary

stringA=${stringA//vccccc/H}
stringA=${stringA//vcccc/H}
stringA=${stringA//vccc/H}
stringA=${stringA//vcc/H}

stringA=${stringA//H/H} #Some combining diacritics may have migrated
stringA=${stringA//H/H} #onto some 'H's; this will clean up the string.

stringA=${stringA//v/L}        #Any leftover 'v's become 'L's and the
stringA=${stringA//c}         #leftover 'c's are deleted.
```

```
stringA=${stringA//\:H/\:A} #Replace first and last scans with 'A'
stringA=${stringA//\:L/\:A} #for "anceps."
stringA=${stringA//H\:/A\:}
stringA=${stringA//L\:/A\:}

stringA=${stringA//\:f/\:A} #I have no idea why this is necessary

#Now we generate the frequency count for each version of each line

stringX=$stringZ
num1=‘grep -c "$stringX" ./rv_scansion‘

stringX=$stringA
num2=‘grep -c "$stringX" ./rv_scansion‘

#if the heavier version scans better, we echo that, otherwise  the lighter

if [ $num1 -lt $num2 ]; then
echo "$stringY   $stringA   $num2"
   else
echo "$stringY   $stringZ   $num1"
   fi

done

exit 0
```

Appendix B

Rigvedic lines with scansion in the first percentile of frequency

These are the 8, 11, and 12 syllable lines of the RigVeda whose metrical patterns constitute the first percentile when ranked in order of frequency.

B.1 First percentile of 8 Syllable lines according to the frequency of each line's scansion pattern.

1.027.03c pāhí sádam íd viśvā́yuḥ :ALLLHHHA: 1

8.094.01a gaúr dhayati marútām̐ :ALLLLLLA: 1

10.085.40a sómaḥ prathamó vivide :AHLLHLLA: 2

1.090.05a utá no dhíyo góagrāḥ :ALHLHHHA: 2

5.075.05a bodhínmanasā rathíyā :AHLLHLLA: 2

8.002.09a śúcir asi puruniṣṭhā́ḥ :ALLLLLHA: 2

8.079.04b divá ā́ prthivyā́ rjīṣin :ALHLHHHA: 2

8.081.08a índra yá u nú te ásti :ALLLLLHA: 2

1.038.09c yát prthivĩṃ viundánti :ALLHLHHA: 3

5.074.06a ásti hí vām ihá stotā̆ :ALLHLHHA: 3

8.002.13c préd u harivaḥ śrutásya :ALLLHLHA: 3

8.046.22e dáśa gávāṃ sahásrā :ALLLHLHA: 3

8.071.02c tuvám íd asi kṣápāvān :ALLLHLHA: 3

8.079.01b viśvajíd udbhíd ít sómaḥ :ALLHLHHA: 3

8.091.03b ádhi caná tvā némasi :ALLHHHLA: 3

9.015.01a eṣá dhiyā̆ yāty áṇviyā :ALLHHHLA: 3

9.113.06b chandasíyāṃ vā̆camṃ vádan :ALLHHHLA: 3

10.020.08c agníṃ havíṣā várdhantaḥ :AHLLHHHA: 5

1.038.14b parjánya iva tatanaḥ :AHLLLLLA: 5

2.006.04b vásupate vásudāvan :ALLHLLHA: 5

3.041.08b háripriya arvā̆ṅ yāhi :AHLLHHHA: 5

5.017.04b dasmásya vásu rátha ā̆ :AHLLLLLA: 5

5.050.02d sácemahi sacathíyaiḥ :AHLLLLLA: 5

5.068.04a rtám rténa sápantā :ALLHLLHA: 5

5.082.07c satyásavaṃ savitā̆ram :ALLHLLHA: 5

5.082.09b āśrāváyati ślókena :AHLLHHHA: 5

8.002.04b índraḥ sutapā̆ viśvā̆yuḥ :AHLLHHHA: 5

8.002.26c ní yamate śatámūtiḥ :ALLHLLHA: 5

8.061.14b kṣáyasya ási vidhatáḥ :AHLLLLLA: 5

8.098.09b uraú rátha urúyuge :AHLLLLLA: 5

9.066.16a mahā̆m asi soma jyéṣṭha :AHLLHHHA: 5

9.066.20a agnír ṛṣiḥ pávamānaḥ :ALLHLLHA: 5

10.072.05a áditir hí ájaniṣṭa :ALHLLLHA: 7

10.090.12a brāhmaṇò 'sya múkham āsīd :ALHLLLHA: 7

10.145.05a ahám asmi sáhamānā :ALHLLLHA: 7

1.142.02a ghrtávantam úpa māsi :ALHLLLHA: 7

5.019.02a juhuré ví citáyanto :ALHLLLHA: 7

8.065.04a ā́ ta indra mahimā́naṃ :ALHLLLHA: 7

8.076.11b krákṣamāṇam akrpetām :ALHLLLHA: 7

10.097.22a óṣadhayaḥ sáṃ vadante :ALLHHLHA: 8

1.158.06a dīrghátamā māmateyó :ALLHHLHA: 8

6.016.25b iṣayaté mártiyāya :ALLHHLHA: 8

6.061.11b urú rájo antárikṣam :ALLHHLHA: 8

8.007.33a ṓ ṣú vŕṣṇaḥ práyajyūn :ALLHHLHA: 8

8.007.33c vavrtiyā́ṃ citrávājān :ALLHHLHA: 8

8.016.04a yásya ánūnā gabhīrā́ :ALLHHLHA: 8

8.071.08b rātím ádevo yuyota :ALLHHLHA: 8

10.009.08c yád vāhám abhidudróha :AHLLLHHA: 9

10.025.08c kṣetravíttaro mánuṣo :ALHLHLLA: 9

10.085.28a nīlalohitám bhavati :ALHLHLLA: 9

10.090.13a candrámā mánaso jātáś :ALHLLHHA: 9

10.097.03a óṣadhīḥ práti modadhvam :ALHLLHHA: 9

10.097.15a yā́ḥ phalínīr yā́ aphalā́ :ALLHHLLA: 9

10.097.17a avapátantīr avadan :ALLHHLLA: 9

10.097.21a yā́ś cedám upaśrṇvánti :AHLLLHHA: 9

10.134.07d pakṣébhir apikakṣébhir :AHLLLHHA: 9

10.146.03a utá gā́va ivādanti :ALHLLHHA: 9

10.146.06a ā́ñjanagandhiṃ surabhím :ALLHHLLA: 9

10.163.05a méhanād vanaṃkáraṇāl :ALHLHLLA: 9

1.023.22c yád vāhám abhidudróha :AHLLLHHA: 9

1.043.04a gāthápatim medhápatiṃ :ALLHHLLA: 9

1.050.13a úd agād ayám ādityó :ALHLLHHA: 9

1.084.02a índram íd dhárī vahato :ALHLHLLA: 9

1.176.03c spāśáyasva yó asmadhrúg :ALHLLHHA: 9

1.191.09a úd apaptad asaú sū́ryaḥ :ALHLLHHA: 9

2.041.07a gómad ū ṣú nāsatiyā :ALHLHLLA: 9

3.041.03c vīhí śūra puroḷā́śam :ALHLLHHA: 9

5.070.01c mítra váṃsi vāṃ sumatím :ALHLHLLA: 9

5.082.08a yá imé ubhé áhanī :ALHLHLLA: 9

5.086.06b áhāvi haviyáṃ śūṣyaṃ :AHLLLHHA: 9

6.044.04a tiyám u vo áprahaṇaṃ :ALLHHLLA: 9

6.047.24a dáśa ráthān práṣṭimataḥ :ALLHHLLA: 9

6.047.24b śatáṃ gā́ átharvabhyaḥ :AHLLLHHA: 9

7.032.18b etā́vad ahám ī́śīya :AHLLLHHA: 9

8.002.20c aśrīrá iva jā́mātā :AHLLLHHA: 9

8.002.21b bhūridā́varīṃ sumatím :ALHLHLLA: 9

8.002.27a éhá hárī brahmayújā :ALLHHLLA: 9

8.005.35c dhī́javanā nā́satiyā :ALLHHLLA: 9

8.046.21d prthuśrávasi kānīté :AHLLLHHA: 9

8.079.08b mā́ ví bībhiṣathā rājan :ALHLLHHA: 9

8.081.05c abhí rā́dhasā jugurat :ALHLHLLA: 9

8.089.05c tát prthivī́m aprathayas :ALLHHLLA: 9

9.005.08a bhā́ratī pávamānasya :ALHLLHHA: 9

10.086.20a dhánva ca yát krntátraṃ ca :ALLHHHHA: 10

10.090.02a púruṣa evédáṃ sárvaṃ :ALLHHHHA: 10

1.010.06d índro vásu dáyamānaḥ :AHLLLLHA: 10

10.135.05a káḥ kumārám ajanayad :ALHLLLLA: 10

10.135.06a yáthā́bhavad anudéyī :AHLLLLHA: 10

10.136.03a úṇmaditā maúṇeyena :ALLHHHHA: 10

10.136.06a apsarásāṃ gandharvā́ṇām :ALLHHHHA: 10

10.143.01a tyáṃ cid átrim rtajúram :ALHLLLLA: 10

10.155.05b pári agníṃ ahṛṣata :ALHLLLLA: 10

10.174.02c abhí prtanyántaṃ tiṣṭha :ALLHHHHA: 10

10.185.02c ī́še ripúr aghāśáṃsaḥ :AHLLLLHA: 10

1.027.03b ní mártiyād aghāyóḥ :AHLLLLHA: 10

1.027.05a ā́ no bhaja paraméṣu :AHLLLLHA: 10

1.038.03b márutaḥ kúva suvitā́ :ALHLLLLA: 10

1.187.07a yád adó pito ájagan :ALHLLLLA: 10

1.191.12b viṣásya púṣiyam akṣan :AHLLLLHA: 10

5.019.02b ánimiṣaṃ nrmṇám pānti :ALLHHHHA: 10

5.050.04a yátra váhnir abhíhito :ALHLLLLA: 10

5.051.14c svastí na índraś cāgníś ca :ALLHHHHA: 10

5.066.05a tád rtám prthivi brhác :ALHLLLLA: 10

8.002.03b svādúm akarma śrīṇántaḥ :ALLHHHHA: 10

8.002.19c mahā́m iva yúvajāniḥ :AHLLLLHA: 10

8.002.25b ā́ dhāvata mádiyāya :AHLLLLHA: 10

8.002.35c inó vásu sá hí vóḷhā :AHLLLLHA: 10

8.024.24b vájrahasta parivŕjam :ALHLLLLA: 10

8.046.10b aśvayā́ utá rathayā́ :ALHLLLLA: 10

8.046.29a ádha priyám iṣirā́ya :AHLLLLHA: 10

8.091.07a khé ráthasya khé ánasaḥ :ALHLLLLA: 10

8.092.07a tiyám u vaḥ satrāsā́haṃ :ALLHHHHA: 10

9.114.03a saptá díśo nā́nāsūryāḥ :ALLHHHHA: 10

10.062.05a vírūpāsa íd ŕṣayas :AHHLLLLA: 11

10.062.05c té áṅgirasaḥ sūnávas :AHLLHHLA: 11

10.093.11a etáṃ śáṃsam indrāsmayúṣ :AHHLHHLA: 11

10.095.03a íṣur ná śriyá iṣudhér :AHHLLLLA: 11

10.126.03c náyiṣṭhā u no neṣáṇi :AHHLHHLA: 11

10.158.02a jóṣā savitar yásya te :AHLLHHLA: 11

10.166.04c ā̃ vaś cittám ā̃ vo vratám :AHHLHHLA: 11

10.166.05e maṇḍū̃kā iva udakā̃n :AHHLLLLA: 11

10.175.03c vṛṣṇe dádhato vṛṣṇiyam :AHLLHHLA: 11

1.022.15a siyonā̃ prthivi bhava :AHHLLLLA: 11

1.024.04a yáś cid dhí ta itthā̃ bhágaḥ :AHLLHHLA: 11

1.028.02a yátra dvā̃v iva jaghánā :AHHLLLLA: 11

1.045.10d tám pāta tiróahniyam :AHLLHHLA: 11

1.046.05b nā̃satyā matavacasā :AHHLLLLA: 11

1.150.02b prahoṣé cid áraruṣaḥ :AHHLLLLA: 11

3.028.06c juṣásva tiróahniyam :AHLLHHLA: 11

5.051.15c púnar dádatā ághnatā :AHLLHHLA: 11

5.061.15b praṇetā̃ra itthā̃ dhiyā̃ :AHHLHHLA: 11

5.083.09d yát kíṃ ca prthivyā̃m ádhi :AHLLHHLA: 11

7.059.01a yáṃ trā̃yadhva idám-idaṃ :AHHLLLLA: 11

8.002.38a gāthāśravasaṃ sátpatiṃ :AHLLHHLA: 11

8.004.13a ratheṣṭhā̃ya adhvaryavaḥ :AHHLHHLA: 11

8.027.05a ā̃ no adyá sámanaso :AHHLLLLA: 11

8.047.16a tádannāya tádapase :AHHLLLLA: 11

8.052.05b mahā̃m ugrá īśānakŕt :AHHLHHLA: 11

8.055.04a sudevā̃ stha kāṇvāyanā :AHHLHHLA: 11

8.060.19a ágne járitar viśpátis :AHLLHHLA: 11

8.060.20d ágne sédha rakṣasvínaḥ :AHHLHHLA: 11

8.065.05b mahā̃m ugrá īśānakŕt :AHHLHHLA: 11

8.069.12a sudevó asi varuṇa :AHHLLLLA: 11

8.076.12c índrāt pári tanvàm mame :AHLLHHLA: 11

8.079.08a mā̆ naḥ soma sáṃ vīvijo :AHHLHHLA: 11

9.061.02a púraḥ sadyá itthā̆dhiye :AHHLHHLA: 11

1.003.04c áṇvībhis tánā pūtā̆saḥ :AHHLHHHA: 12

10.085.47a sám añjantu víśve devā̆ḥ :AHHLHHHA: 12

10.173.02a ihaívaídhi mā̆pa cyoṣṭhāḥ :AHHLHHHA: 12

1.038.09a dívā cit támaḥ krṇvanti :AHHLHHHA: 12

1.088.01b suarkaí ráthebhir yāta :AHHLHHHA: 12

5.070.02a tā̆ vāṃ samyág adruhvāṇā :AHHLHHHA: 12

8.002.10c śukrā̆ āśíraṃ yācante :AHHLHHHA: 12

8.002.25a pányam-panyam ít sotāra :AHHLHHHA: 12

8.002.29b mahé rā̆dhase nrmṇā̆ya :AHHLHHHA: 12

8.002.35a prábhartā ráthaṃ gavyántam :AHHLHHHA: 12

8.003.21c víśveṣāṃ tmánā śóbhiṣṭham :AHHLHHHA: 12

8.071.06b ágne dāśúṣe mártāya :AHHLHHHA: 12

B.2 First percentile of 11 Syllable lines according to the frequency of each line's scansion pattern.

10.015.04a bárhiṣadaḥ pitara ūtī́ arvā̆g :ALLHLLLHHHA: 1

10.016.06b pipīláḥ sarpá utá vā śvā̆padaḥ :AHHHLLLHHLA: 1

10.023.02d áva kṣṇaumi dā̆sasya nā̆ma cit :AHHLLLHLHLA: 1

10.032.04c mātā̆ yán mántur yūthásya pūrviyā̆ :AHHHHHHLHLA: 1

10.048.11d áparājitam ástrtam áṣāḷham :ALHLLHLLLHA: 1

10.050.04c bhúvo nṝ́ṃś cyautanó víśvasmin bháre :AHHHLHHHHLA: 1

10.074.04c sakrtsúvaṃ yé puruputrā́m mahī́ṃ :AHLHHLLHHLA: 1

10.077.01d gaṇám astoṣi eṣāṃ ná śobháse :ALHHLHHLHLA: 1

10.077.04b vithuryáti ná mahī́ śratharyáti :AHLLLLHLHLA: 1

10.078.01a víprāso ná mánmabhiḥ suādhíyo :AHHLHLHLHLA: 1

10.078.03c vármaṇvanto ná yodhā́ḥ śímīvantaḥ :AHHHLHHLHHA: 1

10.087.19c ánu daha sahámūrān kravyā́do :ALLLLLHHHHA: 1

10.105.07c árutahanur ádbhutaṃ ná rájaḥ :ALLLLHLHLLA: 1

10.110.05d devébhiyo bhavata suprāyaṇā́ḥ :AHLHLLLHHLA: 1

10.133.07a asmábhyaṃ sú tuvám indra tā́ṃ śikṣa :AHHLLLHLHHA: 1

10.148.01a suṣvāṇā́sa indara+ stumási tvā :AHHLHLHLLHA: 1

10.164.03a yád āśásā niḥśásā abhiśásā :AHLHHLHLLLA: 1

1.059.04a brhatī́ iva sūnáve ródasī :ALHLLHLHHLA: 1

1.113.14b ápa krṣṇā́ṃ nirṇíjaṃ devī́ āvaḥ :ALHHHLHHHHA: 1

1.117.22b áśviyaṃ śíraḥ práti airayatam :ALHLHLLHLLA: 1

1.121.08c hárim yát te mandínaṃ dukṣán vrdhé :AHHHHLHHHLA: 1

1.121.08d górabhasam ádribhir vātā́pyam :ALLLHLHLLHA: 1

1.122.09d ā́pa yád īṃ hótarābhir rtā́vā :ALLHHLHLLHA: 1

1.140.13c gávyaṃ yáviyaṃ yánto dīrghā́ áhā :AHLLHHHHHLA: 1

1.149.03c sāro ná rurukvā́ñ chatáātmā :ALHLLHHLLHA: 1

1.162.22a sugáviyaṃ no vājī́ suáśviyam :ALLHHHHLHLA: 1

1.173.07c sajóṣasa indaram+ máde kṣoṇī́ḥ :AHLLHLHLHHA: 1

1.173.12b ásti hí ṣmā te śuṣmin avayā́ḥ :ALHHHHLLLLA: 1

1.184.01c nā́satiyā kúha cit sántāv aryó :ALLHLLHHHHA: 1

2.019.01b mánīṣiṇaḥ suvānásya práyasaḥ :AHLHLHHHLLA: 1

2.019.01d óko dadhé brahmaṇyántaś ca náraḥ :AHLHHHHHLLA: 1

2.019.05b ā́ devó riṇaṅ mártiyāya stavā́n :AHHLHHLHHLA: 1

2.019.06b śúṣṇam aśúṣaṃ kúyavaṃ kútsāya :ALLLHLLHHHA: 1

2.020.01a vayáṃ te váya indra viddhí ṣú ṇaḥ :AHHLLHLHLLA: 1

2.020.04d brahmaṇiyató nū́tanasya āyóḥ :ALLLHHLHLHA: 1

2.020.05c muṣṇánn uṣásaḥ sū́riyeṇa stavā́n :AHLLHHLHHLA: 1

2.040.06c ávatu devī́ áditir anarvā́ :ALLHHLLLLHA: 1

2.042.01d mā́ tvā kā́ cid abhibhā́ víśvyā vidat :AHHLLLHHHLA: 1

3.014.07a túbhyaṃ dakṣa kavikrato yā́nīmā́ :AHHLLHLHHHA: 1

3.020.05d vásūn rudrā́m ādityā́m ihá huve :AHHHHHHLLLA: 1

4.021.10a evā́ vásva índaraḥ+ satyáḥ samrā́ḍ :AHHLHLHHHHA: 1

4.028.05d riricáthuḥ kṣā́ś cit tatrdānā́ :ALLHLHHLLHA: 1

4.029.04c úpa tmáni dádhāno dhurí āśū́n :AHLLLHHLLHA: 1

5.041.17a íti cin nú prajā́yai paśumátyai :ALHHLHHLLHA: 1

6.003.08b vidyún ná davidyot suvébhiḥ śúṣmaiḥ :AHLLHHLHHHA: 1

6.004.04c sá tuváṃ na ūrjasana ū́rjaṃ dhā :ALHLHLLLHHA: 1

6.011.03a dhániyā cid dhí tvé dhiṣáṇā vā́ṣṭi :ALHHHHLLHHA: 1

6.017.12b páriṣṭhitam asrja ūrmím apā́m :AHLLLLLHLLA: 1

6.020.05c urú ṣá saráthaṃ sā́rathaye kar :ALLLLHHLLHA: 1

6.020.13c dīdáyad ít túbhya° sómebhiḥ sunván :ALLHHLHHHHA: 1

6.024.10c amā́ cainam áraṇye pāhi riṣó :AHHLLHHHLLA: 1

6.025.01a yā́ ta ūtír avamā́ yā́ paramā́ :ALHLLLHHLLA: 1

6.025.03a índra jāmáya utá yé ’jāmayo :ALHLLLLHHLA: 1

6.026.08c prā́tardaniḥ kṣatraśrī́r astu śréṣṭho :AHLHHHHHHHA: 1

6.029.02c ā́ raśmáyo gábhastiyo sthūráyor :AHLHLHLHHLA: 1

6.040.05a yád indra diví pā́riye yád ŕdhag :AHLLLHLHLLA: 1

6.048.17c mā́ utá sū́ro áha evā́ caná :ALLHLLLHHLA: 1

6.066.11d giráyo ná ā́pa ugrā́ asprdhran :ALHLHLHHHHA: 1

6.068.02a tā́ hí śráyiṣṭhā+ devátātā tujā́ :AHLHHHLHHLA: 1

6.068.02c maghónām máṃhiṣṭhā tuviśúṣma :AHLHHHHLLHA: 1

6.068.03a tā́ grṇīhi namasíyebhiḥ śū́ṣaíḥ :ALHLLLLHHHA: 1

7.002.01c úpa sprśa diviyáṃ sā́nu stū́paiḥ :AHLLLLHHHHA: 1

7.008.06d dyumád amīvacā́tanaṃ rakṣohā́ :ALLHLHLHHHA: 1

7.038.02a úd u tiṣṭha savitaḥ śrudhí asyá :ALHLLLHLLHA: 1

7.061.02b vípro mánmāni dīrghaśrúd iyarti :AHHHLHHLLHA: 1

7.095.06a ayám u te sarasvati vásiṣṭho :ALLHLHLLLHA: 1

