

**The linguistic elements of Old
Germanic metre:
Phonology, metrical theory, and the
development of alliterative verse**



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Abstract

I examine those linguistic features of Old English and Old Norse which serve as the basic elements for the metrical systems of those languages. I begin with a critical survey of recent work on Old English metrical theory in chapter 1, which suggests that the four-position and word-foot theories of metre are the most viable current frameworks. A further conclusion of this chapter is that stress is not, as is often claimed, a core element of the metre. In chapter 2, I reassess the phonological-metrical phenomenon of Kaluza's law, which I find to be much more regular and widely applicable within *Bēowulf* than has previously been recognized. I further argue that the law provides evidence that Old English phonological foot structure is based on a preference for precise bimoraism. In chapter 3, I examine the role of syllables in the Norse Eddic metre *fornyrðislag*, which supports a view of resolution and phonological feet similar to that found in Old English, though Norse prosody is much more tolerant of degenerate, light feet. I reconsider the other major Eddic metre, *líóðahátt*, in chapter 4, integrating the insights of Andreas Heusler and Geoffrey Russom to propose a new system of scansion for this notoriously recalcitrant verse form. This scansion provides important support for the word-foot theory, and suggests that linguistic elements larger than syllables or phonological feet play a crucial role in early Germanic verse. In the final chapter, I give a diachronic account of Germanic metre and relevant linguistic structures, arguing that the word-foot theory provides the best metrical framework for understanding the development of Germanic alliterative verse. This metrical system is linguistically supported by Germanic word structures and compounding rules, and interacts with bimoraic phonological feet, all of which have a long history in Proto- and pre-Germanic.

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Abbreviations and Symbols

Languages and texts (see further §1.1.3, n. 11, §3.1.2, n. 5, and §4.1)

Hkm	Hákonarmál	OS	Old Saxon
Lv	Lausavísa	PGmc	Proto-Germanic
NGmc	North Germanic	PIE	Proto-Indo-European
NWGmc	Northwest Germanic	RV	Ṛgveda
OE	Old English	Sk	Sanskrit
OHG	Old High German	WGmc	West Germanic
ON	Old Norse	YAv	Young Avestan

Grammatical categories

abl.	Ablative	masc.	Masculine
acc.	Accusative	neut.	Neuter
dat.	Dative	nom.	Nominative
fem.	Feminine	pl.	Plural
gen.	Genitive	pres.	Present
imp.	Imperative	pret.	Preterite
inst.	Instrumental	sg.	Singular
loc.	Locative	subj.	Subjunctive

Phonological symbols

C	Consonant	σ	Syllable
R	Resonant	[]	Foot boundary
V	Vowel	*	Reconstructed form
L	Light Syllable	x	Incorrect form
H	Heavy Syllable	.	Syllable boundary

Metrical notation (see §1.1.2)

S	Strong position	C	w...Ssw
s	Secondary position	D	SSww
w	Weak position	Da	SSsw
A	SwSw	Db	SSws
A2a	SsSw	D*	SwSww
A2b	SwSs	Da*	SwSsw
A2ab	SsSs	Db*	SwSws
A2k	SsŠw	E	SswS
A3	ww...Sw	E*	SswSw
A1s	SwŠw	Eb	SwsS
Af	wSwSw	Eb*	SwswS
B	w...Sw...S	+	Anacrusis
B1	w...SwS	/	Foot boundary
B2	w...SwwS	.	Word boundary
B3	w...SwwwS		

Introduction

GERMANIC ALLITERATIVE VERSE encompasses poetry composed in a broadly similar set of metres in a variety of older Germanic languages. The oldest potential examples are found in early runic inscriptions, but the bulk of the surviving corpus is preserved in manuscripts written across the span of the medieval period, in Old and Middle English, Old Saxon, Old High German, and Old Norse. There are significant differences between (and within) each tradition, but important commonalities of poetic and metrical practice, which are not quite like any other known poetic tradition, justify approaching this body of verse as a group.

In this thesis, I am primarily concerned with one aspect of these poetic systems: METRE, and its relationship to linguistic features of the older Germanic languages. If poetry can be defined practically as language that has been formally organized into lines or verses (Fabb and Halle 2008, 1), metre may be defined as a system for regulating linguistic material within the line. Old Germanic verse clearly is poetry: the alliteration which gives the form its conventional name has allowed texts like *Bēowulf* and the poems of the Poetic Edda to be divided into lines. What metrical principles might be active within these lines have remained the subject of considerable debate.