7.104.24a índra jahí púmāṃsaṃ yātudhā́nam :ALLLLHHHLHA: 1

8.026.24c grā́vāṇaṃ ná áśvaprṣṭham maṃhánā :AHHLHLHHHLA: 1

9.089.03b hárim aruṣáṃ divó asyá pátim :ALLLHLLHLLA: 1

9.091.05b suuktā́ya patháḥ krṇuhi prā́caḥ :AHHLLHLLHHA: 1

9.093.05b punānó vā̃tā́pyaṃ viśváścandram :AHHLLHHHHHA: 1

9.094.01a ádhi yád asmin vājínīva śúbha :ALLHHHLHLLA: 1

9.094.01b spárdhante dhíyaḥ sū́riye ná víśaḥ :AHHLHHLHLLA: 1

10.003.05b rócamānasya brhatáḥ sudívaḥ :ALHHLLLHLLA: 2

10.030.02b ácha apá itośatī́r uśantaḥ :ALLLLHLHLHA: 2

10.049.01d áyajvanaḥ sākṣi víśvasmin bháre :AHLHHLHHHLA: 2

10.050.01b árcā viśvā́narāya viśvābhúve :AHHHLHLHHLA: 2

10.050.05a ávā nú kaṃ jyā́yān yajñávanaso :AHLHHHHLLLA: 2

10.061.01a idám itthā́ raúdaraṃ gūrtávacā :ALHHHLHHLLA: 2

10.061.05d duhitúr ā́ ánubhrtam anarvā́ :ALLHLLLLLHA: 2

10.068.03a sādhuaryā́ atithínīr iṣirā́ :ALHHLLLHLLA: 2

10.077.05a yūyáṃ dhūrṣú prayújo ná raśmíbhir :AHHHLLHLHLA: 2

10.079.03a prá mātúḥ prataráṃ gúhiyam ichán :AHHLLHLLLHA: 2

10.083.05c táṃ tvā manyo akratúr jihīḷāháṃ :AHHLHLHLHHA: 2

10.099.01a káṃ naś citrám iṣaṇyasi cikitvā́n :AHHLLHLLLHA: 2

10.103.08a índra āsāṃ nayitā́+ bŕhaspátir :ALHHLLHLHLA: 2

10.106.05a váṃsageva pūṣaríyā śimbā́tā :ALHLHLLHHHA: 2

10.115.05c agníḥ pātu grṇató agníḥ sūrī́n :AHHLLLHHHHA: 2

10.132.01b ījānám bhū́mir abhí prabhūṣáṇi :AHHHLLHLHLA: 2

10.148.04b dā́ nṛ́bhyo nṝṇā́ṃ+ śūra śávaḥ :ALHHHLHHLLA: 2

10.160.01b sarvarathā́ ví hárī ihá muñca :ALLHLLHLLHA: 2

1.062.03d sám usríyābhir vāvaśanta náraḥ :AHLHHHLHLLA: 2

1.100.08c só andhé cit támasi jyótir vidan :AHHHLLHHHLA: 2

1.103.04d yád dha sūnúḥ śrávase nā́ma dadhé :ALHHLLHHLLA: 2

1.122.11d práśastaye mahinā́ ráthavate :AHLHLLHLLLA: 2

1.162.10c sukrtā́ tác chamitā́raḥ krṇvantu :ALHHLLHHHHA: 2

1.165.08c ahám etā́ mánave viśváścandrāḥ :ALHHLLHHHHA: 2

1.165.13d eṣā́m bhūta návedā ma rtā́nām :AHHLLHHLLHA: 2

1.173.01c gā́vo dhenávo barhíṣi ádabdhā :AHHLHHLLLHA: 2

1.174.08a sánā tā́ ta indara+ návyā ā́guḥ :AHHLHLLHHHA: 2

1.178.03c prábhartā ráthaṃ dāśúṣa upāká :AHHLHHLLLHA: 2

1.180.07a vayáṃ cid dhí vāṃ jaritā́raḥ satyā́ :AHHLHLLHHHA: 2

1.181.01b adhvaryántā yád unninīthó apā́m :AHHHLHLHHLA: 2

1.189.04a pāhí no agne pāyúbhir ájasrair :ALHHHHLLLHA: 2

2.004.03d dakṣā́yiyo yó dā́svate dáma ā́ :AHLHHHLHLLA: 2

2.018.02d só anyébhiḥ sacate jényo vṛ́ṣā :AHHHLLHHHLA: 2

2.018.04b ā́ catúrbhir ā́ ṣaḍbhír hūyámānaḥ :ALHLHHHHLHA: 2

2.027.04a dhāráyanta ādityā́so jágat sthā́ :ALHLHHHHLHA: 2

2.042.02c pítryām ánu pradíśaṃ kánikradat :AHLHLLHLHLA: 2

3.005.02a prá íd u agnír vāvrdhe stómebhir :ALLHHHLHHHA: 2

3.020.01a agním uṣásam aśvínā dadhikrā́ṃ :ALLLLHLHLHA: 2

4.007.08c dūtá īyase pradíva urāṇó :ALHLHLLLLHA: 2

4.016.01b drávantu asya háraya úpa naḥ :AHLHLLLLLLA: 2

4.021.01a ā́ yātu índro ávasa úpa na :AHLHLLLLLLA: 2

4.037.01a úpa no vājā adhvarám rbhukṣā :ALHHHHLLLHA: 2

4.038.02a utá vājínam puruniṣṣídhvānaṃ :ALHLHLLHHHA: 2

4.042.04b dhāráyaṃ dívaṃ sádana rtásya :ALHLHLLLLHA: 2

5.033.07a evā́ na indara+ ūtíbhir ava :AHLHLLHLLLA: 2

5.041.05b rāyá éṣe ávase dadhīta dhī́ḥ :ALHHLLHLHLA: 2

5.041.07a úpa va éṣe vándiyebhiḥ śūṣaíḥ :ALLHHHLHHHA: 2

6.020.01d daddhí sūno sahaso vrtratúram :ALHHLLHHLLA: 2

6.020.04a śataír apadran paṇáya indrā́tra :AHLHHLLLHHA: 2

6.023.07d urúṃ krdhi tuvāyatá ulokám† :AHLLLHLLLHA: 2

6.024.08b ná śárdhate dásyujūtāya stavā́n :AHLHHLHHHLA: 2

6.024.09b prá íṣó yandhi sutapāvan vā́jān :ALHHLLLHHHA: 2

6.026.06a tuváṃ śraddhā́bhir mandasānáḥ sómair :AHHHHHLHHHA: 2

6.026.07a aháṃ caná tát sūríbhir ānaśyāṃ :AHLLHHLLHHA: 2

6.044.21c vŕṣṇe ta índur vrṣabha pīpāya :AHLHHLLLHHA: 2

6.047.09c íṣam ā́ vakṣi iṣā́ṃ várṣiṣṭhām :ALHHLLLHHHA: 2

6.051.01c rtásya śúci darśatám ánīkaṃ :AHLLLHLLLHA: 2

6.060.03a ā́ vrtrahaṇā vrtrahábhiḥ śúṣmair :AHLLHHLLHHA: 2

6.063.03b ástāri barhíḥ suprāyaṇátamam :AHLHHHHLLLA: 2

6.066.04b antáḥ sánto avadyā́ni punānā́ḥ :AHHLLHHLLHA: 2

7.001.18c práti na īṃ surabhī́ṇi viyantu :ALLHLLHLLHA: 2

7.003.07a yáthā vaḥ svā́hā agnáye dā́śema :AHHHHHLHHHA: 2

7.004.03a asyá devásya saṃsádi ánīke :ALHHLHLLLHA: 2

7.021.09a sákhāyas ta indra viśváha syāma :AHHLHLHLHHA: 2

7.038.06a ánu tán no jā́spátir maṃsīṣṭa :ALHHLHLHHHA: 2

7.038.07c jambháyanto áhiṃ vŕkaṃ rákṣāṃsi :ALHHLHLHHHA: 2

7.042.04d sá viśé dāti vā́riyam íyatyai :ALHHLHLLLHA: 2

7.045.03c viśráyamāṇo amátim urūcī́m :ALLHLLLLLHA: 2

7.060.10a sasváś cid dhí sámrtis tveṣī eṣām :AHHLLLHHHHA: 2

8.059.05b tveṣábhiyām mahimā́nam indriyám :AHLHLLHLHLA: 2

10.022.11a makṣū́ tā́ ta indara+ dānā́pnasa :AHHLHLLHHLA: 3

10.030.13a práti yád ā́po ádṛśram āyatī́r :ALLHLLHLHLA: 3

10.074.03d té no dhāntu vasavíyam ásāmi :AHHLLLLLLHA: 3

10.074.04b abhí yá ūrváṃ gómantaṃ títrtsān :ALLHHHHHLHA: 3

10.093.14c yé yuktvā́ya páñca śatā́ asmayú :AHHLHLLHHLA: 3

10.095.04b váya úṣo yádi vā́ṣṭy ántigrhāt :ALLHLLHHLLA: 3

10.099.07b ā́ sāviṣad arśasānā́ya śárum :AHLLHLHHLLA: 3

10.108.08a éhá gamann ṛ́ṣayaḥ sómaśitā :ALLHLLHHLLA: 3

10.129.04c sató bándhum ásati nír avindan :AHHLLLLLLHA: 3

1.033.09a pári yád indara+ ródasī ubhé :ALLHLLHLHLA: 3

1.063.04a tuváṃ ha tyád indara+ codī́ḥ sákhā :AHHLHLLHHLA: 3

1.077.01a kathā́ dāśema agnáye kā́ asmai :AHHHLHLHHHA: 3

1.077.05a evá agnír gótamebhir rtā́vā :ALHHHLHLLHA: 3

1.117.08b maháḥ kṣoṇásya aśvinā káṇvāya :AHHHLHLHHHA: 3

1.118.07d práty adhattaṃ suṣṭutíṃ jujuṣāṇā́ :ALHHHLHLLHA: 3

1.149.01b iná inásya vásunaḥ padá ā́ :ALLHLLLHLLA: 3

1.167.05b víṣitastukā rodasī́ nrmáṇāḥ :ALHLHHLHLLA: 3

1.174.09a tuváṃ dhúnir indara+ dhúnimatīr :AHLLHLLLLLA: 3

1.186.06a utá na īṃ tváṣṭā ā́ gantu áchā :ALLHHHHHLHA: 3

2.020.01b prá bharāmahe vājayúr ná rátham :ALHLHHLHLLA: 3

2.028.06a ápo sú myakṣa varuṇa bhiyásam :AHHHLLLLLLA: 3

3.029.07c yáṃ devā́sa īḍiyaṃ viśvavídaṃ :AHHLHLHHLLA: 3

4.004.12d ágne táva naḥ pāntu amūra :AHLLHLHLLHA: 3

4.016.20b bráhma akarma bhṛ́gavo ná rátham :ALLHLLLHLLA: 3

5.002.01d puráḥ paśyanti níhitam aratáu :AHHHLLLLLLA: 3

6.003.06b śocíṣā rārapīti mitrámahāḥ :ALHHLHLHLLA: 3

6.007.03a tuvád vípro jāyate vājī́ agne :AHHHHLHHHHA: 3

6.013.01d divó vṛṣṭír īḍiyo rītír apā́m :AHHLHLHHLLA: 3

6.017.10d návantam áhiṃ sám piṇag rjīṣin :AHLLHHLLLHA: 3

6.020.02b asuríyaṃ devébhir dhāyi víśvam :ALLHHHHHLHA: 3

6.020.10b prá pūráva stavanta enā́ yajñaíḥ :AHLHLHLHHHA: 3

6.020.12a tuváṃ dhúnir indara+ dhúnimatīr :AHLLHLLLLLA: 3

6.033.05d diví ṣyāma pā́riye goṣátamāḥ :AHHLHLHHLLA: 3

6.035.01a kadā́ bhuvan ráthakṣayāṇi bráhma :AHLHLHLHHHA: 3

6.035.04a sá gómaghā jaritré áśvaścandrā :AHLHLHLHHHA: 3

6.044.16b índrasya priyám amŕtam apāyi :AHHLLLLLLHA: 3

6.062.06d patatríbhir árṇaso nír upásthāt :AHLLHLHLLHA: 3

6.063.08b dhenúṃ na íṣam pinvatam ásakrām :AHLLHHLLLHA: 3

6.064.05a sā́ ā́ vaha yā́ ukṣábhir ávātā :AHLLHHLLLHA: 3

6.066.07b anaśváś cid yám ájati árathīḥ :AHHHLLLLLLA: 3

7.003.05b agním átyaṃ ná marjayanta náraḥ :ALHHLHLHLLA: 3

7.019.11c úpa no vā́jān mimīhi úpa stī́n :ALHHHLHLLHA: 3

7.027.04c ánūnā yásya dákṣiṇā pīpā́ya :AHHHLHLHHHA: 3

7.069.07c patatríbhir aśramaír avyathíbhir :AHLLHLHHLLA: 3

7.071.02d dívā náktam mādhuvī trā́sīthāṃ naḥ :AHHHHLHHHHA: 3

7.076.01d āvír akar bhúvanaṃ víśvam uṣā́ḥ :ALLHLLHHLLA: 3

7.090.02d jātó-jāto jāyate vājī́ asya :AHHHHLHHHHA: 3

7.093.06a imā́m u ṣú sómasutim úpa na :AHLLHLLLLLA: 3

7.101.02a yó várdhana óṣadhīnāṃ yó apā́m :AHLLHLHHLLA: 3

8.040.12b mandhātrvád aṅgirasvád avāci :AHLLHLHLLHA: 3

8.046.28a ucathíye vápuṣi yáḥ suvarā́ḷ :ALLHLLLHLLA: 3

9.079.01c ví ca náśan na iṣó árātayo :ALLHLLHLHLA: 3

9.094.03a pári yát kavíḥ kắviyā bhárate :ALHLHHLHLLA: 3

9.096.04b svastáye sarvátātaye brhaté :ALHHLHLHLLA: 3

B.3 First percentile of 12 Syllable lines according to the frequency of each line's scansion pattern.

10.010.13b naívá te máno hŕdayaṃ cāvidāma :ALHLHLLHHLHA: 1

10.036.14b savitóttarắttāt savitắdharắttāt :ALHLHHLLHLHA: 1

10.059.10a sám indra īraya gắm anaḍvắhaṃ :AHLHLLLLLHHA: 1

10.078.08a subhāgắn no devāḥ krṇutā surátnān :AHHHHHLLHLHA: 1

10.082.04b ŕṣayaḥ pū́rve jaritắro ná bhūnắ :ALHHHLLHHLHA: 1

10.087.16a yáḥ paúruṣeyeṇa kravíṣā samaṅkté :AHLHHHLLHLHA: 1

10.088.09b yásminn ā́juhavur bhúvanāni víśvā :AHHLLHLLHLHA: 1

10.093.05b sū́ryāmắsā sádanāya sadhaníyā :AHHHLLHLLLLA: 1

10.093.07a utá no rudrắ cin mīḷatām+ aśvínā :ALHHHHHLHHLA: 1

10.093.08a rbhúr rbhukṣắ rbhúr vidható máda :ALLHHLHLLHLA: 1

10.093.14b prá rāmé vocam ásure maghávatsu :AHHHLLLHLLHA: 1

10.115.05a sá íd agníḥ káṇvatamaḥ káṇvasakhā :ALHHHLLHHLLA: 1

10.122.03b dắśad dāśúṣe sukŕte māmahasva :AHHLHLLHHLHA: 1

10.126.02d pāthá nethắ ca mártiyam áti dvíṣaḥ :ALHHLHLLLHLA: 1

10.126.03d párṣiṣṭhā u naḥ parṣáṇi áti dvíṣaḥ :AHHLHHLLLHLA: 1

10.129.06b kúta ā́jātā kúta iyáṃ vísṛṣṭiḥ :ALHHHLLLHLHA: 1

1.036.08c bhúvat káṇve vŕṣā diyumnī́ ā́hutaḥ :AHHHLHLHHHLA: 1

1.039.03c ví yā̃thana vanínaḥ prthiviyắ :ALLLLLLHLLLA: 1

1.048.04c átrā́ha tát káṇva eṣāṃ káṇvatamo :AHLHHLHHHLLA: 1

1.048.09c āváhantī bhū́ri asmábhyaṃ saúbhagaṃ :ALHHHLHHHHLA: 1

1.084.07c īśāno ápratiṣkuta índro aṅgá :AHLHLHLLLHLHA: 1

1.101.05b yó brahmáṇe prathamó gā́ ávindat :AHLHLLHLLLHA: 1

1.106.04b kṣayádvīram pūṣáṇaṃ sumnaír īmahe :AHHHHLHHHHLA: 1

1.120.03b tā́ no vidvā́ṃsā mánma vocetam adyá :AHHHHHLHHLHA: 1

1.127.05f bhaktám ábhaktam ávo vyánto ajárā :ALLHLLHHLLLA: 1

1.133.06a avár mahá indra dādrhí śrudhī́ naḥ :AHLLHLHLHLHA: 1

1.134.03a vāyúr yuṅkte róhitā vāyúr aruṇā́ :AHHHHLHHLLLA: 1

1.135.04f vā́yav ā́ candréṇa rā́dhasā ā́ gatam :ALHHHLHLHHLA: 1

1.161.03d tā́ni bhrātar ánu vaḥ krtvī émasi :AHHLLLHHHHLA: 1

1.167.01b sahásram íṣo harivo gūrtátamāḥ :AHLLHLLHHLLA: 1

1.168.01c ā́ vo arvā́caḥ suvitā́ya ródasyor :ALHHHLLHLHHA: 1

1.168.02a vavrā́so ná yé suajā́ḥ svátavasa :AHHLHLLHLLLA: 1

1.169.06c ádha yád eṣām prthubudhnā́sa étās :ALLHHLLHHLHA: 1

1.177.04a ayáṃ yajñó devayā́ ayám miyédha :AHHHHLHLHLHA: 1

2.001.10a tuvám agna rbhúr āké namasíyas :ALHLLLHHLLLA: 1

2.002.09d tmánā śatínam pururū́pam iṣáṇi :AHLLHLLHLLLA: 1

2.020.08a tásmai tavasíyam ánu dāyi satrā́ :AHLLLLLLHLHA: 1

3.002.05d rudráṃ yajñā́nāṃ sā́dhadiṣṭim apásām :AHHHHHLHLLLA: 1

3.023.03c agníṃ stuhi daivavātáṃ devaśravo :AHLLHLHHHHLA: 1

3.059.02d naínam áṃho aśnoty ántito ná dūrā́t :ALHLHHHLHLHA: 1

4.042.08b saptá ŕṣayo daurgahé badhyámāne :ALLLHHLHHLHA: 1

5.056.05c marútām purutámam ápūrviyaṃ :ALLHLLLLLHLA: 1

6.026.07c tváyā yát stávante sadhavīra vīrā́s :AHHLHHLLHLHA: 1

6.046.12c ádha smā yacha tanvè táne ca chardír :AHHHLHHLHHHA: 1

6.048.14c aryamáṇaṃ ná mandráṃ srprábhojasaṃ :ALLHLHHHLHLA: 1

6.051.02b devā́nāṃ jánma sanutár ā́ ca víprāḥ :AHHHLLLLHLHA: 1

7.039.03b urā́v antárikṣe marjayanta śubhrā́ḥ :AHHLHHHLHLHA: 1

7.046.01b kṣipráiṣave devā́ya svadhā́vane :ALLLHHHHLHLA: 1

7.081.03c yā́ váhasi purú spārháṃ vananvati :ALLLLHHHLHLA: 1

7.082.02a samrā́ḷ anyáḥ svarā́ḷ anyá ucyate vām :AHHHLHHLHLHA: 1

7.099.03d dādhártha prthivīm abhíto mayū́khaiḥ :AHLLLHLLHLHA: 1

8.001.16c úpastutir maghónām prá tvā avatu :AHLHLHHHHLLA: 1

8.001.30c ninditā́śvaḥ prapathī́ paramajiyā́ :ALHHLLHLLLLA: 1

8.009.01c prā́smai yachatam avrkám prthú chardír :AHHLLLLHLHHA: 1

8.018.21c trivárūtham maruto yanta naś chardíḥ :ALHHLLHHLHHA: 1

8.019.07b siyā́ma sūno sahasa ūrjām pate :AHLHHLLLHHLA: 1

8.019.14a samídhā yó níśitī dā́śad áditiṃ :ALHHLLHHLLLA: 1

8.020.04a ví dvīpā́ni pā́patan tíṣṭhad duchúnā :AHHLHLHHHHLA: 1

8.020.09b vŕṣṇe śárdhāya mā́rutāya bharadhvam :AHHHLHLHLLHA: 1

8.020.24a yā́bhiḥ síndhum ávatha yā́bhis tū́rvatha :AHHLLLLHHHLA: 1

8.022.15b prātā́ ráthena aśvínā vā sakṣáṇī :AHLHLHLHHHLA: 1

8.023.08c mitráṃ ná jáne súdhitam rtā́vani :AHLLHLLLLHLA: 1

8.024.24c áhar-ahaḥ śundhyúḥ paripádām iva :ALLHHHLLLHLA: 1

8.027.07c sutásomāso varuṇa havāmahe :ALHHHLLLLHLA: 1

8.029.02a yónim éka ā́ sasāda diyótano :ALHLHLHLLHLA: 1

8.046.26c ebhíḥ sómebhiḥ somasúdbhiḥ somapā :AHHHHHLHHHLA: 1

8.059.07a índrāvaruṇā saumanasám ádrptaṃ :AHLLHHLLLLHA: 1

8.059.07d dīrghāyutvā́ya prá tirataṃ na ā́yuḥ :AHHHHLLLHLHA: 1

8.060.07c evā́ daha mitramaho yó asmadhrúg :AHLLHLLHLHHA: 1

8.062.09c vidé tád índraś cétanam ádha śrutó :AHLHHHLLLHLA: 1

8.070.08c yó gādhéṣu yá ā́raṇeṣu háviyo :AHHLLHLHLLLA: 1

8.097.15a tán ma rtám indra śūra citra pātu :ALLLHLHLHLHA: 1

9.071.01a ā́ dákṣiṇā srjyate śuṣmī́ āsádaṃ :AHLHHLHHHHLA: 1

9.079.03d sóma jahí pavamāna durādhíyaḥ :ALLLLLHLLHLA: 1

9.097.26d hótāro ná diviyájo mandrátamāḥ :AHHLLLLHHLLA: 1

9.108.14a yásya na índraḥ píbād yásya marúto :ALLHHLHHLLLA: 1

Appendix C

Lines containing tokens

C.1 The position of the genitive with regard to its head noun

C.1.1 X genitive

8 syllable lines

1.027.01c samrā́jantam adhvarā́ṇām :AHHLHLHA: 32
1.003.11a codayitrī́ sūnṛ́tānāṃ :ALHHHLHA: 33
8.046.02c vidmá dātā́raṃ rayīṇā́m :ALHHHLHA: 33
10.166.01a ṛ̥ṣabhám mā samānā́nāṃ :ALHHLHHA: 37
1.188.11a purogā́ agnír devā́nāṃ :AHHHHHHA: 54
1.044.02b ágne rathī́r adhvarā́ṇām :AHLHHLHA: 64
8.011.02c ágne rathī́r adhvarā́ṇām :AHLHHLHA: 64
9.066.18b tokásya sātā́ tanū́nām :AHLHHLHA: 64

1.004.08b ghanó vr̥trā́ṇām abhavaḥ :AHHHHLLA: 68

3.011.05b viśā́m agnír mā́nuṣīṇām :AHHHHLHA: 85

3.011.06b krátur devā́nām ámr̥ktaḥ :AHHHHLHA: 85

8.016.01a prá samrā́jaṃ carṣaṇīnā́m :AHHHHLHA: 85

10.166.01c hantā́raṃ śátrūṇāṃ kr̥dhi :AHHHHHLA: 108

4.030.21c dāsā́nām índro māyáyā :AHHHHHLA: 108

4.032.14b asmé sú matsuvā́ndhasaḥ

4.032.14c sómānām indra somapāḥ :AHHHLHLA: 4930

4.032.17a sahásraṃ viyátīnāṃ

4.032.17b yuktā́nām índram īmahe :AHHHLHLA: 4930

12 syllable lines

6.046.07c yád vā páñca kṣitīnā́ṃ dyumnám ā́ bhara :AHHHLHHHLHLA: 21

6.061.02b sā́nu girīṇā́ṃ taviṣébhir ūrmíbhiḥ :ALLHHLLHLHLA: 35

1.155.01c yā́ sā́nuni párvatānām ádābhiyā :AHLLHLHHLHLA: 38

3.003.08c adhvarā́ṇāṃ cétanaṃ jātávedasam :ALHHHLHHLHLA: 69

10.035.08a pípartu mā tád r̥tásya pravā́canaṃ

10.035.08b devā́nāṃ yán manuṣíyā ámanmahi :AHHHLLLHLHLA: 468

10.092.14a viśā́m āsā́m ábhayānām adhikṣítaṃ :AHHHLLHHLHLA: 523

10.036.11b ávo devā́nām br̥hatā́m anarvā́ṇām :AHHHHLLHLHLA: 650

10.128.07a dhātā́ dhātr̥̄ṇā́m bhúvanasya yás pátir :AHHHHLLHLHLA: 650

3.003.03a ketúṃ yajñā́nāṃ vidáthasya sā́dhanaṃ :AHHHHLLHLHLA: 650

3.003.04a pitā́ yajñā́nām ásuro vipaścítāṃ :AHHHHLLHLHLA: 650

3.003.08b yantā́raṃ dhīnā́m uśíjaṃ ca vāghátām :AHHHHLLHLHLA: 650

3.060.06d vratā́ devā́nām mánuṣaś ca dhármabhiḥ :AHHHHLLHLHLA: 650

6.015.09b dūtó devā́nāṃ rájasī sám īyase :AHHHHLLHLHLA: 650

9.076.01b dákṣo devā́nām anumā́diyo nṛ́bhiḥ :AHHHHLLHLHLA: 650

9.085.02b dákṣo devā́nām ási hí priyó mádaḥ :AHHHHLLHLHLA: 650

9.086.12a ágre síndhūnām pávamāno arṣati :AHHHHLLHLHLA: 650

9.086.33a rā́jā síndhūnām pavate pátir divá :AHHHHLLHLHLA: 650

10.084.04a éko bahūnā́m asi manyav īḷitó :AHLHHLLHLHLA: 1190

1.094.13b vásur vásūnām asi cā́rur adhvaré :AHLHHLLHLHLA: 1190

2.023.01b kavíṃ kavīnā́m upamáśravastamam :AHLHHLLHLHLA: 1190

2.024.06b nidhím paṇīnā́m paramáṃ gúhā hitám :AHLHHLLHLHLA: 1190

3.002.04c rātím bhṛ́gūṇām uśíjaṃ kavíkratum :AHLHHLLHLHLA: 1190

9.076.04d pitā́ matīnā́m ásamaṣṭakāviyaḥ :AHLHHLLHLHLA: 1190

9.086.19a vṛ́ṣā matīnā́m pavate vicakṣaṇáḥ :AHLHHLLHLHLA: 1190

9.086.32d pátir jánīnām úpa yāti niṣkṛ́tám :AHLHHLLHLHLA: 1190

C.1.2 genitive X

8 syllable lines

10.136.06b mṛgā́ṇāṃ cáraṇe cáran

10.072.03a devā́nāṃ yugé prathamé :AHHLHLLA: 27

10.072.01a devā́nāṃ nú vayáṃ jā́nā :AHHLLHHA: 30

8.081.07b dhṛṣatā́ dhṛṣṇo jánānām :ALHHHLHA: 33

8.081.07c ádāśūṣṭarasya védaḥ

10.085.02c átho nákṣatrāṇām eṣā́m :AHHHHHHA: 54

5.005.10b devā́nāṃ gúhyā nā́māni :AHHHHHHA: 54

10.024.03c índra stotṝṇā́m avitā́ :AHHHHLLA: 68

10.146.06c prā́hám mr̥gā́ṇām mātáram :AHLHHHLA: 75

8.027.02d dhīnā́m bhūta prāvitā́raḥ :AHHHHLHA: 85

10.185.01a máhi trīṇā́m ávo astu :AHHHLHHA: 92

8.079.09b devā́nāṃ durmatī́r íkṣe :AHHHLHHA: 92

9.066.16b ugrā́ṇām inda ójiṣṭhaḥ :AHHHLHHA: 92

10.136.06b mr̥gā́ṇāṃ cáraṇe cáran :AHHLLHLA: 1362

1.022.09a ágne pátnīr ihā́ vaha

1.022.09b devā́nām uśatī́r úpa :AHHLLHLA: 1362

1.191.13a navānā́ṃ navatīnā́ṃ :AHHLLHLA: 1362

6.053.07b paṇīnā́ṃ hŕ̥dayā kave :AHHLLHLA: 1362

8.008.03d káṇvānāṃ sávane sutám :AHHLLHLA: 1362

8.013.02b devā́nāṃ sádane vr̥dháḥ :AHHLLHLA: 1362

8.032.19b kr̥ṣṭīnā́m ánu āhúvaḥ :AHHLLHLA: 1362

8.038.08b átrīṇāṃ śr̥ṇutaṃ hávam :AHHLLHLA: 1362

8.044.27a yajñā́nāṃ rathíye vayáṃ :AHHLLHLA: 1362

8.046.18b girīṇā́ṃ snúbhir eṣā̃m :AHHLLHLA: 1362

8.083.01a devā́nām íd ávo mahát :AHHLLHLA: 1362

3.023.03d yó jánānām ásad vaśī́ :ALHHLHLA: 1979

8.044.07c adhvarā́ṇām abhiśríyam :ALHHLHLA: 1979

8.055.03d áruṣīṇāṃ cátuḥśatam :ALHHLHLA: 1979

8.102.07b adhvarā́ṇām purūtámam :ALHHLHLA: 1979

10.033.09a ná devā́nām áti vratáṃ :AHHHLHLA: 4930

10.072.02c devā́nām pūrviyé yugé :AHHHLHLA: 4930

1.011.01d vā́jānāṃ sátpatim pátim :AHHHLHLA: 4930

10.137.03d devā́nāṃ dūtá íyase :AHHHLHLA: 4930

10.166.01b sapátnānāṃ viṣāsahím :AHHHLHLA: 4930

10.171.04c devā́nāṃ cit tiró váśam :AHHHLHLA: 4930

1.018.07c sá dhīnā́m yógam invati :AHHHLHLA: 4930

1.044.03d yajñā́nām adhvaraśríyam :AHHHLHLA: 4930

1.084.02c ṛ́ṣīṇāṃ ca stutī́r úpa :AHHHLHLA: 4930

1.126.06d yā́śūnām bhojíyā śatā́ :AHHHLHLA: 4930

1.126.07d gandhā́rīṇām ivāvikā́ :AHHHLHLA: 4930

1.134.06c sutā́nām pītím arhasi :AHHHLHLA: 4930

2.008.06b devā́nām ūtíbhir vayám :AHHHLHLA: 4930

2.032.06b yā́ devā́nām ási svásā :AHHHLHLA: 4930

3.027.09b bhūtā́nāṃ gárbham ā́ dadhe :AHHHLHLA: 4930

3.062.13b devā́nām eti niṣkṛ́tám :AHHHLHLA: 4930

4.047.02b sómānām pītím arhathaḥ :AHHHLHLA: 4930

5.026.06c devā́nāṃ dūtá ukthíyaḥ :AHHHLHLA: 4930

5.051.06b sutā́nām pītím arhathaḥ :AHHHLHLA: 4930

8.013.09b kṛ́ṣṭīnā́m éka íd vaśī́ :AHHHLHLA: 4930

8.028.05a saptānā́ṃ saptá ṛ́ṣṭáyaḥ :AHHHLHLA: 4930

8.031.07a ná devā́nām ápi hnutaḥ :AHHHLHLA: 4930

8.031.07b sumatíṃ ná jugukṣataḥ

8.041.02d yáḥ síndhūnām úpodayé :AHHHLHLA: 4930

8.041.05b yá usrā́ṇām apīcíyā :AHHHLHLA: 4930

8.041.05c véda nā́māni gúhiyā

8.044.10c yajñā́nāṃ ketúm īmahe :AHHHLHLA: 4930

8.046.22b úṣṭrānāṃ viṃśatíṃ śatā́ :AHHHLHLA: 4930

8.047.05d ādityā́nām utā́vasi :AHHHLHLA: 4930

8.056.04c áśvānām ín ná yūthíyām :AHHHLHLA: 4930

8.067.03c ādityā́nām araṃkṛ́te :AHHHLHLA: 4930

9.001.04b devā́nāṃ vītím ándhasā :AHHHLHLA: 4930

9.012.07b dhīnā́m antáḥ sabardúghaḥ :AHHHLHLA: 4930

9.062.17c ṛ́ṣīṇāṃ saptá dhītíbhiḥ :AHHHLHLA: 4930

9.099.04d devā́nāṃ nā́ma bíbhratīḥ :AHHHLHLA: 4930

12 syllable lines

10.093.09d carṣaṇīnā́ṃ cakráṃ raśmíṃ ná yoyuve :ALHHHHHHLHLA: 5

9.103.03c abhí vā́ṇīr ṛ́ṣīṇāṃ saptá nūṣata :ALHHLHHHLHLA: 6

1.089.02a devā́nām bhadrā́ sumatír ṛjūyatā́ṃ :AHHHHLLLLHLA: 9

9.083.04b pā́ti devā́nāṃ jánimāni ádbhutaḥ :ALHHHLLHLHLA: 139

8.018.01c ādityā́nām ápūrviyaṃ sávīmani :AHHHLHLHLHLA: 183

8.036.06a átrīṇāṃ stómam adrivo mahás kṛdhi :AHHHLHLHLHLA: 183

1.101.04a yó áśvānāṃ yó gávāṃ gópatir vaśí :AHHHHLHHLHLA: 209

2.023.16c ā́ devā́nām óhate ví vráyo hṛdí :AHHHHLHHLHLA: 209

8.101.12c mahnā́ devā́nām asuryàḥ puróhito :AHHHHLHHLHLA: 209

10.044.04d áso yáthā kenipā́nām inó vṛdhé :AHLHHLHHLHLA: 211

10.066.08b bṛhaddivā́ adhvarā́ṇām abhiśríyaḥ :AHLHHLHHLHLA: 211

1.089.02b devā́nāṃ rātír abhí no ní vartatām :AHHHLLLHLHLA: 468

1.089.02c devā́nāṃ sakhyám úpa sedimā vayáṃ :AHHHLLLHLHLA: 468

1.102.05b dhánānāṃ dhartar ávasā vipanyávaḥ :AHHHLLLHLHLA: 468

1.141.11d devā́nāṃ śáṃsam ṛtá ā́ ca sukrátuḥ :AHHHLLLHLHLA: 468

2.023.01a gaṇā́nāṃ tvā gaṇápatiṃ havāmahe :AHHHLLLHLHLA: 468

2.026.03c devā́nāṃ yáḥ pitáram āvívāsati :AHHHLLLHLHLA: 468

9.084.03b devā́nāṃ sumná iṣáyann úpāvasuḥ :AHHHLLLHLHLA: 468

9.107.22c devā́nāṃ soma pavamāna niṣkṛtáṃ :AHHHLLLHLHLA: 468

10.036.02d tád devā́nām ávo adyā́ vṛṇīmahe :AHHHLLHHLHLA: 523

10.036.03d tád devā́nām ávo adyā́ vṛṇīmahe :AHHHLLHHLHLA: 523

10.036.04d tád devā́nām ávo adyā́ vr̥ṇīmahe :AHHHLLHHLHLA: 523

10.036.05d tád devā́nām ávo adyā́ vr̥ṇīmahe :AHHHLLHHLHLA: 523

10.036.06d tád devā́nām ávo adyā́ vr̥ṇīmahe :AHHHLLHHLHLA: 523

10.036.07d tád devā́nām ávo adyā́ vr̥ṇīmahe :AHHHLLHHLHLA: 523

10.036.08d tád devā́nām ávo adyā́ vr̥ṇīmahe :AHHHLLHHLHLA: 523

10.036.09d tád devā́nām ávo adyā́ vr̥ṇīmahe :AHHHLLHHLHLA: 523

10.036.10d tád devā́nām ávo adyā́ vr̥ṇīmahe :AHHHLLHHLHLA: 523

10.036.11d tád devā́nām ávo adyā́ vr̥ṇīmahe :AHHHLLHHLHLA: 523

10.036.12d tád devā́nām ávo adyā́ vr̥ṇīmahe :AHHHLLHHLHLA: 523

(10.036.02d through 10.036.12d counted as one)

10.177.01d márīcīnām padám ichanti vedhásaḥ :AHHHLLHHLHLA: 523

1.102.04d prá śátrūṇām maghavan vr̥ṣṇiyā ruja :AHHHLLHHLHLA: 523

2.013.05b yó dhautīnā́m ahihann á́riṇak patháḥ :AHHHLLHHLHLA: 523

6.075.06c abhíśūnām mahimā́nam panāyata :AHHHLLHHLHLA: 523

9.085.07b prá víprāṇām matáyo vā́ca īrate :AHHHLLHHLHLA: 523

10.035.01d adyā́ devā́nām áva á́ vr̥ṇīmahe :AHHHHLLHLHLA: 650

10.064.11b bhadrā́ rudrā́ṇām marútām úpastutiḥ :AHHHHLLHLHLA: 650

10.142.01d āré híṃsānām ápa didyúm á́ kr̥dhi :AHHHHLLHLHLA: 650

1.031.01b devó devā́nām abhavaḥ śiváḥ sákhā :AHHHHLLHLHLA: 650

1.031.02b kavír devā́nām pári bhūṣasi vratám :AHHHHLLHLHLA: 650

1.044.12a yád devā́nām mitramahaḥ puróhito :AHHHHLLHLHLA: 650

1.047.10c śáśvat káṇvānāṃ sádasi priyé hí kaṃ :AHHHHLLHLHLA: 650

1.094.13a devó devā́nām asi mitró ádbhuto :AHHHHLLHLHLA: 650

1.101.07a rudrā́ṇām eti pradíśā vicakṣaṇó :AHHHHLLHLHLA: 650

1.164.15a sākaṃjā́nāṃ saptátham āhur ekajáṃ :AHHHHLLHLHLA: 650

2.024.03a tád devā́nāṃ devátamāya kártuvam :AHHHHLLHLHLA: 650

2.025.05c devā́nāṃ sumné subhágaḥ sá edhate :AHHHHLLHLHLA: 650

3.002.08d agnír devā́nām abhavat puróhitaḥ :AHHHHLLHLHLA: 650

5.046.07a devā́nām pátnīr uśatī́r avantu naḥ :AHHHHLLHLHLA: 650

7.083.04d satyā́ tr̥tsūnām abhavat puróhitiḥ :AHHHHLLHLHLA: 650

7.104.21a índro yātūnā́m abhavat parāśaró :AHHHHLLHLHLA: 650

8.060.06c devā́nāṃ śárman máma santu sūráyaḥ :AHHHHLLHLHLA: 650

9.078.01d śuddhó devā́nām úpa yāti niṣkr̥tám :AHHHHLLHLHLA: 650

9.081.02c áthā devā́nām ubháyasya jánmano :AHHHHLLHLHLA: 650

9.086.07b sómo devā́nām úpa yāti niṣkr̥tám :AHHHHLLHLHLA: 650

9.086.19c krāṇā́ síndhūnāṃ kaláśāṁ avīvaśad :AHHHHLLHLHLA: 650

9.108.04c devā́nāṃ sumné amr̥tasya cā́ruṇo :AHHHHLLHLHLA: 650

7.083.03c ásthur jánānām úpa mā́m árātayo :AHLHHLLHLHLA: 1190

8.019.31c tuvám mahīnā́m uṣásām asi priyáḥ :AHLHHLLHLHLA: 1190

8.061.02c utópamā́nām prathamó ní ṣīdasi :AHLHHLLHLHLA: 1190

C.2 The position of the gerund with regard to its subject

C.2.1 subject gerund

8 syllable lines

10.159.04a yénéndro havíṣā kr̥tvī́ :AHHLLHHA: 30

10.174.04a yénéndro havíṣā kr̥tvī́ :AHHLLHHA: 30

10.109.07c ū́rjam pr̥thivyā́ bhaktvā́ya :AHLHHHHA: 43

8.100.08c dívaṃ suparṇó gatvā́ya :AHLHHHHA: 43

10.145.05c ubhé sáhasvatī bhūtvī́ :AHLHLHHA: 53

8.091.07c apālā́m indra tríṣ pūtvī́ :AHHHHHHA: 54

10.085.29c kr̥tyaíṣā́ padvátī bhūtvī́ :AHHHLHHA: 92

10.090.01c sá bhū́miṃ viśváto vr̥tvā́ :AHHHLHHA: 92

10.162.05a yás tvā bhrā́tā pátir bhūtvā́ :AHHHLHHA: 92

10.162.05b jāró bhūtvā́ nipádyate :AHHHLHLA: 4930

3.040.07c pītvī́ sómasya vāvr̥dhe :AHHHLHLA: 4930

8.076.10b pītvī́ śípre avepayaḥ :AHHHLHLA: 4930

11 syllable lines

10.093.14c yé yuktvā́ya páñca śatā́ asmayú :AHHLHLLHHLA: 3

2.038.06c śáśvāṁ ápo víkr̥taṃ hitvī́ ā́gād :AHLHLLHHHHA: 12

10.099.05b hitvī́ gáyam āréavadya ā́gāt :AHLLHHLHLHA: 16

2.012.03a yó hatvā́him áriṇāt saptá síndhūn :AHHLLLHHLHA: 379

10.015.12b ávāḍ ḍhavyā́ni surabhī́ṇi kr̥tvī́ :AHHHLLLHLHA: 1231

9.069.09d hitvī́ vavríṃ haríto vr̥ṣṭím ácha :AHHHLLHHLHA: 1388

10.068.07c āṇḍéva bhittvā́ śakunásya gárbham :AHLHHLLHLHA: 2313

1.103.02b vájreṇa hatvā́ nír apáḥ sasarja :AHLHHLLHLHA: 2313

5.040.04c yuktvā́ háribhyām úpa yāsad arvā́ṅ :AHLHHLLHLHA: 2313

12 syllable lines

1.161.03d tā́ni bhrātar ánu vaḥ kr̥tvī́ émasi :AHHLLLHHHHLA: 1

2.020.08d hatvī́ dásyūn púra ā́yasīr ní tārīt :AHHHLLHLHLHA: 3

10.044.08d vr̥ṣṇaḥ pītvā́ máda ukthā́ni śaṃsati :AHHHLLHHLHLA: 482

7.104.18c váyo yé bhūtvī́ patáyanti naktábhir :AHHHHLLHLHLA: 600

C.2.2 gerund subject

8 syllable lines

1.004.08a asyá pītvā́ śatakrato :ALHHLHLA: 1979

8.092.06a asyá pītvā́ mádānā̃m̐ :ALHHLHLA: 1979

9.023.07a asyá pītvā́ mádānām :ALHHLHLA: 1979

11 syllable lines

10.101.09c sā́ no duhīyad yávaseva gatvī́ :AHLHHLLHLHA: 2313

10.157.04a hatvā́ya devā́ ásurān yád áyan :AHLHHLLHLHA: 2313

10.165.05d hitvā́ na ū́rjam prá patāt pátiṣṭhaḥ :AHLHHLLHLHA: 2313

4.041.05c sā́ no duhīyad yávaseva gatvī́ :AHLHHLLHLHA: 2313

12 syllable lines

9.108.02a yásya te pītvā́ vr̥ṣabhó vr̥ṣāyáte :ALHHHLLHLHLA: 128

C.3 Enclisis to vocatives

C.3.1 Voc.-te

8 syllable lines

5.010.04a yé agne candra te gíraḥ :AHHHLHLA: 4930
8.061.09b vípro vā indra te vácaḥ :AHHHLHLA: 4930
10.025.03a utá vratā́ni soma te :AHLHLHLA: 3316
1.009.04a ásr̥gram indra te gíraḥ :AHLHLHLA: 3316
1.014.02b gr̥ṇánti vipra te dhíyaḥ :AHLHLHLA: 3316
1.082.01e yójā nú indra te hárī :AHLHLHLA: 3316
1.084.01a ásāvi sóma indra te :AHLHLHLA: 3316
6.044.01c sómaḥ sutáḥ sá indra te :AHLHLHLA: 3316
8.004.09b gómāṁ íd indra te sákhā :AHLHLHLA: 3316
8.006.31a káṇvāsa indra te matím̥ :AHLHLHLA: 3316
8.013.31a vr̥ṣāyám indra te rátha :AHLHLHLA: 3316
8.021.07a nū́tnā íd indra te vayám :AHLHLHLA: 3316
8.062.08a gr̥ṇé tád indra te śáva :AHLHLHLA: 3316
8.062.10a új jātám indra te śáva :AHLHLHLA: 3316
8.070.05a yád dyā́va indra te śatáṃ :AHLHLHLA: 3316
8.078.04a nákīm̥ vr̥dhīká indra te :AHLHLHLA: 3316
8.093.04c sárvaṃ tád indra te váśe :AHLHLHLA: 3316
9.067.15a pári prá soma te ráso :AHLHLHLA: 3316
10.186.03a yád adó vāta te gr̥hé :ALHHLHLA: 1979

8.065.04b hárayo deva te máhaḥ :ALHHLHLA: 1979

6.044.02a yáḥ śagmás tuviśagma te :AHHLLHLA: 1362

11 syllable lines

7.027.02a yá indra śúṣmo maghavan te ásti :AHLHHLLHLHA: 2313

2.019.08c brahmaṇyánta indara + te návīya :AHHLHLLHLHA: 307