The metrical rules of Germanic alliterative poetry have attracted so much discussion and argument largely because they have had to be – and still are being – reconstructed on mostly inductive grounds (Fulk 1992, 6-24). Native metrical commentary exists only for Norse, and these Latin-influenced treatises appear to be artificial and over-systematized, serving rather poorly as guides to the poetry as actually attested. Instead, the poetry itself has had to provide the evidence for its own rules. This alone makes Germanic metre an interesting object of study, since it is not merely the actual metrical rules alone that are at stake, but also the methodologies and principles of how we might go about recovering the properties of such an unfamiliar metrical form.

This task of metrical reconstruction is closely bound up with the reconstruc-

tion of the linguistic structures of the older Germanic languages. Language and metre inform each other, with evidence from one domain routinely used to make arguments in the other. It is this potentially circular intersection of linguistic (especially phonological) and metrical theories, both of which are often to some extent provisional and open to refinement, that is my main interest in this thesis. I try to approach both the metrical and phonological research of Old Germanic critically and each on its own terms, in order to use them to illuminate one another while, hopefully, avoiding excessive circularity. For this reason, I focus on what might be called the LINGUISTIC ELEMENTS of Germanic metre: the linguistic features that play a role in the metrical system, either directly (by serving as the basis for metrical constituents) or indirectly (by interacting with metrical rules to affect what arrangements of linguistic material are favoured or avoided in our corpora).

Since a full consideration of all linguistic elements of all older Germanic verse forms is not possible within the scope of a single thesis, I concentrate on several core topics. Old English and Old Norse Eddic poetry form my main poetic corpora: Old English, because it is the oldest and largest body of surviving alliterative verse; and Old Norse, because it shows the most internal metrical diversity and is the furthest removed linguistically from Old English. I have had to leave out any really systematic treatment of Old Saxon, Middle English, and Norse skaldic verse, though I touch on evidence from these sources where relevant. Linguistically, phonological problems stand front and centre, and I have had to largely set many complicated questions of poetic syntax aside.

In the body of this thesis, I begin with an overview of Germanic metrical theories in chapter 1. After discussing the history of metrical research from Sievers onward, I focus on the two most promising current metrical paradigms, both of which are most fully worked out for Old English. The first is the proposal that a typical line consists of four positions, an approach best represented by the work of Cable and Yakovlev. The second is an innovative theory, chiefly developed by Russom, which holds that every half-line consists of two word-feet, units approximating the rhythms of words. I concentrate especially on how these different theoretical approaches deal with empirical data, and conclude that there are some reasons to favour the word-foot theory, although it is difficult to rule out a positional approach on the Old English evidence alone.

In chapter 2, I discuss the controversial issue of resolution (the ability of two syllables to count as ‘the same’ as a single syllable, under certain conditions) and its suspension (the non-application of resolution), which are held to be governed

by the principle known as KALUZA'S LAW in the poem *Bēowulf*. After thoroughly reviewing the metrical evidence for the law – a problem which itself requires re-consideration of some historical phonology and morphology – I consider how to bring together metrical evidence and phonological theory to provide both a coherent account of resolution in *Bēowulf*, and of phonological FOOT STRUCTURE in early Old English. This analysis is largely within the framework of metrical phonology; despite its name, this does not have anything directly to do with poetic metre, but rather with the prosody of words (especially as formalized through phonological feet, rhythmic units smaller than the word, but potentially larger than the syllable; see §2.2.8.2). Approached from this perspective, Kaluza's law emerges as a preference for Old English feet to have precisely two MORAS (units of length within a syllable), which is applied more laxly or strictly depending on the phonological and metrical environment.

I build on these phonological questions in chapter 3, examining the evidence of one of the major Norse Eddic metres, *fornyrðislag*. After an initial review of Norse syllabification, I reconsider the role of resolution in this metrical system, paying particular attention to places where suspension has been thought not to apply. I argue that resolution, on the whole, applies more regularly and widely than has sometimes been argued, and that the overall system generally resembles that of Old English. There are, however, some differences, which appear to be due to changes in the linguistic foot structure of Old Norse. The language is more inclined to favour single syllables as units over polysyllabic feet, which results in certain distinctive metrical patterns in *fornyrðislag*.