7.022.08c ná vīríyam indara + te ná rā́dhaḥ :AHLLHLLHLHA: 241

12 syllable lines

1.052.10b áyoyavīd bhiyásā vájra indra te :AHLHLLHHLHLA: 662

9.072.04d śúcir dhiyā́ pavate sóma indra te :AHLHLLHHLHLA: 662

9.072.05b anuṣvadhám pavate sóma indra te :AHLHLLHHLHLA: 662

1.055.07c yámiṣṭhāsaḥ sā́rathayo yá indra te :AHHHHLLHLHLA: 650

9.086.28c áthedáṃ víśvam pavamāna te váśe :AHHHHLLHLHLA: 650

9.107.20a utā́háṃ náktam utá soma te dívā :AHHHLLLHLHLA: 468

6.043.01c ayáṃ sá sóma indra te sutáḥ píba :AHLHLHLHLHLA: 224

C.3.2 X-te

8 syllable lines

8.081.08a índra yá u nú te ásti :ALLLLLHA: 2

10.158.02a jóṣā savitar yásya te :AHLLHHLA: 11

10.162.03a yás te hánti patáyantaṃ :AHHLLLHA: 15

10.145.06a úpa te ’dhāṃ sáhamānām :ALHHLLHA: 21

1.030.04a ayám u te sám atasi :ALLHLLLA: 24

6.016.17a yátra kúva ca te máno :ALLLLHLA: 25

10.058.09a yát te párvatān bṛ́ható :AHHLHLLA: 27

5.022.03c váreṇyasya te ávasa :AHHLHLLA: 27

10.161.05c sárvāṅga sárvaṃ te cákṣuḥ :AHLHHHHA: 43

8.001.30a stuhí stuhī́d eté ghā te :AHLHHHHA: 43

8.002.30a gíraś ca yā́s te girvāha :AHLHHHHA: 43

1.043.09a yā́s te prajā́ amṛ́tasya :AHLHLLHA: 53

8.002.01c ánābhayin rarimā́ te :AHLHLLHA: 53

8.002.03a táṃ te yávaṃ yáthā góbhiḥ :AHLHLHHA: 53

8.046.03a ā́ yásya te mahimā́naṃ :AHLHLLHA: 53

8.068.08a ná yásya te śavasāna :AHLHLLHA: 53

10.163.04a ūrúbhyāṃ te aṣṭhīvádbhyām :AHHHHHHA: 54

6.016.25a vásvī te agne sáṃdṛṣṭir :AHHHHHHA: 54

10.173.05a dhruvā́ṃ te rā́jā váruṇo :AHHHHLLA: 68

10.058.02a yát te dívaṃ yát pṛthivī́m :AHLHHLLA: 71

10.058.04a yát te cátasraḥ pradíśo :AHLHHLLA: 71

10.058.06a yát te márīcīḥ praváto :AHLHHLLA: 71

10.058.01a yát te yamáṃ vaivasvatám :AHLHHHLA: 75

5.050.05a eṣá te deva nayitā + :ALHHLLLA: 81

8.068.11a yásya te svādú sakhiyáṃ :ALHHLLLA: 81

10.105.09a ūrdhvā́ yát te tretínī bhū́d :AHHHHLHA: 85

10.163.01a akṣíbhyāṃ te nā́sikābhyāṃ :AHHHHLHA: 85

2.006.02a ayā́ te agne vidhema :AHHHHLHA: 85

10.058.03a yát te bhū́miṃ cáturbhṛṣṭim :AHHHLHHA: 92

10.058.12a yát te bhūtáṃ ca bhávyaṃ ca :AHHHLHHA: 92

10.137.02c dákṣaṃ te anyá ā́ vātu :AHHHLHHA: 92

10.137.04c dákṣaṃ te bhadrám ā́bhārṣam :AHHHLHHA: 92

10.184.02c gárbhaṃ te aśvínau devā́v :AHHHLHHA: 92

6.016.27a té te agne tuvā́ūtā :AHHHLHHA: 92

8.103.04b márto yás te vaso dā́śat :AHHHLHHA: 92

10.085.12a śúcī te cakré yātiyā́ :AHHHHHLA: 108

10.085.16a duvé te cakré sūriye :AHHHHHLA: 108

1.097.04a prá yát te agne sūráyo :AHHHHHLA: 108

3.062.07a iyáṃ te pūṣann āghṛṇe :AHHHHHLA: 108

6.053.09a yā́ te áṣṭrā góopaśā :AHHHHHLA: 108

10.058.08a yát te sū́ryaṃ yád uṣásam :AHHHLLLA: 152

5.035.01a yás te sā́dhiṣṭho ávasa :AHHHLLLA: 152

8.053.07a yás te sā́dhiṣṭho ávase :AHHHLLLA: 152

6.002.09c dhā́mā ha yát te ajara :AHLHLLLA: 168

10.145.06c mā́m ánu prá te máno :ALLHLHLA: 238

1.175.01a mátsi ápāyi te máhaḥ :ALLHLHLA: 238

8.024.09a índra yáthā hí ásti te :ALLHLHLA: 238

8.063.08a iyám u te ánuṣṭutiś :ALLHLHLA: 238

10.060.11d níag bhavatu te rápaḥ :AHLLLHLA: 621

8.092.23c yá indra jaṭháreṣu te :AHLLLHLA: 621

10.163.04d bhámṣaso ví vr̥hāmi te :ALHLLHLA: 691
10.163.05d tám idáṃ ví vr̥hāmi te :ALHLLHLA: 691
10.163.06d tám idáṃ ví vr̥hāmi te :ALHLLHLA: 691
4.032.19a dáśa te kaláśānāṃ :ALHLLHLA: 691
8.044.24c syáma te sumatáv ápi :ALHLLHLA: 691
8.053.07b té siyāma bháreṣu te :ALHLLHLA: 691
8.068.03a yásya te mahiná maháḥ :ALHLLHLA: 691
9.011.02a abhí te mádhunā páyo :ALHLLHLA: 691
9.061.29a ásya te sakhiyé vayáṃ :ALHLLHLA: 691
9.065.15a yásya te mádiyaṃ rásaṃ :ALHLLHLA: 691
9.066.14a ásya te sakhiyé vayám :ALHLLHLA: 691
10.058.10a yát te víśvam idáṃ jágan :AHHLLHLA: 1362
10.163.01d jihvā́yā ví vr̥hāmi te :AHHLLHLA: 1362
10.163.02d bāhúbhyāṃ ví vr̥hāmi te :AHHLLHLA: 1362
10.163.03d plāśíbhyo ví vr̥hāmi te :AHHLLHLA: 1362
1.091.16a á pyāyasva sám etu te :AHHLLHLA: 1362
1.134.01d ūrdhvá te ánu sūnr̥tā :AHHLLHLA: 1362
1.138.04g ná te sakhyám apahnuvé :AHHLLHLA: 1362
1.170.04d yajñáṃ te tanavāvahai :AHHLLHLA: 1362
1.187.09a yát te soma gávāśiro :AHHLLHLA: 1362
4.030.02a satrá te ánu kr̥ṣṭáyo :AHHLLHLA: 1362
5.006.04a á te agna idhīmahi :AHHLLHLA: 1362
5.006.05a á te agna r̥cá havíḥ :AHHLLHLA: 1362
6.016.47a á te agna r̥cá havír :AHHLLHLA: 1362
8.001.09a yé te sánti daśagvínaḥ :AHHLLHLA: 1362
8.013.31b utó te vr̥ṣaṇā hárī :AHHLLHLA: 1362
8.017.13a yás te śr̥ṅgavr̥ṣo napāt :AHHLLHLA: 1362

8.026.10b kuvít te śrávato hávam :AHHLLHLA: 1362

8.036.01c yáṃ te bhāgám ádhārayan :AHHLLHLA: 1362

8.036.02c yáṃ te bhāgám ádhārayan :AHHLLHLA: 1362

8.036.03c yáṃ te bhāgám ádhārayan :AHHLLHLA: 1362

8.036.04c yáṃ te bhāgám ádhārayan :AHHLLHLA: 1362

8.036.05c yáṃ te bhāgám ádhārayan :AHHLLHLA: 1362

8.036.06c yáṃ te bhāgám ádhārayan :AHHLLHLA: 1362

8.043.02a ásmai te pratiháryate :AHHLLHLA: 1362

8.045.06b yás te vāṣṭi vavákṣi tát :AHHLLHLA: 1362

8.046.32c té te vāyav imé jánā :AHHLLHLA: 1362

9.031.04a ā́ pyāyasva sám etu te :AHHLLHLA: 1362

9.063.22b índraṃ gachatu te mádaḥ :AHHLLHLA: 1362

10.059.08e mó ṣú te kíṃ canā́mamat :ALHHLHLA: 1979

10.059.09f mó ṣú te kíṃ canā́mamat :ALHHLHLA: 1979

10.059.10e mó ṣú te kíṃ canā́mamat :ALHHLHLA: 1979

1.009.05c ásad ít te vibhú prabhú :ALHHLHLA: 1979

10.127.08a úpa te gā́ ivā́karaṃ :ALHHLHLA: 1979

10.142.08a ā́yane te parā́yaṇe :ALHHLHLA: 1979

10.161.05d sárvam āyúś ca te ’vidam :ALHHLHLA: 1979

1.024.05a bhágabhaktasya te vayám :ALHHLHLA: 1979

1.080.03c índra nr̥mṇáṃ hí te śávo :ALHHLHLA: 1979

1.080.08d bāhuvós te bálaṃ hitám :ALHHLHLA: 1979

1.080.13d diví te badbadhe śávo :ALHHLHLA: 1979

1.081.02e sunvaté bhū́ri te vásu :ALHHLHLA: 1979

1.081.06d ví bhajā bhū́ri te vásu :ALHHLHLA: 1979

1.091.09a sóma yā́s te mayobhúva :ALHHLHLA: 1979

3.021.02a ghr̥távantaḥ pavāka+ te :ALHHLHLA: 1979

3.042.08c eṣá rārantu te hr̥dí :ALHHLHLA: 1979

4.009.08a pári te dūḷábho rátho :ALHHLHLA: 1979

4.048.05c utá vā te sahasríṇo :ALHHLHLA: 1979

5.035.04b jajñiṣé vr̥ṣṇi te śávaḥ :ALHHLHLA: 1979

6.016.16a éhi ū ṣú brávāṇi te :ALHHLHLA: 1979

6.016.18a nahí te pūrtám akṣipád :ALHHLHLA: 1979

8.013.23a utá te súṣṭutā hárī :ALHHLHLA: 1979

8.014.06a vāvr̥dhānásya te vayáṃ :ALHHLHLA: 1979

8.021.16b índra má́ te gr̥hāmahi :ALHHLHLA: 1979

8.032.08c mághavan bhū́ri te vásu :ALHHLHLA: 1979

8.033.11a vr̥ṣaṇas te abhíśavo :ALHHLHLA: 1979

8.045.42a yásya te viśvámānuṣo :ALHHLHLA: 1979

8.046.11a nahí te śūra rā́dhaso :ALHHLHLA: 1979

8.056.01a práti te dasyave vr̥ka :ALHHLHLA: 1979

8.061.02d sómakāmaṃ hí te mánaḥ :ALHHLHLA: 1979

8.069.12b yásya te saptá síndhavaḥ :ALHHLHLA: 1979

8.080.06b sukáraṃ te kím ít pári :ALHHLHLA: 1979

8.090.03d índra yā́ te ámanmahi :ALHHLHLA: 1979

8.093.11a yásya te nū́ cid ādíśaṃ :ALHHLHLA: 1979

8.095.02d índra víśvāsu te hitám :ALHHLHLA: 1979

8.095.05a índra yás te návīyasīṃ :ALHHLHLA: 1979

9.029.03a suṣáhā soma tā́ni te :ALHHLHLA: 1979

9.031.03c sóma várdhanti te máhaḥ :ALHHLHLA: 1979

9.061.04a pávamānasya te vayám :ALHHLHLA: 1979

9.061.17a pávamānasya te ráso :ALHHLHLA: 1979

9.065.09a tásya te vājíno vayáṃ :ALHHLHLA: 1979

9.066.03a pári dhā́māni yā́ni te :ALHHLHLA: 1979

9.066.10a pávamānasya te kave :ALHHLHLA: 1979

9.066.30a yásya te dyumnávat páyaḥ :ALHHLHLA: 1979

9.100.04a pári te jigyúṣo yathā :ALHHLHLA: 1979

1.004.04c yás te sákhibhya ā́ váram :AHLHLHLA: 3316

10.058.05a yát te samudrám arṇavám :AHLHLHLA: 3316

10.058.07a yát te apó yád óṣadhīr :AHLHLHLA: 3316

10.058.11a yát te párāḥ parāváto :AHLHLHLA: 3316

1.008.09a evā́ hí te víbhūtaya :AHLHLHLA: 3316

10.086.15d yáṃ te sunóti bhāvayúr :AHLHLHLA: 3316

10.102.01a prá te rátham mithūkŕ̥tam :AHLHLHLA: 3316

1.014.08b té te pibantu jihváyā :AHLHLHLA: 3316

10.144.01a ayáṃ hí te ámartiya :AHLHLHLA: 3316

1.025.01a yác cid dhí te víśo yathā :AHLHLHLA: 3316

1.028.06a utá sma te vanaspate :AHLHLHLA: 3316

1.030.21a vayáṃ hí te ámanmahi :AHLHLHLA: 3316

1.036.04d yás te dadā́śa mártiyaḥ :AHLHLHLA: 3316

1.080.14a abhiṣṭané te adrivo :AHLHLHLA: 3316

1.084.19d índra brávīmi te vácaḥ :AHLHLHLA: 3316

1.097.04b jā́yemahi prá te vayám :AHLHLHLA: 3316

1.127.09d śuṣmíntamo hí te mádo :AHLHLHLA: 3316

1.130.02d mádāya haryatā́ya te :AHLHLHLA: 3316

1.133.04d takát sú te manāyati :AHLHLHLA: 3316

1.170.03c vidmā́ hí te yáthā máno :AHLHLHLA: 3316

1.175.05a śuṣmíntamo hí te mádo :AHLHLHLA: 3316

1.191.11b sakā́ jaghāsa te viṣám :AHLHLHLA: 3316

1.191.14c tā́s te viṣáṃ ví jabhrira :AHLHLHLA: 3316

3.021.05b prá te vayáṃ dadāmahe :AHLHLHLA: 3316

3.027.03a ágne śakéma te vayáṃ :AHLHLHLA: 3316

3.037.03a nā́māni te śatakrato :AHLHLHLA: 3316

3.037.09b yā́ te jáneṣu pañcásu :AHLHLHLA: 3316

3.051.11a yás te ánu svadhā́m ásat :AHLHLHLA: 3316

3.052.04c índra krátur hí te bṛ́hán :AHLHLHLA: 3316

4.031.10a asmā́ṁ avantu te śatám :AHLHLHLA: 3316

4.032.11a tā́ te gṛ́ṇanti vedháso :AHLHLHLA: 3316

5.035.03a ā́ te ávo váreṇiyaṃ :AHLHLHLA: 3316

5.039.02c vidyā́ma tásya te vayám :AHLHLHLA: 3316

5.079.05a yác cid dhí te gaṇā́ imé :AHLHLHLA: 3316

6.016.38b áganma śárma te vayám :AHLHLHLA: 3316

6.016.47c té te bhavantu ukṣáṇa :AHLHLHLA: 3316

6.045.30a asmā́kam indra bhūtu te :AHLHLHLA: 3316

6.056.06a ā́ te suastím īmaha :AHLHLHLA: 3316

7.031.07a mahā́ṁ utā́si yásya te :AHLHLHLA: 3316

7.031.09c sáṃ te namanta kṛ́ṣṭáyaḥ :AHLHLHLA: 3316

7.096.05a yé te sarasva ūrmáyo :AHLHLHLA: 3316

8.003.01d asmā́ṁ avantu te dhíyaḥ :AHLHLHLA: 3316

8.003.10b tád indra vṛ́ṣṇi te śávaḥ :AHLHLHLA: 3316

8.011.05a mártā ámartiyasya te :AHLHLHLA: 3316

8.014.10c ví te mádā arājiṣuḥ :AHLHLHLA: 3316

8.015.04a táṃ te mádaṃ gṛ́ṇīmasi :AHLHLHLA: 3316

8.017.06c sómaḥ śám astu te hṛ́dé :AHLHLHLA: 3316

8.017.12b ayáṃ ráṇāya te sutáḥ :AHLHLHLA: 3316

8.021.14b pī́yanti te surāśúvaḥ :AHLHLHLA: 3316

8.021.15a mā́ te amājúro yathā :AHLHLHLA: 3316

8.033.19c mā́ te kaśaplakaú dṛ́śan :AHLHLHLA: 3316

8.034.05a dádhāmi te sutā́nā̃m :AHLHLHLA: 3316

8.043.33a tát te sahasva īmahe :AHLHLHLA: 3316

8.044.04a út te bṛhánto arcáyaḥ :AHLHLHLA: 3316

8.044.25a ágne dhṛ̥távratāya te :AHLHLHLA: 3316

8.045.10a vṛ̥jyā́ma te pári dvíṣo :AHLHLHLA: 3316

8.045.12a ūrdhvā́ hí te divé-dive :AHLHLHLA: 3316

8.045.19a yác cid dhí te ápi vyáthir :AHLHLHLA: 3316

8.045.32c jígātu indra te mánaḥ :AHLHLHLA: 3316

8.046.08a yás te mádo váreṇiyo :AHLHLHLA: 3316

8.054.05a yád indra rā́dho ásti te :AHLHLHLA: 3316

8.063.05a ā́d ū nú te ánu krátuṃ :AHLHLHLA: 3316

8.068.08c nákiḥ śávāṃsi te naśat :AHLHLHLA: 3316

8.075.16a vidmā́ hí te purā́ vayám :AHLHLHLA: 3316

8.082.07b sómaś camū́ṣu te sutáḥ :AHLHLHLA: 3316

8.084.04a káyā te agne aṅgira :AHLHLHLA: 3316

8.088.03d nákiṣ ṭád ā́ mināti te :AHLHLHLA: 3316

8.092.18a vidmā́ hí yás te adrivas :AHLHLHLA: 3316

8.092.27c áraṃ gamāma te vayám :AHLHLHLA: 3316

8.093.27a ā́ te dadhāmi indriyám :AHLHLHLA: 3316

8.102.21c sárvaṃ tád astu te ghṛ̥tám :AHLHLHLA: 3316

9.001.06a punā́ti te parisrútaṃ :AHLHLHLA: 3316

9.031.06a suāyudhásya te sató :AHLHLHLA: 3316

9.061.05a yé te pavítram ūrmáyo :AHLHLHLA: 3316

9.061.19a yás te mádo váreṇiyas :AHLHLHLA: 3316

9.062.28a prá te divó ná vṛ̥ṣṭáyo :AHLHLHLA: 3316

9.067.23a yát te pavítram arcíṣi :AHLHLHLA: 3316

9.067.24a yát te pavítram arcivád :AHLHLHLA: 3316

10.022.09c purutrā́ te ví pūrtáyo :AHHHLHLA: 4930
10.025.01c ádhā te sakhyé ándhaso :AHHHLHLA: 4930
10.033.03b stotā́raṃ te śatakrato :AHHHLHLA: 4930
1.004.03a áthā te ántamānāṃ :AHHHLHLA: 4930
1.005.07c śáṃ te santu prácetase :AHHHLHLA: 4930
10.060.08c evā́ dādhāra te máno :AHHHLHLA: 4930
10.060.09c evā́ dādhāra te máno :AHHHLHLA: 4930
10.085.04d ná te aśnāti pā́rthivaḥ :AHHHLHLA: 4930
10.085.11b gā́vau te sāmanā́v itaḥ :AHHHLHLA: 4930
10.085.40d turíyas te manuṣyajā́ḥ :AHHHLHLA: 4930
10.127.04b ní te yā́mannávikṣmahi :AHHHLHLA: 4930
10.133.03e yā́ te rātír dadír vásu :AHHHLHLA: 4930
10.137.04d párā yákṣmaṃ suvāmi te :AHHHLHLA: 4930
10.137.06d tā́s te kr̥ṇvantu bheṣajám :AHHHLHLA: 4930
1.016.07a ayáṃ te stómo agriyó :AHHHLHLA: 4930
10.162.03c jātáṃ yás te jíghāṃsati :AHHHLHLA: 4930
10.162.05c prajā́ṃ yás te jíghāṃsati :AHHHLHLA: 4930
10.162.06c prajā́ṃ yás te jíghāṃsati :AHHHLHLA: 4930
10.163.03a āntrébhyas te gúdābhiyo :AHHHLHLA: 4930
10.163.05b lómabhyas te nakhébhiyaḥ :AHHHLHLA: 4930
10.184.01d dhātā́ gárbhaṃ dadhātu te :AHHHLHLA: 4930
10.184.03c táṃ te gárbhaṃ havāmahe :AHHHLHLA: 4930
1.025.03a ví mr̥̄ḷīkā́ya + te máno :AHHHLHLA: 4930
1.030.05b gírvāho vīra yásya te :AHHHLHLA: 4930
1.030.09c yáṃ te pū́rvam pitā́ huvé :AHHHLHLA: 4930
1.036.02b havíṣmanto vidhema te :AHHHLHLA: 4930
1.042.05a ā́ tát te dasra mantumaḥ :AHHHLHLA: 4930

1.049.03a váyaś cit te patatríṇo :AHHHLHLA: 4930

1.075.02a áthā te aṅgirastama :AHHHLHLA: 4930

1.075.03a kás te jāmír jánānām :AHHHLHLA: 4930

1.080.03b ná te vájro ní yaṃsate :AHHHLHLA: 4930

1.080.08a ví te vájrāso asthiran :AHHHLHLA: 4930

1.082.05a yuktás te astu dákṣiṇa :AHHHLHLA: 4930