In chapter 4, I turn to the other major Eddic metre, *líóðahátt*, and questions of scansion and metrical theory. This metre, especially the full-verse portion of the stanzas, has long been difficult to analyse, and I spend most of the chapter developing a new system of scansion based on word-foot principles. This approach accounts better for a variety of metrical facts in *líóðahátt*, including patterns of alliteration, syntactic groupings, resolution, and constraints on weakly stressed syllables. The success of this word-foot approach where positional analyses have long struggled is a powerful argument in favour of the word-foot theory as a framework for scanning Germanic metres in general, with consequences for the history of alliterative verse.

In the concluding chapter 5, I bring the results of the preceding chapters together to develop an outline of the history and structures of old Germanic verse forms. I argue that the word-foot theory provides a better framework for discussing

Germanic metre as a whole. The attested verse forms can all be derived from a pre-Germanic¹ word-foot system whose basic principles remained relatively constant, even as the specific patterns allowed in poetic lines changed along with the individual Germanic languages. This implies that words, as the basis for word-feet, are the most directly represented linguistic element in alliterative verse. The preference for prosodic feet with two moras is also a core phonological principle from the earliest Germanic on, and despite being more indirectly represented in the metre, has an enormous effect on the actual forms of Germanic verses by providing the basis for resolution and suspension.

1. I use Proto-Germanic to refer specifically to the reconstructed language from which the later Germanic languages developed, and pre-Germanic for the period of development from Proto-Indo-European to Proto-Germanic. I do not refer to changes ‘within’ Proto-Germanic, nor to ‘earlier’ and ‘later’ Proto-Germanic – all diachronic developments either predate Proto-Germanic (and belong to pre-Germanic) or belong to the histories of the separate branches of Germanic. In general, I follow Hale (2007) in my views on linguistic reconstruction.

Chapter 1

Old English and Theories of Alliterative Metre

Old English is a natural starting point for a discussion of Germanic metrics, both because the corpus of Anglo-Saxon poetry is large and early, and especially because the greater share of recent theorizing about the workings of alliterative metre have focused on this corpus (or even more narrowly, on the metre of *Bēowulf*). The aim of this chapter is to outline the current landscape of metrical theory which provides the context for the analysis of language in metre not only in Old English, but in older Germanic poetry generally. I wish to emphasize up front that I have no desire to propose yet another ‘new system’ for Old English verse. As will become clear, the problem is less the lack of an adequate theory of the metre than the presence of too many good theories. This chapter can be viewed partly as a process of winnowing, setting aside the larger portion of proposed metrical systems to leave two: the refined four-position system, which began with Sievers and is today best expressed in the writings of Thomas Cable and Nikolay Yakovlev; and the word-foot theory developed by Geoffrey Russom. Beyond serving as the theoretical points of reference throughout the rest of this study, comparing and evaluating these two approaches highlights the main linguistic features which are regulated and patterned in Germanic verse: syllables (or, through resolution, syllable equivalents) and words have emerged as potentially playing a central and direct role in the metre, while stress – still sometimes presented as *the* basic constituent of Germanic poetry – appears to have a decidedly secondary place in the system.

1.1 THE LEGACY OF SIEVERS

1.1.1 EVALUATING METRICAL THEORIES

Sievers' style of scansion is hard to teach and hard to learn. This has been stated several times in the literature, and probably indicates that the theory and the scansion it provides are inadequate... Scansion should be a simple mechanical operation, easily convertible into the theory that defines it. (Golston and Riad 2001, 1-2)

As a prelude to their proposal of a new theory of Germanic alliterative verse, Golston and Riad highlight both the enduring influence of Eduard Sievers' system of scansion of half-lines into five rhythmic types,¹ as well as the dissatisfaction many feel with it. The charge that Sievers' system is too complex has really two aspects, each of which can be found throughout the metrical literature. The first is psychological implausibility: the assertion that Sievers' types and subtypes are not intuitive ('hard to teach and hard to learn') and could not have been used by medieval poets – much less by medieval audiences attempting to appreciate a performance in real-time (on the importance of considering performance, see Cable 1991, 7-9; Russom 1998a, 3-5). This is closely related to, but technically distinct from the assertion that Sievers' scansion lacks theoretical adequacy by merely describing rather than explaining why some rhythmic patterns are found in early Germanic verse, while other, perfectly imaginable rhythms are excluded or only found very rarely (e.g. Sweet 1894, x-xi; Russom 1987, 1; Fulk 1992, 55-56).