1.084.03b yuktā́ te bráhmaṇā hárī :AHHHLHLA: 4930

1.084.03c arvācī́naṃ sú te máno :AHHHLHLA: 4930

1.105.08d stotā́raṃ te śatakrato :AHHHLHLA: 4930

1.175.02a ā́ nas te gantu matsaró :AHHHLHLA: 4930

1.176.04b dūṇā́śaṃ yó ná te máyaḥ :AHHHLHLA: 4930

2.041.01a vā́yo yé te sahasríṇo :AHHHLHLA: 4930

2.041.02b ayáṃ śukró ayāmi te :AHHHLHLA: 4930

3.010.03a sá ghā yás te dádāśati :AHHHLHLA: 4930

3.029.10a ayáṃ te yónir ṛ̥tvíyo :AHHHLHLA: 4930

3.037.02a arvācī́naṃ sú te mána :AHHHLHLA: 4930

3.037.10c út te śúṣmaṃ tirāmasi :AHHHLHLA: 4930

3.037.11c ulokó† yás te adriva :AHHHLHLA: 4930

3.042.01c háribhyāṃ yás te asmayúḥ :AHHHLHLA: 4930

3.042.06c ádhā te sumnám īmahe :AHHHLHLA: 4930

3.044.01a ayáṃ te astu haryatáḥ :AHHHLHLA: 4930

3.051.12a prá te aśnotu kukṣiyóḥ :AHHHLHLA: 4930

4.030.19c ná tát te sumnám áṣṭave :AHHHLHLA: 4930

4.031.09a nahí ṣmā te śatáṃ caná :AHHHLHLA: 4930

4.032.10a prá te vocāma vīríyā :AHHHLHLA: 4930

4.032.18a sahásrā te śatā́ vayáṃ :AHHHLHLA: 4930

4.032.18c asmatrā́ rā́dha etu te :AHHHLHLA: 4930

4.032.22a prá te babhrū́ vicakṣaṇa :AHHHLHLA: 4930

4.047.01a vā́yo śukró ayāmi te :AHHHLHLA: 4930

5.006.04c yád dha syā́ te pánīyasī :AHHHLHLA: 4930

5.007.09a ā́ yás te sarpirāsute :AHHHLHLA: 4930

5.018.02d stotā́ cit te amartiya :AHHHLHLA: 4930

5.020.02a yé agne nérāyanti te :AHHHLHLA: 4930

5.025.08c utó te tanyatúr yathā :AHHHLHLA: 4930

5.035.04c svákṣatraṃ te dhṛ̥ṣán mánaḥ :AHHHLHLA: 4930

5.038.03a śúṣmāso yé te adrivo :AHHHLHLA: 4930

5.039.03a yát te ditsú prarā́dhiyam :AHHHLHLA: 4930

5.078.07c evā́ te gárbha ejatu :AHHHLHLA: 4930

5.084.03c yát te abhrásya vidyúto :AHHHLHLA: 4930

6.002.04a ṛ̥dhad yás te sudā́nave :AHHHLHLA: 4930

6.002.06a tveṣás te dhūmá ṛ̥ṇvati :AHHHLHLA: 4930

6.053.09c tásyās te sumnám īmahe :AHHHLHLA: 4930

8.001.07b purutrā́ cid dhí te mánaḥ :AHHHLHLA: 4930

8.001.16d ádhā te vaśmi suṣṭutím :AHHHLHLA: 4930

8.011.07a ā́ te vatsó máno yamat :AHHHLHLA: 4930

8.012.27a yadā́ te víṣṇur ójasā :AHHHLHLA: 4930

8.012.28a yadā́ te haryatā́ hárī :AHHHLHLA: 4930

8.012.29a yadā́ te mā́rutīr víśas :AHHHLHLA: 4930

8.013.06a stotā́ yát te vícarṣaṇir :AHHHLHLA: 4930

8.013.19a stotā́ yát te ánuvrata :AHHHLHLA: 4930

8.014.04a ná te vartā́sti rā́dhasa :AHHHLHLA: 4930

8.017.05a ā́ te siñcāmi kukṣiyór :AHHHLHLA: 4930

8.017.10a dīrghás te astu aṅkuśó :AHHHLHLA: 4930

8.019.20d vanémā te abhíṣṭibhiḥ :AHHHLHLA: 4930

8.021.05a sídantas te váyo yathā :AHHHLHLA: 4930

8.021.08b ā́ te tā́ vajrin īmahe :AHHHLHLA: 4930

8.021.16d ná te dāmā́na ādábhe :AHHHLHLA: 4930

8.024.05a ná te savyáṃ ná dákṣiṇaṃ :AHHHLHLA: 4930

8.024.08a vayáṃ te asyá vr̥trahan :AHHHLHLA: 4930

8.032.07a vayáṃ ghā te ápi ṣmasi :AHHHLHLA: 4930

8.033.12a vr̥ṣā́ sótā sunotu te :AHHHLHLA: 4930

8.045.05c yás te śatrutvám ācaké :AHHHLHLA: 4930

8.045.10b áraṃ te śakra dāváne :AHHHLHLA: 4930

8.045.15a yás te revā́m̐ ádāśuriḥ :AHHHLHLA: 4930

8.045.36c āvŕ̥tvad bhūtu te mánaḥ :AHHHLHLA: 4930

8.055.01c rā́dhas te dasyave vr̥ka :AHHHLHLA: 4930

8.064.09a káṃ te dānā́ asakṣata :AHHHLHLA: 4930

8.064.10a ayáṃ te mā́nuṣe jáne :AHHHLHLA: 4930

8.064.11a ayáṃ te śaryaṇā́vati :AHHHLHLA: 4930

8.065.08a idáṃ te somiyám mádhu :AHHHLHLA: 4930

8.066.11a vayáṃ ghā te ápūrviya :AHHHLHLA: 4930

8.066.13a vayáṃ ghā te tuvé íd u :AHHHLHLA: 4930

8.074.07a iyáṃ te návyasī matír :AHHHLHLA: 4930

8.075.10a námas te agna ójase :AHHHLHLA: 4930

8.075.16c ádhā te sumnám īmahe :AHHHLHLA: 4930

8.077.09a etā́ cyautnā́ni te kr̥tā́ :AHHHLHLA: 4930

8.082.03a iṣā́ mandasva ā́d u te :AHHHLHLA: 4930

8.082.09a yáṃ te śyenáḥ padā́bharat :AHHHLHLA: 4930

8.084.07c góṣātā yásya te gíraḥ :AHHHLHLA: 4930

8.089.04b śrávaś cit te asad br̥hát :AHHHLHLA: 4930

8.089.06a tát te yajñó ajāyata :AHHHLHLA: 4930

8.090.06d prá te sumnā́ no aśnavan :AHHHLHLA: 4930

8.092.16a yás te nūnáṃ śatakratav :AHHHLHLA: 4930

8.092.17a yás te citráśravastamo :AHHHLHLA: 4930

8.092.26c áraṃ te śakra dāváne :AHHHLHLA: 4930

8.092.28c evā́ te rā́dhiyam mánaḥ :AHHHLHLA: 4930

8.093.12a ádhā te ápratiṣkutaṃ :AHHHLHLA: 4930

8.093.26a ā́ te dákṣaṃ ví rocanā́ :AHHHLHLA: 4930

8.098.11c ádhā te sumnám īmahe :AHHHLHLA: 4930

8.101.09d ayáṃ śukró ayāmi te :AHHHLHLA: 4930

8.102.19c áthaitādṛ́g bharāmi te :AHHHLHLA: 4930

8.102.20b ā́ te dā́rūṇi dadhmási :AHHHLHLA: 4930

9.016.01a prá te sotā́ra oṇíyo :AHHHLHLA: 4930

9.050.01a út te śúṣmāsa īrate :AHHHLHLA: 4930

9.055.02b yáthā te jātám ándhasaḥ :AHHHLHLA: 4930

9.057.01a prá te dhā́rā asaścáto :AHHHLHLA: 4930

9.061.10a uccā́ te jātám ándhaso :AHHHLHLA: 4930

9.061.30a yā́ te bhīmā́ni áyudhā :AHHHLHLA: 4930

9.062.07a yā́s te dhā́rā madhuścúto :AHHHLHLA: 4930

9.064.02a vṛ́ṣṇas te vṛ́ṣṇiyaṃ śávo :AHHHLHLA: 4930

9.064.07b prá te sárgā asṛkṣata :AHHHLHLA: 4930

9.064.11a ūrmír yás te pavítra ā́ :AHHHLHLA: 4930

9.064.24a rásaṃ te mitró aryamā́ :AHHHLHLA: 4930

9.065.28a ā́ te dákṣam mayobhúvaṃ :AHHHLHLA: 4930

9.098.05a vayáṃ te asyá vṛtrahan :AHHHLHLA: 4930

9.114.01d yás te somā́vidhan mána :AHHHLHLA: 4930

9.114.04a yát te rājañ chṛtáṃ havís :AHHHLHLA: 4930

11 syllable lines

1.121.08c hárim̥ yát te mandínam̥ dukṣán vr̥dhé :AHHHHLHHHLA: 1
1.173.12b ásti hí ṣmā te śuṣmin avayā́ḥ :ALHHHHLLLLA: 1
2.020.01a vayám̥ te váya indra viddhí ṣú ṇaḥ :AHHLLHLHLLA: 1
7.095.06a ayám u te sarasvati vásiṣṭho :ALLHLHLLLHA: 1
7.025.01a ā́ te mahá indara+ ūtí́ ugra :AHLLHLLHHHA: 4
1.076.01d kéna vā te mánasā dāśema :ALHHLLHLLHA: 5
6.001.04d bhadrā́yām̥ te raṇayanta sám̥dr̥ṣṭau :AHHHLLHLHHA: 5
6.024.03c vr̥kṣásya nú te puruhūta vayā́ :AHLLHLLHLLA: 5
5.030.03a prá nú vayám̥ suté yā́ te kr̥tā́ni :ALLHLHHHLHA: 7
7.027.05b ā́ te máno vavr̥tyāma maghā́ya :AHLHLHHLLHA: 7
1.024.14a áva te héḷo varuṇa námobhir :ALHHHLLLLHA: 10
4.012.01b trís te ánnam̥ kr̥ṇávat sásmin áhan :AHHHLLHHLLA: 10
7.029.03b kadā́ nūnám̥ te maghavan dāśema :AHHHHLLHHHA: 12
1.121.15a mā́ sā́ te asmát sumatír ví dasad :AHLHHLLHLLA: 15
6.015.14d havyā́ vaha yaviṣṭha yā́ te adyá :AHLLLHLHLHA: 15
2.009.05a ubháyam̥ te ná kṣīyate vasavyàm̥ :ALHHHHLHLHA: 19
10.050.03b yé te sumnám̥ sadhaníyam íyakṣān :AHHHLLLLLHA: 21
1.163.07a átrā te rūpám uttamám apaśyam̥ :AHHHLHLLLHA: 25
7.098.03b prá te mātā́ mahimā́nam uvāca :AHHHLLHLLHA: 26
6.026.08a vayám̥ te asyā́m indra dyumnáhūtau :AHLHHHHHLHA: 28
7.092.01c úpo te ándho mádiyam ayāmi :AHLHHLLLLHA: 37
5.029.14d ná te vartā́ táviṣyā asti tásyāḥ :AHHHLHHHLHA: 52
10.004.07a bráhma ca te jātavedo námaś ca :ALLHHLHHLHA: 56
1.162.20b mā́ svádhitis tanvà ā́ tiṣṭhipat te :ALLHHLHHLHA: 56
7.003.04a ví yásya te pr̥thivyā́m pā́jo áśret :AHLHLHHHLHA: 63

10.054.03a ká u nú te mahimánaḥ samasya :ALLHLLLHLHA: 80
6.027.03a nahí nú te mahimánaḥ samasya :ALLHLLLHLHA: 80
6.027.03d índra nákir dadṛśa indriyáṃ te :ALLHLLLHLHA: 80
3.035.05c atiā́yāhi śáśvato vayáṃ te :ALHHLHLHLHA: 84
2.011.12d sadyás te rāyó dāváne siyāma :AHHHHHLHLHA: 85
3.033.08b ā́ yát te ghóṣān úttarā yugā́ni :AHHHHHLHLHA: 85
7.001.09a ví yé te agne bhejiré ánīkam :AHHHHHLHLHA: 85
10.004.06c iyáṃ te agne návyasī manīṣā́ :AHLHHHLHLHA: 109
10.120.05d sáṃ te śiśāmi bráhmaṇā váyāṃsi :AHLHHHLHLHA: 109
7.025.01d mā́ te máno viṣvadríag ví cārīt :AHLHHHLHLHA: 109
10.089.17a evā́ te vayám indra bhuñjatīnā́ṃ :AHHLLHLHLHA: 126
1.173.08c víśvā te ánu jóṣiyā bhūd gaúḥ :AHHLLHLHLHA: 126
7.029.03a kā́ te asti áraṃkṛtiḥ suuktaíḥ :AHHLLHLHLHA: 126
3.020.02c tisrá u te tanúvo devávātās :ALLHLLHHLHA: 133
7.022.06a bhū́ri hí te sávanā mā́nuṣeṣu :ALLHLLHHLHA: 133
2.030.10b vīryà̄ kṛdhi yā́ni te kártuvāni :AHLLHLHHLHA: 140
10.108.09d ápa te gávāṃ subhage bhajāma :ALHLHLLHLHA: 141
1.095.09a urú te jráyaḥ pári eti budhnáṃ :ALHLHLLHLHA: 141
8.048.07a iṣiréṇa te mánasā sutásya :ALHLHLLHLHA: 141
1.114.10b kṣáyadvīra sumnám asmé te astu :AHHLHLHHLHA: 160
1.032.14b hṛdí yát te jaghnúṣo bhī́r ágachat :ALHHHLHHLHA: 161
3.036.09c índra yát te mā́hinaṃ dátram ásti :ALHHHLHHLHA: 161
3.039.01d índra yát te jā́yate viddhí tásya :ALHHHLHHLHA: 161
10.018.01b yás te suvá ítaro devayā́nāt :AHLLLLHHLHA: 223
6.037.01d ṛdhīmáhi sadhamā́das te adyá :AHLLLLHHLHA: 223
10.029.03a kás te máda indara+ rántiyo bhūd :AHLLHLLHLHA: 241
1.177.02a yé te vṛ́ṣaṇo vṛṣabhā́sa indra :AHLLHLLHLHA: 241

1.177.03a ấ tiṣṭha ráthaṃ vr̥ṣaṇaṃ vr̥ṣā te :AHLLHLLHLHA: 241

4.018.09a mámac caná te maghavan víaṃso :AHLLHLLHLHA: 241

4.054.06a yé te trír áhan savitaḥ savā́so :AHLLHLLHLHA: 241

7.098.06d bhakṣīmáhi te práyatasya vásvaḥ :AHLLHLLHLHA: 241

1.104.06d śráddhitaṃ te mahatá indriyā́ya :ALHHLLLHLHA: 287

5.003.03b rúdra yát te jánima cā́ru citrám :ALHHLLLHLHA: 287

6.025.08a ánu te dāyi mahá indriyā́ya :ALHHLLLHLHA: 287

6.025.08d índra devébhir ánu te nr̥ṣáhye :ALHHLLLHLHA: 287

10.044.02a suṣṭhā́mā ráthaḥ suyámā hárī te :AHHLHLLHLHA: 307

4.018.12a kás te mātáraṃ vidhávām acakrac :AHHLHLLHLHA: 307

6.044.11b mā́ te revátaḥ sakhiyé riṣāma :AHHLHLLHLHA: 307

7.019.06c vr̥ṣṇe te hárī vr̥ṣaṇā yunajmi :AHHLHLLHLHA: 307

7.037.05c vavanmā́ nú te yújiyābhir ūtī́ :AHHLHLLHLHA: 307

9.096.21d índraṃ te ráso madiró mamattu :AHHLHLLHLHA: 307

10.011.07a yás te agne sumatím márto ákṣat :ALHHLLHHLHA: 351

10.087.20c práti té te ajárāsas tápiṣṭhā :ALHHLLHHLHA: 351

10.112.02c tū́yam ā́ te hárayaḥ prá dravantu :ALHHLLHHLHA: 351

1.163.08d ánu devā́ mamire vīríyaṃ te :ALHHLLHHLHA: 351

3.031.14a máhi ā́ te sakhiyáṃ vaśmi śaktī́r :ALHHLLHHLHA: 351

3.031.17c pári yát te mahimā́naṃ vr̥jádhyai :ALHHLLHHLHA: 351

5.029.13d préd u tā́ te vidátheṣu bravāma :ALHHLLHHLHA: 351

5.031.04a ánavas te rátham áśvāya takṣan :ALHHLLHHLHA: 351

5.043.03d déva mádhvo rarimā́ te mádāya :ALHHLLHHLHA: 351

10.028.03a ádriṇā te mandína indra tū́yān :ALHHHLLHLHA: 360

10.054.01a tā́ṃ sú te kīrtím maghavan mahitvā́ :ALHHHLLHLHA: 360

10.061.11c śúci yát te rékaṇa ā́yajanta :ALHHHLLHLHA: 360

1.024.06a nahí te kṣatráṃ ná sáho ná manyúṃ :ALHHHLLHLHA: 360

1.063.01c yád dha te víśvā giráyaś cid ábhvā :ALHHHLLHLHA: 360

1.069.08a tát tú te dáṃso yád áhan samānaír :ALHHHLLHLHA: 360

3.017.03b tisrá ājā́nīr uṣásas te agne :ALHHHLLHLHA: 360

3.035.04a bráhmaṇā te brahmayújā yunajmi :ALHHHLLHLHA: 360

6.040.02c tám u te gā́vo nára ā́po ádrir :ALHHHLLHLHA: 360

6.049.13c tásya te śármann upadadyámāne :ALHHHLLHLHA: 360

7.054.02c ajárāsas te sakhiyé siyāma :ALHHHLLHLHA: 360

7.104.14d droghavā́cas te nirr̥thā́ṃ sacantām :ALHHHLLHLHA: 360

10.045.09a yás te adyá kr̥ṇávad bhadraśoce :AHHLLLHHLHA: 379

1.121.12c yáṃ te kāvyá uśánā mandínaṃ dā́d :AHHLLLHHLHA: 379

1.162.20c mā́ te gr̥dhnúr aviśastā́tihā́ya :AHHLLLHHLHA: 379

3.033.10d máryāyeva kaníyā śaśvacaí te :AHHLLLHHLHA: 379

3.053.05b índra bhrātar ubhayátrā te ártham :AHHLLLHHLHA: 379

6.018.15c kr̥ṣvā́ kr̥tno ákr̥taṃ yát te ásti :AHHLLLHHLHA: 379

7.033.10c tát te jánma utá ékaṃ vasiṣṭha :AHHLLLHHLHA: 379

1.061.16a evā́ te hāriyojanā suvr̥ktí :AHHHLHLHLHA: 470

3.019.02a prá te agne havíṣmatīm iyarmi :AHHHLHLHLHA: 470

3.030.19b ní te deṣṇásya dhīmahi prareké :AHHHLHLHLHA: 470

3.053.14a kíṃ te kr̥ṇvanti kī́kaṭeṣu gā́vo :AHHHLHLHLHA: 470

4.010.06d tát te rukmó ná rocata svadhāvaḥ :AHHHLHLHLHA: 470

4.029.05b vayáṃ te syāma sūráyo gr̥ṇántaḥ :AHHHLHLHLHA: 470

7.003.08a yā́ vā te sánti dāśúṣe ádhr̥ṣṭā :AHHHLHLHLHA: 470

7.017.07a té te devā́ya dā́śataḥ siyāma :AHHHLHLHLHA: 470

7.025.03a śatáṃ te śiprin ūtáyaḥ sudā́se :AHHHLHLHLHA: 470

7.099.07a vāṣaṭ te viṣṇav āsá ā́ kr̥ṇomi :AHHHLHLHLHA: 470

7.100.07a vāṣaṭ te viṣṇav āsá ā́ kr̥ṇomi :AHHHLHLHLHA: 470

10.054.02c māyét sā́ te yā́ni yuddhā́ni āhúr :AHHHHLHHLHA: 483

10.089.12b asinvā́ te vartatām indra hetíḥ :AHHHHLHHLHA: 483
10.100.12a citrás te bhānúḥ kratuprā́ abhiṣṭíḥ :AHHHHLHHLHA: 483
1.104.07a ádhā manye śrát te asmā adhāyi :AHHHHLHHLHA: 483
1.162.11a yát te gā́trād agnínā pacyámānād :AHHHHLHHLHA: 483
1.162.17d sárvā tā́ te bráhmaṇā sūdayāmi :AHHHHLHHLHA: 483
3.006.02d vacyántāṃ te váhnayaḥ saptájihvāḥ :AHHHHLHHLHA: 483
3.020.02a ágne trī́ te vā́jinā trī́ ṣadhásthā :AHHHHLHHLHA: 483
3.033.10c ní te naṃsai pīpiyānéva yóṣā :AHHHHLHHLHA: 483
3.035.07b kr̥tā́ dhānā́ áttave te háribhyām :AHHHHLHHLHA: 483
3.055.22c sákhāyas te vāmabhā́jaḥ siyāma :AHHHHLHHLHA: 483
3.057.06a yā́ te agne párvatasyeva dhā́rā :AHHHHLHHLHA: 483
4.003.15d sáṃ te śastír devávātā jareta :AHHHHLHHLHA: 483
6.006.03a ví te víṣvag vā́tajūtāso agne :AHHHHLHHLHA: 483
6.022.04c kás te bhāgáḥ kíṃ váyo dudhra khidvaḥ :AHHHHLHHLHA: 483
6.041.02d sáṃ te vájro vartatām indra gavyúḥ :AHHHHLHHLHA: 483
6.058.03a yā́s te pūṣan nā́vo antáḥ samudré :AHHHHLHHLHA: 483
6.064.02b út te śocír bhānávo dyā́m apaptan :AHHHHLHHLHA: 483
7.099.02a ná te viṣṇo jā́yamāno ná jātó :AHHHHLHHLHA: 483
10.116.05c ugrā́ya te sáho bálaṃ dadāmi :AHLHLHLHLHA: 512
1.059.01a vayā́ íd agne agnáyas te anyé :AHLHLHLHLHA: 512
5.031.13d ójo jáneṣu yéṣu te siyā́ma :AHLHLHLHLHA: 512
7.020.08b ásan nireké adrivaḥ sákhā te :AHLHLHLHLHA: 512