These two points of criticism have driven a number of reconsiderations of Germanic metrical theory over the years, especially since the mid-1980's, most often with reference only to Old English metre.² The proliferation of metrical theories can be daunting at first glance, and does not immediately inspire faith in the whole enterprise. Yet the types of responses to Sievers have not all been of the same sort, and the range is telling about the value of Sievers' observations: even as the theoretical inadequacy of his type-system has become ever more apparent (and to a large degree superseded by more sophisticated theories), the importance of his empirical observations, and those of later researchers in the same tradition, has grown even clearer.

1. This common description of Sievers is somewhat inaccurate, see §1.1.3.

2. The main book-length treatments of the past half-century: Bliss (1962), Pope (1966), Cable (1974, 1991), Hoover (1985), Obst (1987), Russom (1987), Creed (1990), Whitman (1993), Huthcheson (1995), Suzuki (1996b), Getty (2002), and Bredehoft (2005).

The value of Sievers' general approach has been highlighted by certain radically different proposals, such as the attempt by Golston and Riad to do away entirely with the significance of Sievers' rhythmic patterns (in this they are preceded by, e.g., Hoover 1985). They instead propose a 'simple' scansion based on the premise that each line is built up of four feet, each containing two to four vocalic moras and preferably containing two syllables; alliteration, stress, and syntax serve merely as guides to these moraic groups (2001, 19-23). Their scansion of the first two lines of *Bēowulf* is as follows, using their notation (feet are placed within brackets, with the vocalic moras, each represented by μ , given above the text; 2001, 23f.):

- (1) (μ $\mu\mu$) ($\mu\mu$ μ μ) (μ $\mu\mu$) (μ μ)
 (hwæt wē) (Gār- Dena) (in geār) (dagum)
- ($\mu\mu$ μ) (μ μ) (μ μ) ($\mu\mu$ μ)
 (pēod cy-) (-ninga) (þrym ge) (frūnon)

This theory has, rightly, received little acceptance (or even notice) on the part of Germanic metricists, but it can be informative to look at just why Golston and Riad's scansion is so inadequate. After all, as they correctly point out, nearly every line of *Bēowulf* can be scanned according to their system, and it makes use of some of the most immediately obvious features clearly present in the metre (alliteration, the syntactic cohesiveness of half-lines).

The failings of this moraic scansion are threefold. The first has to do with its linguistic basis. The definition of syllable weight used by Golston and Riad is based purely on vowel length: short vowels (including short diphthongs) count as a single mora, long vowels and long diphthongs as two moras, and consonants count not at all (14, 23). The exclusion of consonants is arbitrary and at odds with the phonology of the language. Old English was certainly a quantitative language in which syllable weight played an important role, but consonants in a syllable coda were included in determining weight. In the process of high vowel deletion, for instance, we find apocope of final **-u* after heavy syllables in both NEUT.PL *wīf* 'women' and *word* 'words' < **wīfu*, **wordu*. Even though *word* has a short vowel, the coda consonant counts towards the weight of the syllable; contrast the failure of apocope after a genuinely monomoraic root in, e.g., *scipu* 'ships'. This basic system of quantity, including the further system of RESOLUTION, is a fundamental part of the phonology of the language, and plays a key role in the Sieversian metrical tradition.³ Golston and Riad's practice of only counting vocalic moras is ad hoc

3. On syllabification and syllable weight in Old English, see note 1 in §2.1, and for Old Norse §3.2. On resolution, see §§1.1.3.1, 2.4.1.1, and 3.3.

and not grounded in the phonology.

It is a basic tenet of much metrical research that metrical entities are in some way derived or selected from natural linguistic entities (see, for example, Kuryłowicz 1970 or Kristján Árnason 1991, 3-5, 23-25), a principle which is at odds with the assumption of one type of quantitative system for actual speech and another, quite different one for the metre. Golston and Riad provide a particularly clear example of a mismatch, but a less pronounced disconnect between metre and phonology is often found in metrical theory. Bredehoft (2005, 15, 23f.), for instance, regards resolution as a purely metrical phenomenon, relegating its linguistic basis to the earlier history of the language. Aside from the fact that this is a mistaken view of Old English phonological history, it has the effect of making Bredehoft's system excessively formal: resolution becomes an arbitrary rule with no affinity to any other linguistic or metrical process, and Bredehoft has to hardwire it in to the theory as an ad hoc metrical principle (see further the criticisms of Pascual 2014, 806-11). I take it as fundamental that the basic elements of metre should be derived from the natural features of the language, and that any rules operating on these elements should either be themselves simply part of the language, or form a natural part of a coherent metrical principle (that is, have a clear and motivated relation to the basic components of the metrical system).

Turning back to Golston and Riad, there is a further empirical question of how well the scansion actually predicts the verse-forms found. The most basic criterion is that a metrical system must be able to generate the attested forms. Golston and Riad do in fact pass this (minimal) requirement, as far as I can tell; by their count, some 99% of lines in *Bēowulf* (or in their sample of 1000 lines, though I see no reason to doubt that the proportion would be similar for the rest, setting aside hypermetric verses) can be scanned according to their system (2001, 14). But this scansion would also work for a very large number of half-line patterns which are not actually found. Verses like the following appear to be categorically excluded as valid Old English verse-types:⁴

4. The superscript ^x is used to indicate a metrical pattern or linguistic form which might be predicted by a theory, but does not in fact occur or appears to be illicit for some reason. Some have objected to the practice of using invented verses to illustrate patterns which do not occur, but theoretically could (e.g. Spanghel (1990, 428), reviewing Russom (1987) who makes particularly prominent and effective use of this technique). While it may be that some patterns fail to occur simply by chance, the corpus of Old English, and even *Bēowulf* alone, is large enough that the complete absence of a particular pattern is at the least suspicious. In some cases, the absence of a pattern may be due to more purely linguistic facts, and the invention of verses (especially ones that are minimal variants on attested half-lines) is an effective way of demonstrating that a missing pattern is, in fact, linguistically conceivable. The practice also serves an expositional purpose, and

- (2) (μ μ μ) (μ μ μ μ)
^x(on þissum) (middangearde)
 ‘on this middle-earth’
- (3) (μ μ) (μμ μ)
^x(worold-) (āre)
 ‘worldly honour’

Verses with these patterns do not actually occur, with the first being considerably longer than what is usually found, the second too short. Compare the actually occurring verses, the first of which becomes metrical by the removal of the single final unstressed syllable:

- (4) geond þisne middangeard
 ‘across this middle-earth’ (*Beo* 75b, 1771b)
- (5) worold-āre forgeaf
 ‘(he) granted worldly honour’ (*Beo* 17b)

The non-existent patterns of (2) and (3) meet all of Golston and Riad’s moraic constraints, and they have no way to explain why such patterns are not found. That is to say, their metrical theory massively over-generates line-patterns. This issue is briefly raised by Golston and Riad (2001, 5), but not addressed. It is, however, neither a trivial quibble nor a matter of refinement, but an essential means of evaluating how closely our metrical theories come to approximating the actual system used by ancient poets and their audiences.⁵

The third failing of the Golston-Riad model (and of others adopting a similar approach) is closely related to the previous one, but bears emphasizing separately in the context of Germanic metre. Over the years, researchers working in the Sieversian tradition have accumulated a large number of detailed observations about the distributions of various features: double alliteration, suspension of resolution, the stress and length of ‘half-lifts’ in various verse types, the expansion of dips with multiple unstressed syllables, the placement of word-boundaries, the use of anacrusis, and more. There is now a rather large catalogue in the literature of what rhythmic patterns these features can be associated with, how frequently they are

it is my experience reading metrical discussions that the clarity gained by giving an example of a putatively non-metrical pattern far outweighs any possible problems with the practice.

5. This is also a fundamental problem with a number of theories that fail to give sufficient attention to unstressed syllables, and focus excessively on lifts. A prominent example of such an approach within Anglo-Saxonist circles is Hoover (1985), while phonologists and comparative metricists may be familiar with a similar faulty analysis in Fabb and Halle (2008, 263-7), closely based on Halle and Keyser (1971).

found, whether they can, must, or cannot co-occur with one another, and whether their distribution in the on-verse or off-verse⁶ is conditioned. Models which attempt to do away with all considerations of rhythmic patterning have no way to account for these distributional facts, which can sometimes be surprisingly robust, and so end up with serious empirical deficiencies in their descriptions of Old English poetry as we actually have it.