7.020.10c vásvī ṣú te jaritré astu śaktír :AHLHLHLHLHA: 512
7.021.10c vásvī ṣú te jaritré astu śaktír :AHLHLHLHLHA: 512
7.022.03b yā́ṃ te vásiṣṭho árcati práśastim :AHLHLHLHLHA: 512
10.018.01c cákṣuṣmate śr̥ṇvaté te bravīmi :AHLHHLHHLHA: 683
10.018.13d átrā yamáḥ sā́danā te minotu :AHLHHLHHLHA: 683

10.085.36a gr̥bhṇā́mi te saubhagatvā́ya hástam :AHLHHLHHLHA: 683
10.125.04d śrudhí śruta śraddhivā́ṃ te vadāmi :AHLHHLHHLHA: 683
1.147.03a yé pāyávo māmateyáṃ te agne :AHLHHLHHLHA: 683
4.004.13a yé pāyávo māmateyáṃ te agne :AHLHHLHHLHA: 683
4.020.10b prá dāśúṣe dā́tave bhū́ri yát te :AHLHHLHHLHA: 683
4.023.06b kadā́ nú te bhrātarám prá bravāma :AHLHHLHHLHA: 683
6.075.18a mármāṇi te vármaṇā chādayāmi :AHLHHLHHLHA: 683
7.022.08a nū́ cin nú te mányamānasya dasma :AHLHHLHHLHA: 683
7.037.04c vayáṃ nú te dāśuvā́ṃsaḥ siyāma :AHLHHLHHLHA: 683
7.054.03a vā́stoṣ pate śagmáyā saṃsádā te :AHLHHLHHLHA: 683
10.004.01a prá te yakṣi prá ta iyarmi mánma :AHHHLLLHLHA: 1231
10.007.06b kíṃ te pā́kaḥ kr̥ṇavad ápracetāḥ :AHHHLLLHLHA: 1231
10.016.04b táṃ te śocís tapatu táṃ te arcíḥ :AHHHLLLHLHA: 1231
10.016.06a yát te kr̥ṣṇáḥ śakuná ātutóda :AHHHLLLHLHA: 1231
10.023.07d asmé te santu sakhiyā́ śivā́ni :AHHHLLLHLHA: 1231
10.027.24a sā́ te jīvā́tur utá tásya viddhi :AHHHLLLHLHA: 1231
10.045.02b vidmā́ te dhā́ma víbhr̥tā purutrā́ :AHHHLLLHLHA: 1231
10.045.02c vidmā́ te nā́ma paramā́ṃ gúhā yád :AHHHLLLHLHA: 1231
10.055.04c yát te jāmitvám ávaram párasyā :AHHHLLLHLHA: 1231
10.069.04d dātráṃ rakṣasva yád idáṃ te asmé :AHHHLLLHLHA: 1231
10.105.10a śriyé te pr̥śnir upasécanī bhūc :AHHHLLLHLHA: 1231
10.180.01b jyéṣṭhas te śúṣma ihá rātír astu :AHHHLLLHLHA: 1231
1.053.11b sákhāyas te śivátamā ásāma :AHHHLLLHLHA: 1231
1.091.04a yā́ te dhā́māni diví yā́ pr̥thivyā́ṃ :AHHHLLLHLHA: 1231
1.091.19a yā́ te dhā́māni havíṣā yájanti :AHHHLLLHLHA: 1231
1.114.10a āré te goghnám utá pūruṣaghnáṃ :AHHHLLLHLHA: 1231
1.163.03d āhús te trí̀ṇi diví bándhanāni :AHHHLLLHLHA: 1231

2.004.08a nū́ te pū́rvasya ávaso ádhītau :AHHHLLLHLHA: 1231
2.011.21a nūnáṃ sā́ te práti váraṃ jaritré :AHHHLLLHLHA: 1231
2.015.10a nūnáṃ sā́ te práti váraṃ jaritré :AHHHLLLHLHA: 1231
2.016.09a nūnáṃ sā́ te práti váraṃ jaritré :AHHHLLLHLHA: 1231
2.017.09a nūnáṃ sā́ te práti váraṃ jaritré :AHHHLLLHLHA: 1231
2.018.09a nūnáṃ sā́ te práti váraṃ jaritré :AHHHLLLHLHA: 1231
2.019.09a nūnáṃ sā́ te práti váraṃ jaritré :AHHHLLLHLHA: 1231
2.020.09a nūnáṃ sā́ te práti váraṃ jaritré :AHHHLLLHLHA: 1231
3.030.03d kúva tyā́ te vr̥ṣabha vīríyāṇi :AHHHLLLHLHA: 1231
3.032.12d yajñás te vájram ahihátya āvat :AHHHLLLHLHA: 1231
3.043.07b ā́ yáṃ te śyená uśaté jabhā́ra :AHHHLLLHLHA: 1231
3.046.05c táṃ te hinvanti tám u te mr̥janti :AHHHLLLHLHA: 1231
3.057.05a yā́ te jihvā́ mádhumatī sumedhā́ :AHHHLLLHLHA: 1231
4.004.06a sá te jānāti sumatíṃ yaviṣṭha :AHHHLLLHLHA: 1231
4.016.14b ví yát te céti amŕ̥tasya várpaḥ :AHHHLLLHLHA: 1231
4.019.10a prá te pū́rvāṇi kāraṇāni vipra :AHHHLLLHLHA: 1231
5.031.06a prá te pū́rvāṇi kāraṇāni vocam :AHHHLLLHLHA: 1231
5.085.08d ádhā te syāma varuṇa priyā́saḥ :AHHHLLLHLHA: 1231
6.005.05a yás te yajñéna samídhā yá ukthaír :AHHHLLLHLHA: 1231
6.005.07d aśyā́ma dyumnám ajarājáraṃ te :AHHHLLLHLHA: 1231
6.019.09a ā́ te śúṣmo vr̥ṣabhá etu paścā́d :AHHHLLLHLHA: 1231
6.025.08b satrā́ te víśvam ánu vr̥trahátye :AHHHLLLHLHA: 1231
6.047.26d āsthātā́ te jayatu jétuvāni :AHHHLLLHLHA: 1231
7.001.08a ā́ yás te agna idhaté ánīkaṃ :AHHHLLLHLHA: 1231
7.018.21c ná te bhojásya sakhiyám mr̥ṣanta :AHHHLLLHLHA: 1231
7.021.07a devā́śś cit te asuríyāya pū́rve :AHHHLLLHLHA: 1231
7.022.09c asmé te santu sakhiyā́ śivā́ni :AHHHLLLHLHA: 1231

7.087.02d víśvā te dhā́ma varuṇa priyā́ṇi :AHHHLLLHLHA: 1231
7.088.06b tuvā́m ā́gāṃsi kr̥ṇávat sákhā te :AHHHLLLHLHA: 1231
7.099.01c ubhé te vidma rájasī pr̥thivyā́ :AHHHLLLHLHA: 1231
9.091.05d tā́ṃs te aśyāma purukr̥t purukṣo :AHHHLLLHLHA: 1231
9.097.31a prá te dhā́rā mádhumatīr asr̥gran :AHHHLLLHLHA: 1231
10.010.03c ní te máno mánasi dhāyi asmé :AHLHLLLHLHA: 1374
10.054.04a catvā́ri te asuríyāṇi nā́ma :AHLHLLLHLHA: 1374
10.083.06a ayáṃ te asmi úpa méhi arvā́ṅ :AHLHLLLHLHA: 1374
10.112.05d sá te mádāya sutá indra sómaḥ :AHLHLLLHLHA: 1374
1.073.10a etā́ te agna ucáthāni vedho :AHLHLLLHLHA: 1374
1.091.18a sáṃ te páyāṃsi sám u yantu vā́jāḥ :AHLHLLLHLHA: 1374
2.013.13b sám arthayasva bahú te vasavyàm :AHLHLLLHLHA: 1374
2.014.12b sám arthayasva bahú te vasavyàm :AHLHLLLHLHA: 1374
2.028.05b r̥dhyā́ma te varuṇa khā́m r̥tásya :AHLHLLLHLHA: 1374
2.033.07a kúva syá te rudara + mr̥̄ḷayā́kur + :AHLHLLLHLHA: 1374
3.014.05a vayáṃ te adyá rarimā́ hí kā́mam :AHLHLLLHLHA: 1374
3.032.11c ná te mahitvám ánu bhūd ádha dyaúr :AHLHLLLHLHA: 1374
4.002.19a ákarma te suápaso abhūma :AHLHLLLHLHA: 1374
4.002.20a etā́ te agna ucáthāni vedho :AHLHLLLHLHA: 1374
4.003.04d kadā́ bhavanti sakhiyā́ gr̥hé te :AHLHLLLHLHA: 1374
5.029.13a kathó nú te pári carāṇi vidvā́n :AHLHLLLHLHA: 1374
5.029.15b yā́ te śaviṣṭha náviyā ákarma :AHLHLLLHLHA: 1374
5.031.10c víśve te átra marútaḥ sákhāya :AHLHLLLHLHA: 1374
6.001.10a asmā́ u te máhi mahé vidhema :AHLHLLLHLHA: 1374
6.041.03d yásyéśiṣe pradívi yás te ánnam :AHLHLLLHLHA: 1374
6.048.18a dŕ̥ter ’va° te avr̥kám astu sakhyám :AHLHLLLHLHA: 1374
7.001.20c rātaú siyāma ubháyāsa ā́ te :AHLHLLLHLHA: 1374

7.001.25c rātaú siyāma ubháyāsa ā́ te :AHLHLLLHLHA: 1374

7.022.01b yáṃ te suṣā́va hariaśva ádriḥ :AHLHLLLHLHA: 1374

7.099.01b ná te mahitvám ánu aśnuvanti :AHLHLLLHLHA: 1374

7.100.05a prá tát te adyá śipiviṣṭa nā́ma :AHLHLLLHLHA: 1374

8.096.07c marúdbhir indra sakhiyáṃ te astu :AHLHLLLHLHA: 1374

9.087.08d sómasya te pavata indra dhā́rā :AHLHLLLHLHA: 1374

9.097.46a eṣá syá te pavata indra sómaś :AHLHLLLHLHA: 1374

10.010.12d ná te bhrā́tā subhage vaṣṭi etát :AHHHLLHHLHA: 1388

10.012.03c víśve devā́ ánu tát te yájur gur :AHHHLLHHLHA: 1388

10.028.05d yám árdhaṃ te maghavan kṣemiyā́ dhúḥ :AHHHLLHHLHA: 1388

10.029.02a prá te asyā́ uṣásaḥ prā́parasyā :AHHHLLHHLHA: 1388

10.069.09a devā́ś cit te amṛ́tā jātavedo :AHHHLLHHLHA: 1388

10.085.21d sá te bhāgó janúṣā tásya viddhi :AHHHLLHHLHA: 1388

10.112.04a yásya tyát te mahimā́nam mádeṣu :AHHHLLHHLHA: 1388

10.121.10c yátkāmās te juhumás tán no astu :AHHHLLHHLHA: 1388

10.142.03d mā́ te hetíṃ táviṣīṃ cukrudhāma :AHHHLLHHLHA: 1388

10.142.06a út te śúṣmā jihatām út te arcír :AHHHLLHHLHA: 1388

10.142.06b út te agne śaśamānásya vā́jāḥ :AHHHLLHHLHA: 1388

1.035.11a yé te pánthāḥ savitaḥ pūrviyā́so :AHHHLLHHLHA: 1388

1.059.05a diváś cit te bṛ́ható jātavedo :AHHHLLHHLHA: 1388

1.063.02b ā́ te vájraṃ jaritā́ bāhuvór dhāt :AHHHLLHHLHA: 1388

1.091.19b tā́ te víśvā paribhū́r astu yajñám :AHHHLLHHLHA: 1388

1.121.15d máṃhiṣṭhās te sadhamā́daḥ siyāma :AHHHLLHHLHA: 1388

1.147.02d vandā́rus te tanúvaṃ vande agne :AHHHLLHHLHA: 1388

1.162.08d sárvā tā́ te ápi devéṣu astu :AHHHLLHHLHA: 1388

1.162.09d sárvā tā́ te ápi devéṣu astu :AHHHLLHHLHA: 1388

1.162.14d sárvā tā́ te ápi devéṣu astu :AHHHLLHHLHA: 1388

1.162.17a yát te sādé máhasā śū́kr̥tasya :AHHHLLHHLHA: 1388
1.163.01d upastútyam máhi jātáṃ te arvan :AHHHLLHHLHA: 1388
1.163.06a ātmā́naṃ te mánasārā́d ajānām :AHHHLLHHLHA: 1388
1.165.03d vocés tán no harivo yát te asmé :AHHHLLHHLHA: 1388
1.189.01d bhū́yiṣṭhāṃ te námaüktiṃ vidhema :AHHHLLHHLHA: 1388
2.019.08a evā́ te gr̥tsamadā́ḥ śūra mánma :AHHHLLHHLHA: 1388
3.001.23d ágne sā́ te sumatír bhūtu asmé :AHHHLLHHLHA: 1388
3.005.11d ágne sā́ te sumatír bhūtu asmé :AHHHLLHHLHA: 1388
3.006.11d ágne sā́ te sumatír bhūtu asmé :AHHHLLHHLHA: 1388
3.007.11d ágne sā́ te sumatír bhūtu asmé :AHHHLLHHLHA: 1388
3.015.07d ágne sā́ te sumatír bhūtu asmé :AHHHLLHHLHA: 1388
3.018.04d marmr̥jmā́ te tanúvam bhū́ri kŕ̥tvaḥ :AHHHLLHHLHA: 1388
3.022.02a ágne yát te diví várcaḥ pr̥thivyā́ṃ :AHHHLLHHLHA: 1388
3.022.05d ágne sā́ te sumatír bhūtu asmé :AHHHLLHHLHA: 1388
3.023.05d ágne sā́ te sumatír bhūtu asmé :AHHHLLHHLHA: 1388
3.030.02a ná te dūré paramā́ cid rájāṃsi :AHHHLLHHLHA: 1388
3.030.05d yát saṃgr̥bhṇā́ maghavan kā́śír ít te :AHHHLLHHLHA: 1388
3.030.06b prá te vájraḥ pramr̥ṇánn etu śátrūn :AHHHLLHHLHA: 1388
3.032.02b píbā sómaṃ rarimā́ te mádāya :AHHHLLHHLHA: 1388
3.033.10a ā́ te kāro śr̥ṇavāmā vácāṃsi :AHHHLLHHLHA: 1388
3.035.01d índra svā́hā rarimā́ te mádāya :AHHHLLHHLHA: 1388
3.048.02c táṃ te mātā́ pári yóṣā jánitrī :AHHHLLHHLHA: 1388
4.003.02a ayáṃ yóniś cakr̥mā́ yáṃ vayáṃ te :AHHHLLHHLHA: 1388
4.006.10a yé ha tyé te sáhamānā ayā́sas :AHHHLLHHLHA: 1388
4.012.02a idhmáṃ yás te jabhárac chaśramāṇó :AHHHLLHHLHA: 1388
4.017.04a suvī́ras te janitā́ manyata dyaúr :AHHHLLHHLHA: 1388
4.018.12c kás te devó ádhi mārḍīká āsīd :AHHHLLHHLHA: 1388

5.003.09b putró yás te sahasaḥ sūna ūhé :AHHHLLHHLHA: 1388
5.012.04a ké te agne ripáve bándhanāsaḥ :AHHHLLHHLHA: 1388
5.012.05a sákhāyas te víṣuṇā agna eté :AHHHLLHHLHA: 1388
5.012.06a yás te agne námasā yajñám íṭṭa :AHHHLLHHLHA: 1388
5.031.05a vr̥ṣṇe yát te vr̥ṣaṇo arkám árcān :AHHHLLHHLHA: 1388
5.042.06c ná te pū́rve maghavan nā́parāso :AHHHLLHHLHA: 1388
6.013.04a yás te sūno sahaso gīrbhír ukthaír :AHHHLLHHLHA: 1388
6.021.04c kás te yajñó mánase śáṃ várāya :AHHHLLHHLHA: 1388
6.024.03b prá te mahnā́ ririce ródasīyoḥ :AHHHLLHHLHA: 1388
6.029.05a ná te ántaḥ śávaso dhāyi asyá :AHHHLLHHLHA: 1388
6.031.02d víśvaṃ dr̥ḷhám+ bhayate ájman ā́ te :AHHHLLHHLHA: 1388
6.041.02a yā́ te kākút súkr̥tā yā́ váriṣṭhā :AHHHLLHHLHA: 1388
6.041.02c táyā pāhi prá te adhvaryúr asthāt :AHHHLLHHLHA: 1388
7.003.06a susaṃdŕ̥k te suanīka prátīkaṃ :AHHHLLHHLHA: 1388
7.018.03c arvā́cī te pathíyā rāyá etu :AHHHLLHHLHA: 1388
7.019.07a mā́ te asyā́ṃ sahasāvan páriṣṭāv :AHHHLLHHLHA: 1388
7.021.06b ná te vivyaṅ mahimā́naṃ rájāṃsi :AHHHLLHHLHA: 1388
7.024.02a gr̥bhītáṃ te mána indra dvibárhāḥ :AHHHLLHHLHA: 1388
7.028.01b arvā́ñcas te hárayaḥ santu yuktā́ḥ :AHHHLLHHLHA: 1388
7.046.04b mā́ te bhūma prásitau hīḷitásya :AHHHLLHHLHA: 1388
7.079.02c sáṃ te gā́vas táma ā́ vartayanti :AHHHLLHHLHA: 1388
7.092.01b sahásraṃ te niyúto viśvavāra :AHHHLLHHLHA: 1388
10.006.07c táṃ te devā́so ánu kétam āyann :AHHHHLLHLHA: 1472
10.007.02c yadā́ te márto ánu bhógam ā́naḍ :AHHHHLLHLHA: 1472
10.017.12a yás te drapsá skándati yás te aṃśúr :AHHHHLLHLHA: 1472
10.027.02c amā́ te túmraṃ vr̥ṣabhám pacāni :AHHHHLLHLHA: 1472
10.047.01a jagr̥bhmā́ te dákṣiṇam indra hástaṃ :AHHHHLLHLHA: 1472

10.049.11c víśvā ít tấ te harivaḥ śacīvo :AHHHHLLHLHA: 1472
10.061.18a tádbandhuḥ sūrír diví te dhiyaṃdhấ :AHHHHLLHLHA: 1472
10.084.03c ugráṃ te pấjo nanú ấ rurudhre :AHHHHLLHLHA: 1472
10.087.19d mấ te hetyấ mukṣata daíviyāyāḥ :AHHHHLLHLHA: 1472
10.095.18c prajấ te devấn havíṣā yajāti :AHHHHLLHLHA: 1472
10.112.06a idáṃ te pấtraṃ sánavittam indra :AHHHHLLHLHA: 1472
10.142.04c yadấ te vấto anuvấti śocír :AHHHHLLHLHA: 1472
10.148.05c ấ yás te yóniṃ ghr̥távantam ásvār :AHHHHLLHLHA: 1472
10.160.05c ābhū́ṣantas te sumataú návāyāṃ :AHHHHLLHLHA: 1472
1.024.09a śatáṃ te rājan bhiṣájaḥ sahásram :AHHHHLLHLHA: 1472
1.031.18b śáktī vā yát te cakr̥mấ vidấ vā :AHHHHLLHLHA: 1472
1.162.19c yấ te gấtrāṇām r̥tuthấ kr̥ṇómi :AHHHHLLHLHA: 1472
1.162.21c hárī te yúñjā pŕ̥ṣatī abhūtām :AHHHHLLHLHA: 1472
1.163.05a imấ te vājinn avamárjanāni :AHHHHLLHLHA: 1472
1.163.05c átrā te bhadrấ raśanấ apaśyam :AHHHHLLHLHA: 1472
1.163.07c yadấ te márto ánu bhógam ấnaḷ :AHHHHLLHLHA: 1472
3.018.02d ví te tiṣṭhantām ajárā ayấsaḥ :AHHHHLLHLHA: 1472
3.020.02b tisrás te jihvấ r̥tajāta pūrvíḥ :AHHHHLLHLHA: 1472
3.032.03a yé te śúṣmaṃ yé táviṣīm ávardhann :AHHHHLLHLHA: 1472
3.035.07a stīrṇáṃ te barhíḥ sutá indra sómaḥ :AHHHHLLHLHA: 1472
3.053.06b kalyāṇ́ir jāyấ suráṇaṃ gr̥hé te :AHHHHLLHLHA: 1472
4.004.08b sáṃ te vāvấtā jaratām iyáṃ gír̥ḥ :AHHHHLLHLHA: 1472
4.006.06c ná yát te śocís támasā váranta :AHHHHLLHLHA: 1472
4.016.07b prấvat te vájram pr̥thiví sácetāḥ :AHHHHLLHLHA: 1472
4.016.10b bhúvat te kútsaḥ sakhiyé níkāmaḥ :AHHHHLLHLHA: 1472
4.021.09a bhadrấ te hástā súkr̥totá pāṇ́i :AHHHHLLHLHA: 1472
4.022.06a tấ tū́ te satyấ tuvinr̥mṇa víśvā :AHHHHLLHLHA: 1472

4.042.07a vidúṣ te víśvā bhúvanāni tásya :AHHHHLLHLHA: 1472
5.002.11a etáṃ te stómaṃ tuvijāta vípro :AHHHHLLHLHA: 1472
5.032.12c kíṃ te brahmā́ṇo gr̥hate sákhāyo :AHHHHLLHLHA: 1472
6.001.10d ā́ te bhadrā́yāṃ sumataú yatema :AHHHHLLHLHA: 1472
6.006.04a yé te śukrā́saḥ śúcayaḥ śucíṣmaḥ :AHHHHLLHLHA: 1472
6.017.09a ádha dyaúś cit te ápa sā́ nú vájrād :AHHHHLLHLHA: 1472
6.017.10a ádha tváṣṭā te mahá ugra vájraṃ :AHHHHLLHLHA: 1472
6.021.03c kadā́ te mártā amŕ̥tasya dhā́ma :AHHHHLLHLHA: 1472
6.025.07a ádha smā te carṣaṇáyo yád éjān :AHHHHLLHLHA: 1472
6.029.03a śriyé te pā́dā dúva ā́ mimikṣur :AHHHHLLHLHA: 1472
6.040.04d áthā te yajñás tanúve váyo dhāt :AHHHHLLHLHA: 1472
6.041.05b áraṃ te sómas tanúve bhavāti :AHHHHLLHLHA: 1472
6.058.01d bhadrā́ te pūṣann ihá rātír astu :AHHHHLLHLHA: 1472
7.001.22c mā́ te asmā́n durmatáyo bhr̥mā́c cid :AHHHHLLHLHA: 1472
7.021.09c vanvántu smā te ávasā samīké :AHHHHLLHLHA: 1472
7.022.05c sádā te nā́ma svayaśo vivakmi :AHHHHLLHLHA: 1472
7.037.03c ubhā́ te pūrṇā́ vásunā gábhastī :AHHHHLLHLHA: 1472
7.087.02a ātmā́ te vā́to rája ā́ navīnot :AHHHHLLHLHA: 1472
7.088.05d sahásradvāraṃ jagamā gr̥hā́ṃ te :AHHHHLLHLHA: 1472
7.100.06a kím ít te viṣṇo paricákṣiyam bhūt :AHHHHLLHLHA: 1472
8.100.02b hitás te bhāgáḥ sutó astu sómaḥ :AHHHHLLHLHA: 1472
10.010.02a ná te sákhā sakhiyáṃ vaṣṭi etát :AHLHLLHHLHA: 1670
10.016.04c yā́s te śivā́s tanúvo jātavedas :AHLHLLHHLHA: 1670
10.028.03c pácanti te vr̥ṣabhā́ṁ átsi téṣām :AHLHLLHHLHA: 1670
10.029.06a mā́tre nú te súmite indra pūrvī́ :AHLHLLHHLHA: 1670
10.029.06c várāya te ghr̥távantaḥ sutā́saḥ :AHLHLLHHLHA: 1670
10.044.02d várdhāma te papúṣo vr̥ṣṇiyāni :AHLHLLHHLHA: 1670

10.069.03a yát te mánur yád ánīkaṃ sumitráḥ :AHLHLLHHLHA: 1670
10.083.07c juhómi te dharúṇam mádhvo ágram :AHLHLLHHLHA: 1670
10.095.05c púrūravo ánu te kétam āyaṃ :AHLHLLHHLHA: 1670
10.096.13b átho idáṃ sávanaṃ kévalaṃ te :AHLHLLHHLHA: 1670
10.098.02d dádhāmi te dyumátīṃ vā́cam āsán :AHLHLLHHLHA: 1670
1.091.03a rā́jño nú te váruṇasya vratā́ni :AHLHLLHHLHA: 1670
1.164.49a yás te stánaḥ śaśayó yó mayobhū́r :AHLHLLHHLHA: 1670
1.189.04c mā́ te bhayáṃ jaritā́raṃ yaviṣṭha :AHLHLLHHLHA: 1670
2.009.03a vidhéma te paramé jánman agne :AHLHLLHHLHA: 1670
2.018.06c ayáṃ hí te śunáhotreṣu sóma :AHLHLLHHLHA: 1670
2.033.01a ā́ te pitar marutāṃ sumnám etu :AHLHLLHHLHA: 1670
3.014.02a áyāmi te námaüktiṃ juṣasva :AHLHLLHHLHA: 1670
3.032.01b mā́dhyaṃdinaṃ sávanaṃ cā́ru yát te :AHLHLLHHLHA: 1670
3.033.08d mā́ no ní kaḥ puruṣatrā́ námas te :AHLHLLHHLHA: 1670
3.034.02a makhásya te taviṣásya prá jūtím :AHLHLLHHLHA: 1670
3.035.05a mā́ te hárī vr̥ṣaṇā vītápr̥ṣṭhā :AHLHLLHHLHA: 1670
3.038.02c imā́ u te praṇíyo várdhamānā :AHLHLLHHLHA: 1670
3.046.01a yudhmásya te vr̥ṣabhásya svarā́ja :AHLHLLHHLHA: 1670
3.048.01c sādhóḥ piba pratikāmáṃ yáthā te :AHLHLLHHLHA: 1670
3.057.04c imā́ u te mánave bhū́rivārā :AHLHLLHHLHA: 1670
4.003.02d imā́ u te suapāka pratīcíḥ :AHLHLLHHLHA: 1670
4.004.08a árcāmi te sumatíṃ ghóṣi arvā́k :AHLHLLHHLHA: 1670
4.012.04a yác cid dhí te puruṣatrā́ yaviṣṭha :AHLHLLHHLHA: 1670
4.016.08b āvír bhuvat sarámā pūrviyáṃ te :AHLHLLHHLHA: 1670
4.016.21c ákāri te harivo bráhma návyaṃ :AHLHLLHHLHA: 1670
4.017.21c ákāri te harivo bráhma návyaṃ :AHLHLLHHLHA: 1670
4.019.11c ákāri te harivo bráhma návyaṃ :AHLHLLHHLHA: 1670

4.020.11c ákāri te harivo bráhma návyaṃ :AHLHLLHHLHA: 1670

4.021.10d bhakṣīyá te ávaso daíviyasya :AHLHLLHHLHA: 1670

4.021.11c ákāri te harivo bráhma návyaṃ :AHLHLLHHLHA: 1670

4.022.07a átrā́ha te harivas tā́ u devī́r :AHLHLLHHLHA: 1670

4.022.11c ákāri te harivo bráhma návyaṃ :AHLHLLHHLHA: 1670

4.023.11c ákāri te harivo bráhma návyaṃ :AHLHLLHHLHA: 1670

4.024.11c ákāri te harivo bráhma návyaṃ :AHLHLLHHLHA: 1670

4.035.07b mā́dhyaṃdinaṃ sávanaṃ kévalaṃ te :AHLHLLHHLHA: 1670

5.015.05a vā́jo nú te śávasas pātu ántam :AHLHLLHHLHA: 1670

5.031.07a tád ín nú te káraṇaṃ dasma vipra :AHLHLLHHLHA: 1670

5.036.02a ā́ te hánū harivaḥ śūra śípre :AHLHLLHHLHA: 1670

5.043.05a ásāvi te jujuṣāṇā́ya sómaḥ :AHLHLLHHLHA: 1670

6.018.04a sád íd dhí te tuvijātásya mánye :AHLHLLHHLHA: 1670

6.019.07a yás te mádaḥ pr̥tanāṣā́ḷ ámr̥dhra :AHLHLLHHLHA: 1670

6.020.10a sanéma te ávasā návya indra :AHLHLLHHLHA: 1670

6.044.20a ā́ te vr̥ṣan vr̥ṣaṇo dróṇam asthur :AHLHLLHHLHA: 1670

6.064.04a sugótá te supáthā párvateṣu :AHLHLLHHLHA: 1670

7.003.02d ádha sma te vrájanaṃ kr̥ṣṇám asti :AHLHLLHHLHA: 1670

7.003.03a úd yásya te návajātasya vr̥ṣṇo :AHLHLLHHLHA: 1670

7.018.03d siyā́ma te sumatā́v indra śárman :AHLHLLHHLHA: 1670

7.022.02a yás te mádo yújiyaś cā́rur ásti :AHLHLLHHLHA: 1670

7.022.05a ná te gíro ápi mr̥ṣye turásya :AHLHLLHHLHA: 1670

7.024.06b prá te mahī́ṃ sumatíṃ vevidāma :AHLHLLHHLHA: 1670

7.025.06b prá te mahī́ṃ sumatíṃ vevidāma :AHLHLLHHLHA: 1670

8.048.06c áthā hí te máda ā́ soma mánye :AHLHLLHHLHA: 1670

8.048.09c yát te vayám praminā́ma vratā́ni :AHLHLLHHLHA: 1670

8.100.02a dádhāmi te mádhuno bhakṣám ágre :AHLHLLHHLHA: 1670

9.087.04a eṣá syá te mádhumāṁ indra sómo :AHLHLLHHLHA: 1670
9.088.08a rā́jño nú te váruṇasya vratā́ni :AHLHLLHHLHA: 1670
9.096.24a ā́ te rúcaḥ pávamānasya soma :AHLHLLHHLHA: 1670
10.014.11a yaú te śuvā́nau yama rakṣitā́rau :AHLHHLLHLHA: 2313
10.020.10a evā́ te agne vimadó manīṣā́m :AHLHHLLHLHA: 2313
10.029.05c gíraś ca yé te tuvijāta pūrvír :AHLHHLLHLHA: 2313
10.045.02a vidmā́ te agne trēdhā́ trayā́ṇi :AHLHHLLHLHA: 2313
10.051.01c víśvā apaśyad bahudhā́ te agne :AHLHHLLHLHA: 2313
10.061.22d anehásas te harivo abhíṣṭau :AHLHHLLHLHA: 2313
10.091.15a áhāvi agne havír āsíye te :AHLHHLLHLHA: 2313
10.112.05c sá te púraṃdhiṃ táviṣīm iyarti :AHLHHLLHLHA: 2313
10.120.02d sáṃ te navanta prábhr̥tā mádeṣu :AHLHHLLHLHA: 2313
1.073.10c śakéma rāyáḥ sudhúro yámaṃ te :AHLHHLLHLHA: 2313
1.079.02a ā́ te suparṇā́ aminantaṁ évaiḥ :AHLHHLLHLHA: 2313
1.123.11d ná tát te anyā́ uṣáso naśanta :AHLHHLLHLHA: 2313
1.124.12a út te váyaś cid vasatér apaptan :AHLHHLLHLHA: 2313
1.147.01a kathā́ te agne śucáyanta āyór :AHLHHLLHLHA: 2313
1.150.03c prá-prét te agne vanúṣaḥ siyāma :AHLHHLLHLHA: 2313
1.165.09a ánuttam ā́ te maghavan nákir nú :AHLHHLLHLHA: 2313
1.169.04c stútaś ca yā́s te cakánanta vāyó :AHLHHLLHLHA: 2313
1.173.08a evā́ hí te śáṃ sávanā samudrá :AHLHHLLHLHA: 2313
1.178.01d víśvā te aśyām pári ā́pa āyóḥ :AHLHHLLHLHA: 2313
2.028.08a námaḥ purā́ te varuṇotá nūnám :AHLHHLLHLHA: 2313
2.033.11d anyáṃ te asmán ní vapantu sénāḥ :AHLHHLLHLHA: 2313
3.001.20a etā́ te agne jánimā sánāni :AHLHHLLHLHA: 2313
3.006.05a vratā́ te agne maható mahā́ni :AHLHHLLHLHA: 2313
3.006.07a diváś cid ā́ te rucayanta rokā́ :AHLHHLLHLHA: 2313

3.019.03d bhūyā́ma te suṣṭutáyaś ca vásvaḥ :AHLHHLLHLHA: 2313
3.035.09b yé tvā́m ávardhann ábhavan gaṇás te :AHLHHLLHLHA: 2313
3.050.02a ā́ te saparyū́ javáse yunajmi :AHLHHLLHLHA: 2313
3.052.07a pūṣaṇváte te cakr̥mā karambhā́m :AHLHHLLHLHA: 2313
4.002.07a yás te bhárād ánniyate cid ánnaṃ :AHLHHLLHLHA: 2313
4.004.15a ayā́ te agne samídhā vidhema :AHLHHLLHLHA: 2313
4.006.06a bhadrā́ te agne suanīka saṃdŕ̥g :AHLHHLLHLHA: 2313
4.010.04d prá te divó ná stanayanti śúṣmāḥ :AHLHHLLHLHA: 2313
4.011.01a bhadrā́ṃ te agne sahasinn ánīkam :AHLHHLLHLHA: 2313
4.012.05c mā́ te sákhāyaḥ sádam íd riṣāma :AHLHHLLHLHA: 2313
4.017.18c vayā́ṃ hí ā́ te cakr̥mā́ sabā́dha :AHLHHLLHLHA: 2313
4.021.09c kā́ te níṣattiḥ kím u nó mamatsi :AHLHHLLHLHA: 2313
5.001.10d br̥hát te agne máhi śárma bhadrám :AHLHHLLHLHA: 2313
5.027.03a evā́ te agne sumatíṃ cakānó :AHLHHLLHLHA: 2313
6.001.13b vásūni rājan vasútā te aśyām :AHLHHLLHLHA: 2313
6.018.13a prá tát te adyā́ kāraṇaṃ kr̥tám bhūt :AHLHHLLHLHA: 2313
6.021.05a idā́ hí te véviṣataḥ purājā́ḥ :AHLHHLLHLHA: 2313
6.022.04a tán no ví voco yádi te purā́ cij :AHLHHLLHLHA: 2313
6.024.04a śácīvatas te puruśāka śā́kā :AHLHHLLHLHA: 2313
6.027.04c vájrasya yát te níhatasya śúṣmāt :AHLHHLLHLHA: 2313
6.058.01a śukrā́ṃ te anyád yajatā́ṃ te anyád :AHLHHLLHLHA: 2313
6.064.06a út te váyaś cid vasatér apaptan :AHLHHLLHLHA: 2313
7.003.06c divó ná te tanyatúr eti śúṣmaś :AHLHHLLHLHA: 2313
7.005.06b krátuṃ hí te mitramaho juṣánta :AHLHHLLHLHA: 2313
7.014.02a vayā́ṃ te agne samídhā vidhema :AHLHHLLHLHA: 2313
7.019.08a priyā́sa ít te maghavann abhíṣṭau :AHLHHLLHLHA: 2313
7.019.09c yé te hávebhir ví paṇí̎r ádāśann :AHLHHLLHLHA: 2313

7.020.08c vayáṃ te asyā́ṃ sumataú cániṣṭhāḥ :AHLHHLLHLHA: 2313

7.021.06d ná śátrur ántaṃ vividad yudhā́ te :AHLHHLLHLHA: 2313

7.042.02a sugás te agne sánavitto ádhvā :AHLHHLLHLHA: 2313

9.097.06b índram mádo gachatu te bhárāya :AHLHHLLHLHA: 2313

12 syllable lines

10.010.13b naívá te máno hŕ̥dayaṃ cāvidāma :ALHLHLLHHLHA: 1

2.001.07d tuvám pãyúr dáme yás te ávidhat :AHLLHLHHLLLA: 2

8.060.14a nahí te agne vr̥ṣabha pratidhŕ̥ṣe :ALLHHLLHLLLA: 2

6.075.18c urór várīyo váruṇas te kr̥ṇotu :AHLHHLLHHLHA: 3

10.115.04a ví yásya te jrayasānásya ajara :AHLHLLHHLLLA: 4

1.055.07a dānā́ya mánaḥ somapāvan astu te :AHLLHHLHLHLA: 8

4.058.11a dhā́man te víśvam bhúvanam ádhi śritám :AHHHHLLLLHLA: 9

1.127.09f ádha smā te pári caranti ajara :AHHHLLLHLLLA: 11

2.001.09c tuvám putró bhavasi yás te ávidhat :AHHHLLLHLLLA: 11

1.083.03c ásaṃyatto vraté te kṣeti púṣyati :AHHHLHHHLHLA: 21

1.135.09a imé yé te sú vāyo bāhúojaso :AHHHLHHHLHLA: 21

3.021.05c ścótanti te vaso stokā́ ádhi tvací :AHLHLHHHLHLA: 22

2.002.12a ubháyāso jātavedaḥ siyāma te :ALHHHLHHLHLA: 69

2.016.03b ná samudraíḥ párvatair indra te ráthaḥ :ALHHHLHHLHLA: 69

6.048.16b śáṃsiṣaṃ nú te apikarṇá āghr̥ṇe :ALHLHLLHLHLA: 79

1.114.09d áthā vayám áva ít te vr̥ṇīmahe :AHLLLLHHLHLA: 85

1.036.03c mahás te sató ví caranti arcáyo :AHHLHLLHLHLA: 104

1.102.01a imā́ṃ te dhíyam prá bhare mahó mahī́m :AHHLHLLHLHLA: 104

2.041.18c yā́ te mánma gr̥tsamadā́ r̥tāvari :AHHLHLLHLHLA: 104

8.099.06c víśvās te spr̥dhaḥ śnathayanta† manyáve :AHHLHLLLHLHLA: 104

8.101.11c mahás te sató mahimā́ panasyate :AHHLHLLLHLHLA: 104

9.086.05b prabhós te satáḥ pári yanti ketávaḥ :AHHLHLLLHLHLA: 104

1.057.02a ádha te víśvam ánu hāsad iṣṭáya :ALHHLLLLHLHLA: 113

1.135.08e ná te vāya úpa dasyanti dhenávo :AHHLLLHHLHLA: 118

2.016.03c ná te vájram ánu aśnoti káś caná :AHHLLLHHLHLA: 118

7.046.03a yā́ te didyúd ávasr̥ṣṭā divás pári :AHHLLLHHLHLA: 118

8.051.07c úpopén nú maghavan bhū́ya ín nú te :AHHLLLHHLHLA: 118

9.074.09a adbhíḥ soma papr̥cānásya te ráso :AHHLLLHHLHLA: 118

10.037.09a yásya te víśvā bhúvanāni ketúnā :ALHHHLLHLHLA: 139

1.054.01b nahí teántaḥ śávasaḥ parīṇáśe :ALHHHLLHLHLA: 139

1.114.09a úpa te stómān paśupā́ ivā́karaṃ :ALHHHLLHLHLA: 139

1.138.03a yásya te pūṣan sakhiyé vipanyávaḥ :ALHHHLLHLHLA: 139

8.099.06a ánu te śúṣmaṃ turáyantam īyatuḥ :ALHHHLLHLHLA: 139

9.079.04a diví te nā́bhā paramó yá ādadé :ALHHHLLHLHLA: 139

9.108.02a yásya te pītvā́ vr̥ṣabhó vr̥ṣāyáte :ALHHHLLHLHLA: 139

1.057.05c ánu te dyaúr br̥hatī́ vīríyam mama :ALHHLLHHLHLA: 161

1.094.10b vā́tajūtā vr̥ṣabhásyeva te rávaḥ :ALHHLLHHLHLA: 161

8.050.08a rathirā́so hárayo yé te asrídha :ALHHLLHHLHLA: 161

1.084.20a mā́ te rā́dhāṃsi mā́ ta ūtáyo vaso :AHHHLHLHLHLA: 183

1.106.05b śáṃ yór yát te mánurhitaṃ tád īmahe :AHHHLHLHLHLA: 183

7.081.04c tásyās te ratnabhā́ja īmahe vayáṃ :AHHHLHLHLHLA: 183

8.012.25c ā́d ít te haryatā́ hárī vavakṣatuḥ :AHHHLHLHLHLA: 183

8.012.26c ā́d ít te haryatā́ hárī vavakṣatuḥ :AHHHLHLHLHLA: 183

8.012.27c ā́d ít te haryatā́ hárī vavakṣatuḥ :AHHHLHLHLHLA: 183

1.094.11c sugáṃ tát te tāvakébhyo ráthebhiyo :AHHHHLHHLHLA: 209

1.094.14a tát te bhadráṃ yát sámiddhaḥ suvé dáme :AHHHHLHHLHLA: 209

1.130.06a imā́m te vā́cam vasūyánta āyávo :AHHHHLHHLHLA: 209

1.132.02f asmatrā́ te sadhríak santu rātáyo :AHHHHLHHLHLA: 209

1.132.04a nú itthā́ te pūrváthā ca pravā́ciyam :AHHHHLHHLHLA: 209

1.134.06f víśvāít te dhenávo duhra āśíram :AHHHHLHHLHLA: 209

3.021.05a ójiṣṭham te madhyató méda údbhr̥tam :AHHHHLHHLHLA: 209

5.008.05d tvíṣiḥ sā́ te titviṣāṇásya nā́dhr̥ṣe :AHHHHLHHLHLA: 209

10.050.06c várāya te pā́taram + dhármaṇe tánā :AHLHHLHHLHLA: 211

10.093.08b ā́ te hárī jūjuvānásya vājínā :AHLHHLHHLHLA: 211

1.082.06a yunájmi te bráhmaṇā keśínā hárī :AHLHHLHHLHLA: 211

1.132.03a tát tú práyaḥ pratnáthā te śuśukvanā́m :AHLHHLHHLHLA: 211

1.140.11b priyā́d u cin mánmanaḥ préyo astu te :AHLHHLHHLHLA: 211

2.037.03a médyantu te váhnayo yébhir íyase :AHLHHLHHLHLA: 211

8.003.18a imé hí te kārávo vāvaśúr dhiyā́ :AHLHHLHHLHLA: 211

1.131.05a ā́d ít te asyá vīríyasya carkiran :AHLHLHLHLHLA: 224

8.013.11c ā́ yāhi yajñám āśúbhiḥ śám íd dhí te :AHLHLHLHLHLA: 224

8.013.26c r̥tā́d iyarmi te dhíyam manoyújam :AHLHLHLHLHLA: 224

9.085.01c mā́ te rásasya matsata dvayāvíno :AHLHLHLHLHLA: 224

10.016.03c apó vā gacha yádi tátra te hitám :AHHHLLLHLHLA: 468

10.018.13a út te stabhnāmi pr̥thivī́m tuvát pári :AHHHLLLHLHLA: 468

10.081.05a yā́ te dhā́māni paramā́ṇi yā́vamā́ :AHHHLLLHLHLA: 468

10.084.05c priyā́m te nā́ma sahure gr̥ṇīmasi :AHHHLLLHLHLA: 468

1.102.03b jaítram yā́m te anumádāma saṃgamé :AHHHLLLHLHLA: 468

1.114.02b kṣayádvīrāya námasā vidhema te :AHHHLLLHLHLA: 468

2.016.06a vr̥ṣā te vájra utá te vr̥ṣā rátho :AHHHLLLHLHLA: 468

2.016.07a prá te nā́vam ná sámane vacasyúvam :AHHHLLLHLHLA: 468

2.023.02a devā́ś cit te asuriya prácetaso :AHHHLLLHLHLA: 468

2.032.05a yā́s te rāke sumatáyaḥ supéśaso :AHHHLLLHLHLA: 468

5.011.03d dhūmás te ketúr abhavad diví śritáḥ :AHHHLLLHLHLA: 468
5.044.02d paró māyā́bhir ṛtá āsa nā́ma te :AHHHLLLHLHLA: 468
6.015.09c yát te dhītíṃ sumatím āvṛ̥ṇīmáhe :AHHHLLLHLHLA: 468
6.061.01d tā́ te dātrā́ṇi taviṣā́ sarasvati :AHHHLLLHLHLA: 468
7.046.03c sahásraṃ te suapivāta bheṣajā́ :AHHHLLLHLHLA: 468
8.001.03c asmā́kam bráhma idám indra bhūtu te :AHHHLLLHLHLA: 468
8.021.16a mā́ te godatra nír arāma rā́dhasa :AHHHLLLHLHLA: 468
9.082.04b pájrāyā garbha śṛ̥ṇuhí brávīmi te :AHHHLLLHLHLA: 468
9.105.04c śúciṃ te várṇam ádhi góṣu dīdharam :AHHHLLLHLHLA: 468
10.018.13c etā́ṃ sthū́ṇām pitáro dhārayantu te :AHHHLLHHLHLA: 523
10.050.03c ké te vā́jāya asuryàya hinvire :AHHHLLHHLHLA: 523
10.083.01a yás te manyo ávidhad vajra sāyaka :AHHHLLHHLHLA: 523
10.096.01b prá te vanve vanúṣo haryatám mádam :AHHHLLHHLHLA: 523
1.051.08d víśvét tā́ te sadhamā́deṣu cākana :AHHHLLHHLHLA: 523
1.051.13d víśvét tā́ te sávaneṣu pravā́ciyā :AHHHLLHHLHLA: 523
1.052.07c tváṣṭā cit te yújiyaṃ vāvṛ̥dhe śávas :AHHHLLHHLHLA: 523
1.094.04a bhárāmedhmáṃ kṛ̥ṇávāmā havī́ṃṣi te :AHHHLLHHLHLA: 523
1.094.11b drapsā́ yát te yavasā́do ví ásthiran :AHHHLLHHLHLA: 523
1.140.11c yát te śukráṃ tanúvo rócate śúci :AHHHLLHHLHLA: 523
5.081.05d śyāvā́śvas te savita stómam ānaśe :AHHHLLHHLHLA: 523
6.047.29b purutrā́ te manutāṃ víṣṭhitaṃ jágat :AHHHLLHHLHLA: 523
7.032.14c śraddhā́ ít te maghavan pā́riye diví :AHHHLLHHLHLA: 523
7.096.02a ubhé yát te mahinā́ śubhre ándhasī :AHHHLLHHLHLA: 523
8.019.16c vayáṃ tát te śávasā gātuvíttamā :AHHHLLHHLHLA: 523
8.033.15c asmā́kaṃ te sávanā santu śáṃtamā :AHHHLLHHLHLA: 523
8.077.11a tuvikṣáṃ te súkṛ̥taṃ sūmáyaṃ dhánuḥ :AHHHLLHHLHLA: 523
8.100.06a víśvét tā́ te sávaneṣu pravā́ciyā :AHHHLLHHLHLA: 523

9.079.04b pr̥thivyā́s te ruruhuḥ sā́navi kṣípaḥ :AHHHLLHHLHLA: 523

9.083.01a pavítraṃ te vítatam brahmaṇas pate :AHHHLLHHLHLA: 523

9.086.47a prá te dhā́rā áti áṇvāni meṣíyaḥ :AHHHLLHHLHLA: 523

10.017.12d táṃ te juhomi mánasā vāṣaṭkr̥tam :AHLHLLLHLHLA: 624

10.044.09a imám bibharmi súkr̥taṃ te aṅkuśáṃ :AHLHLLLHLHLA: 624

10.091.04c ā́ te cikitra uṣásām ivétayo :AHLHLLLHLHLA: 624

10.113.03c víśve te átra marútaḥ sahá tmánā :AHLHLLLHLHLA: 624

1.055.08d tanū́ṣu te krátava indra bhū́rayaḥ :AHLHLLLHLHLA: 624

2.001.15c pr̥kṣó yád átra mahinā́ ví te bhúvad :AHLHLLLHLHLA: 624

2.016.08c sakŕ̥t sú te sumatíbhiḥ śatakrato :AHLHLLLHLHLA: 624

5.044.08b r̥ṣisvaráṃ carati yā́su nā́ma te :AHLHLLLHLHLA: 624

8.021.07b ūtí́ abhūma nahí nū́ te adrivaḥ :AHLHLLLHLHLA: 624

9.086.37c tā́s te kṣarantu mádhumad ghr̥tám páyas :AHLHLLLHLHLA: 624

10.043.05c ná tát te anyó ánu vīríyaṃ śakan :AHHHHLLHLHLA: 650

10.050.07a yé te vipra brahmakŕ̥taḥ suté sácā :AHHHHLLHLHLA: 650

10.113.08a víśve devā́so ádha vr̥ṣṇiyāni te :AHHHHLLHLHLA: 650

1.156.01c ádhā te viṣṇo vidúṣā cid árdhiya :AHHHHLLHLHLA: 650

1.156.03d mahás te viṣṇo sumatím bhajāmahe :AHHHHLLHLHLA: 650

5.056.02c yé te nédiṣṭhaṃ hávanāni āgáman :AHHHHLLHLHLA: 650

8.001.09c áśvāso yé te vr̥ṣaṇo raghudrúvas :AHHHHLLHLHLA: 650

8.004.07c mahát te vr̥ṣṇo abhicákṣiyaṃ kr̥tám :AHHHHLLHLHLA: 650

8.012.28c ā́d ít te víśvā bhúvanāni yemire :AHHHHLLHLHLA: 650

8.012.29c ā́d ít te víśvā bhúvanāni yemire :AHHHHLLHLHLA: 650

8.012.30c ā́d ít te víśvā bhúvanāni yemire :AHHHHLLHLHLA: 650

8.061.18c ubhā́ te bāhū́ vr̥ṣaṇā śatakrato :AHHHHLLHLHLA: 650

8.077.11c ubhā́ te bāhū́ ráṇiyā súsaṃskr̥ta :AHHHHLLHLHLA: 650

9.079.05d āvís te śúṣmo bhavatu priyó mádaḥ :AHHHHLLHLHLA: 650

10.023.07c vidmā́ hí te prámatiṃ deva jāmivád :AHLHLLHHLHLA: 662
10.038.02c siyā́ma te jáyataḥ śakra medíno :AHLHLLHHLHLA: 662
10.044.09c asmín sú te sávane astu okíyaṃ :AHLHLLHHLHLA: 662
10.075.02a prá te 'radad váruṇo yā́tave pathā́ḥ :AHLHLLHHLHLA: 662
10.085.27a ihá priyám prajáyā te sám ṛ́dhyatām :AHLHLLHHLHLA: 662
10.096.01a prá te mahé vidáthe śaṃsiṣaṃ hárī :AHLHLLHHLHLA: 662
1.052.11c átrā́ha te maghavan víśrutaṃ sáho :AHLHLLHHLHLA: 662
1.057.05d iyáṃ ca te pṛ́thivī́ nema ójase :AHLHLLHHLHLA: 662
1.102.07a út te śatā́n maghavann úc ca bhū́yasa :AHLHLLHHLHLA: 662
1.114.03a aśyā́ma te sumatíṃ devayajyáyā :AHLHLLHHLHLA: 662
1.114.09c bhadrā́ hí te sumatír mṛ́ḷayáttamā + :AHLHLLHHLHLA: 662
2.023.04d bṛ́haspate máhi tát te mahitvanám :AHLHLLHHLHLA: 662
2.036.05a eṣá syá te tanúvo nṛ́mṇavárdhanaḥ :AHLHLLHHLHLA: 662
7.081.05c yát te divo duhitar martabhójanaṃ :AHLHLLHHLHLA: 662
8.001.14c sakṛ́t sú te mahatā́ śūra rā́dhasā :AHLHLLHHLHLA: 662
8.003.02a bhūyā́ma te sumataú vājíno vayám :AHLHLLHHLHLA: 662
8.046.25c vayáṃ hí te cakṛmā́ bhū́ri dāváne :AHLHLLHHLHLA: 662
8.053.08a aháṃ hí te harivo bráhma vājayúr :AHLHLLHHLHLA: 662
9.078.02c pūrvī́r hí te srutáyaḥ sánti yā́tave :AHLHLLHHLHLA: 662
9.086.13d śúcir dhiyā́ pavate sóma indra te :AHLHLLHHLHLA: 662
10.037.03a ná te ádevaḥ pradívo ní vāsate :AHLHHLLHLHLA: 1190
10.043.02d asmín sú sóme avapā́nam astu te :AHLHHLLHLHLA: 1190
10.091.07c ā́ te yatante rathíyo yáthā pṛ́thak :AHLHHLLHLHLA: 1190
10.091.09c yád devayánto dádhati práyāṃsi te :AHLHHLLHLHLA: 1190
10.138.06a etā́ tiyā́ te śrútiyāni kévalā :AHLHHLLHLHLA: 1190
10.142.02a pravát te agne jánimā pitūyatáḥ :AHLHHLLHLHLA: 1190
10.147.01a śrát te dadhāmi prathamā́ya manyáve :AHLHHLLHLHLA: 1190

1.114.03d ariṣṭavīrā juhavāma te havíḥ :AHLHHLLHLHLA: 1190

1.135.01f prá te sutā́so mádhumanto asthiran :AHLHHLLHLHLA: 1190

1.135.09b antár nadī́ te patáyanti ukṣáṇo :AHLHHLLHLHLA: 1190

3.009.02c ná tát te agne pramr̥ṣe nivártanaṃ :AHLHHLLHLHLA: 1190

4.054.05d evaívá tasthuḥ savitaḥ savā́ya te :AHLHHLLHLHLA: 1190

7.032.02a imé hí te brahmakr̥taḥ suté sácā :AHLHHLLHLHLA: 1190

7.032.06c yás te gabhīrā́ sávanāni vr̥trahan :AHLHHLLHLHLA: 1190

8.004.12c idáṃ te ánnaṃ yújiyaṃ sámukṣitaṃ :AHLHHLLHLHLA: 1190

8.049.05c yáṃ te svadhāvan svadáyanti dhenáva :AHLHHLLHLHLA: 1190

8.050.05c yáṃ te svadāvan suádanti gūrtáyaḥ :AHLHHLLHLHLA: 1190

8.053.04c śíṣṭeṣu cit te madirā́so aṃśávo :AHLHHLLHLHLA: 1190

8.088.06a nákiḥ páriṣṭir maghavan maghásya te :AHLHHLLHLHLA: 1190

9.075.05c yé te mádā āhanáso víhāyasas :AHLHHLLHLHLA: 1190

9.086.02a prá te mádāso madirā́sa āśávo :AHLHHLLHLHLA: 1190

C.4 The position of *áchā* with regard to its object

C.4.1 áchā X

8 syllable lines

1.006.06b áchā vidádvasuṃ gíraḥ :AHLHLHLA: 3316

8.005.33c áchā suadhvaráṃ jánam :AHLHLHLA: 3316

9.064.16b áchā samudrám āśávaḥ :AHLHLHLA: 3316

9.066.12a áchā samudrám índavo :AHLHLHLA: 3316

8.023.10a áchā no áṅgirastamaṃ :AHHHLHLA: 4930

8.071.10a áchā naḥ śīráśociṣaṃ :AHHHLHLA: 4930

9.057.01c áchā vā́jaṃ sahasríṇam :AHHHLHLA: 4930

9.066.11a áchā kóśam madhuścútam :AHHHLHLA: 4930

9.107.12d áchā kóśam madhuścútam :AHHHLHLA: 4930

9.108.02d áchā vā́jaṃ ná étaśaḥ :AHHHLHLA: 4930

11 syllable lines

6.030.04d ávāsṛjo apó áchā samudrám :AHLLLLHHLHA: 223

7.036.09b áchā víṣṇuṃ niṣiktapā́m ávobhiḥ :AHHHLHLHLHA: 470

3.022.03b áchā devā́m̐ ūciṣe dhíṣṇiyā yé :AHHHHLHHLHA: 483

3.057.03c áchā putráṃ dhenávo vāvaśānā́ :AHHHHLHHLHA: 483

4.001.10b áchā rátnaṃ devábhaktaṃ yád asya :AHHHHLHHLHA: 483

7.057.07b áchā sūrī́n sarvátātā jigāta :AHHHHLHHLHA: 483

3.039.01b áchā pátiṃ stómataṣṭā jigāti :AHLHHLHHLHA: 683

7.067.01d áchā sūnúr ná pitárā vivakmi :AHHHLLLHLHA: 1231

1.163.13b árvā́m̐ áchā pitáram mātáraṃ ca :AHHHLLHHLHA: 1388

4.044.05a ā́ no yātaṃ divó áchā pr̥thivyā́ :AHHHLLHHLHA: 1388

9.087.01d áchā barhī́ raśanā́bhir nayanti :AHHHLLHHLHA: 1388

3.033.03a áchā síndhum mātŕ̥tamām ayāsaṃ :AHHHHLLHLHA: 1472

3.061.05a áchā vo devī́m uṣásaṃ vibhātī́m :AHHHHLLHLHA: 1472

3.031.06d áchā rávam prathamā́ jānatī́ gāt :AHLHLLHHLHA: 1670

4.016.09a áchā kavíṃ nr̥maṇo gā abhíṣṭau :AHLHLLHHLHA: 1670

7.003.03c áchā diyā́m aruṣó dhūmá eti :AHLHLLHHLHA: 1670

3.033.02b áchā samudráṃ rathíyeva yāthaḥ :AHLHHLLHLHA: 2313

12 syllable lines

1.040.03c áchā vīráṃ náriyam paṅktírādhasaṃ :AHHHLLHHLHLA: 523
8.060.02a áchā hí tvā sahasaḥ sūno aṅgiraḥ :AHHHLLHHLHLA: 523
1.130.05b áchā samudrám asr̥jo ráthāṁ̐ iva :AHLHLLLHLHLA: 624
2.036.06c áchā rā́jānā náma eti āvŕ̥tam :AHHHHLLHLHLA: 650
8.071.10c áchā yajñā́so námasā purūvásum :AHHHHLLHLHLA: 650
9.081.02a áchā hí sómaḥ kaláśāṁ̐ ásiṣyadad :AHLHHLLHLHLA: 1190

C.4.2 X áchā

8 syllable lines

8.002.28d nā́yám áchā sadhamā́dam :ALHHLLHA: 21
1.002.02b tuvā́m áchā jaritā́raḥ :AHHHLLHA: 55
8.016.10a praṇetā́raṃ vásyo áchā :AHHHHLHA: 85
1.105.14b devā́ṁ̐ áchā vidúṣṭaraḥ :AHHHLHLA: 4930
1.132.05g devā́ṁ̐ áchā ná dhītáyaḥ :AHHHLHLA: 4930
1.139.01g devā́ṁ̐ áchā ná dhītáyaḥ :AHHHLHLA: 4930
5.052.15b devā́ṁ̐ áchā ná vakṣáṇā :AHHHLHLA: 4930
8.103.02b devā́ṁ̐ áchā ná majmánā :AHHHLHLA: 4930
9.001.05a tuvā́m áchā carāmasi :AHHHLHLA: 4930

11 syllable lines

4.024.08c ácikradad vr̥ṣaṇam pátnī áchā :AHLHLLHHHHA: 12

1.101.08c áta ā́ yāhi adhvaráṃ no áchā :ALHHLHLHLHA: 84

3.055.03b śámi áchā dīdiye pūrviyā́ṇi :ALHHHLHHLHA: 161

7.023.04c yāhí vāyúr ná niyúto no áchā :ALHHLLLHLHA: 287

5.001.04a agním áchā devayatā́m mánāṃsi :ALHHHLLHLHA: 360

10.030.05c tā́ adhvaryo apó áchā párehi :AHHLLLHHLHA: 379

9.097.06c devaír yāhi saráthaṃ rā́dho áchā :AHHLLLHHLHA: 379

7.092.03a prá yā́bhir yā́si dāśuvā́ṃsam áchā :AHHHLHLHLHA: 470

5.042.15a eṣá stómo mā́rutaṃ śárdho áchā :AHHHHLHHLHA: 483

3.022.03a ágne divó árṇam áchā jigāsi :AHLHHLHHLHA: 683

5.045.09c raghúḥ śyenáḥ patayad ándho áchā :AHHHLLLHLHA: 1231

10.006.04b devā́m̐ áchā raghupátvā jigāti :AHHHLLHHLHA: 1388

10.030.01b apó áchā mánaso ná práyukti :AHHHLLHHLHA: 1388

3.054.05b devā́m̐ áchā pathíyā ká sám eti :AHHHLLHHLHA: 1388

7.009.05b devā́m̐ áchā brahmakr̥tā gaṇéna :AHHHHLLHLHA: 1472

6.006.01a prá návyasā sáhasaḥ sūnúm áchā :AHLHLLHHLHA: 1670

2.019.02c prá yád váyo ná svásarāṇi áchā :AHLHHLLHLHA: 2313

4.038.05d śrávaś ca áchā paśumác ca yūthám :AHLHHLLHLHA: 2313

5.041.14b apáś ca áchā súmakhāya vocam :AHLHHLLHLHA: 2313

6.032.04a sá nīvíyābhir jaritā́ram áchā :AHLHHLLHLHA: 2313

7.024.03d āṅgūṣám áchā tavásam mádāya :AHLHHLLHLHA: 2313

12 syllable lines

4.001.02b devā́m̐ áchā sumatí́ yajñávanasaṃ :AHHHLLHHLLLA: 5

8.033.13c nā́yám áchā maghávā śr̥ṇávad gíro :ALHHLLHLLHLA: 6

1.130.01b nā́yám áchā vidáthānīva sátpatir :ALHHLLHHLHLA: 161

8.022.04c asmā́m̐ áchā sumatír vāṃ śubhas patī :AHHHLLHHLHLA: 523

9.068.01a prá devám áchā mádhumanta índavo :AHLHHLLHLHLA: 1190

C.5 The position of the copula in predicate nominative constructions

C.5.1 ahám X asmi

8 syllable lines

1.105.07a ahám̐ só asmi yáḥ purā́ :AHHHLHLA: 4930

11 syllable lines

4.026.01b ahám̐ kakṣ́ívām̐ ŕ̥ṣir asmi vípraḥ :AHHHHLLHLHA: 1472

C.5.2 ahám asmi X

8 syllable lines

10.145.05a ahám asmi sáhamānā :ALHLLLHA: 7

10.119.12a ahám asmi mahāmahó :ALHLLHLA: 691

10.166.02a ahám asmi sapatnahā́ :ALHLLHLA: 691

11 syllable lines

5.044.14d távāhám asmi sakhiyé níokāḥ :AHLHLLLHLHA: 1374

5.044.15d távāhám asmi sakhiyé níokāḥ :AHLHLLLHLHA: 1374

10.027.01c ánāśīrdām ahám asmi prahantā́ :AHHHLLHHLHA: 1388

C.5.3 t(u)vám X asi

8 syllable lines

8.013.26a índra tvám avitéd asi :AHLLLHLA: 621

3.053.18d tuváṃ hí baladā́ ási :AHLLLHLA: 621

8.090.05a tuvám indra yaśā́ asi :ALHLLHLA: 691

5.013.06b devā́ṃs tvám paribhū́r asi :AHHLLHLA: 1362

8.011.01a tvám agne vratapā́ asi :AHHLLHLA: 1362

10.153.05a tuvám indrābhibhū́r asi :ALHHLHLA: 1979

8.060.05a tuvám ít sapráthā asi :ALHHLHLA: 1979

8.098.02a tuvám indrābhibhū́r asi :ALHHLHLA: 1979

10.153.02c tuváṃ vr̥ṣan vr̥ṣéd asi :AHLHLHLA: 3316

8.023.30a ágne tuváṃ yaśā́ asi :AHLHLHLA: 3316

1.015.03c tuváṃ hí ratnadhā́ ási :AHLHLHLA: 3316

4.046.01c tuváṃ hí pūrvapā́ ási :AHLHLHLA: 3316

5.028.05c tuváṃ hí havyavā́ḷ ási :AHLHLHLA: 3316

7.016.06b tuváṃ hí ratnadhā́ ási :AHLHLHLA: 3316

8.023.29a tuváṃ hí supratū́r ási :AHLHLHLA: 3316

5.013.04a tvám agne sapráthā asi :AHHHLHLA: 4930

11 syllable lines

10.110.01d tuváṃ dūtáḥ kavír asi prácetāḥ :AHHHLLLHLHA: 1231

12 syllable lines

6.048.09c asyá rāyás tuvám agne rathī́r asi :ALHHLLHHLHLA: 161

9.086.28d tuvám indo prathamó dhāmadhā́ asi :ALHHLLHHLHLA: 161

2.001.12c tuváṃ vā́jaḥ pratáraṇo bṛ́hánn asi :AHHHLLLHLHLA: 468

2.001.07b tuváṃ devā́ḥ savitā́ ratnadhā́ asi :AHHHLLHHLHLA: 523

8.090.02a tuváṃ dātā́ prathamó rā́dhasām asi :AHHHLLHHLHLA: 523

2.001.10d tuváṃ viśíkṣur asi yajñám ātániḥ :AHLHLLLHLHLA: 624

2.001.03a tvám agna índro vr̥ṣabháḥ satā́m asi :AHLHHLLHLHLA: 1190

9.086.29a tuváṃ samudró asi viśvavít kave :AHLHHLLHLHLA: 1190

9.086.38a tuváṃ nṛ́cákṣā asi soma viśvátaḥ :AHLHHLLHLHLA: 1190

9.086.39c tuváṃ suví́ro asi soma viśvavít :AHLHHLLHLHLA: 1190

C.5.4 t(u)vám asi X

8 syllable lines

8.071.02c tuvám íd asi kṣápāvān :ALLLHLHA: 3

8.011.02a tuvám asi praśásiyo :ALLHLLLA: 24

10.097.18c tā́sāṃ tvám asi uttamā́ :AHLLLHLA: 621

10.145.05b átha tvám asi sāsahíḥ :AHLLLHLA: 621

8.039.03d tuváṃ hí ási pūrviyáḥ :AHLLLHLA: 621

2.007.05a tuváṃ no asi bhārata :AHHLLHLA: 1362

1.091.05c tuvám bhadró asi krátuḥ :AHHHLHLA: 4930

11 syllable lines

6.044.12c tuvám asi pradívaḥ kārúdhāyā :ALLHLLHHLHA: 133

10.002.01d tuváṃ hótr̥̄ṇām asi ā́yajiṣṭhaḥ :AHHHHLLHLHA: 1472

10.110.03c tuváṃ devā́nām asi yahva hótā :AHHHHLLHLHA: 1472

12 syllable lines

2.001.05d tuváṃ narā́ṃ śárdho asi purūvásuḥ :AHLHHLLLLHLA: 13

7.032.17a tuváṃ víśvasya dhanadā́ asi śrutó :AHHHLLLHLHLA: 468

8.019.31c tuvám mahīnā́m uṣásām asi priyáḥ :AHLHHLLHLHLA: 1190