Of course, the initial impulse for proposals like Golston and Riad's comes from the impression that Sievers' theory is too complicated to have been a real system of scansion, and even if such counter-proposals can hardly be adopted, their widely shared criticisms cannot be entirely ignored. There seems to be a real tension between our natural supposition that Germanic metre was psychologically manageable and ultimately based on fairly simple or intuitive principles, and the elaborate patternings of metrical and linguistic features that have been noted over the years. The most fruitful path forward, however, is probably not in discarding a century and a quarter's worth of empirical research, but rather in identifying basic principles that, in interaction with the phonology and grammar of Old English (or, more generally, of the various old Germanic languages), produce the actually attested verse patterns and variations.

This is naturally not a radical proposal, and various metricists have attempted to do exactly this – starting with Sievers himself, who did not (despite frequent statements otherwise) devise his system merely as a set of five arbitrary, unmotivated types. It is worth reviewing Sievers' lines of thought, and so – after a brief discussion of the terminology used to mark out anatomy of the Germanic verse – I will outline his principles, along with those of some of his most direct successors: Alan Bliss, Seiichi Suzuki, Thomas Cable, and Nikolay Yakovlev. I will then compare the current state of the Sieversian approach in Old English, especially as articulated by Cable and Yakovlev, with Geoffrey Russom's innovative word-foot theory (itself an outgrowth of the Sieversian tradition, but resting on a very different theoretical basis). The Cable-Yakovlev and Russom theories both make a number of surprisingly similar empirical predictions, despite starting from radically different basic principles. Their more general adequacy, which I discuss in the following sections, rests on how well they meet the criteria presented in this section: groundedness in the language; ability to generate the correct verse forms while excluding linguistically-plausible patterns not actually found; and ability to account for the distributions of metrical-linguistic features.

6. For these terms, see §1.1.2 immediately below.

This emphasis on theories in the Sieversian tradition stems from my sense that while the principles as codified in the *Altgermanische Metrik* of 1893 are hardly tenable in their stated form, very serious progress has been made, especially by researchers looking to build upon the previous traditions of metrical research. If the correct view of old Germanic metres – the ‘sense of a real understanding’, to borrow a phrase from Riad (2004a, 853) – is not fully realized in our current theories, neither does it seem to be wholly absent.

1.1.2 BASIC METRICAL TERMINOLOGY

The basic terminology for discussing the components of Germanic verse are rooted in the foundational work of Sievers (1885b, 1885c, 1887, 1893),⁷ and has generally been retained as part of the *koine* of metrical scholarship even by those who take issue with his principles. In this section I concentrate on basic vocabulary and notation that will be needed throughout this thesis.⁸

The most basic division of alliterative poetry, made long before Sievers, is into the (LONG) LINE, which is the domain of alliteration. Each line contains two VERSES or HALF-LINES, the first of which I refer to as the ON-VERSE, and the second of which as the OFF-VERSE. This is the usage of scholars such as Fulk (1992), Hucheson (1995), and Terasawa (2011); a popular alternative is to use A-VERSE, B-VERSE (e.g. Bliss 1962, Russom 1987, and Bredehoft 2005), though this strikes me as unnecessarily similar to the practice of using letters to label the different rhythmic patterns (cf. Pope and Fulk 2001, 131, n. 3).⁹

A potentially alliterating prominence in the half-line (traditionally held to be two in number) is called a LIFT (or primary ictus, or arsis; German *Hebung*) from a metrical perspective, and prototypically corresponds to linguistic STRESS. Similarly a HALF-LIFT (secondary ictus) is traditionally associated with *secondary stress*, and the *dip* (drop, weak position, *Senkung*) with unstressed material (an EXPANDED DIP may contain several weakly stressed syllables). The precise relationship of inferred

7. It is worth noting that Sievers (1924) eventually turned to a very different view of Germanic metre, ‘Schallanalyse’. The contemporary criticism of Tolkien (1926, 40-4) remains both a fair summary and rejection of this approach, and I do not address it further here.

8. The workings of the metre will be discussed at length in the remainder of this chapter, starting with an overview of Sievers’ types in §1.1.3. For a broad introduction to the metrical system in general, I recommend Jun Terasawa’s excellent *Old English Metre: An Introduction* (2011).

9. Admittedly, I am not entirely sure just what is ‘on’ and ‘off’ in the two half-lines, although the first half-line is sometimes alleged to have been more prominent and certainly allows for a greater variety of metrical phenomena. But the labels ‘on’ and ‘off’ are distinctive, and less cumbersome than the collocations ‘first half-line’, ‘second half-line’.

linguistic stress and postulated metrical prominence is not always straightforward, and has been the topic of considerable discussion: issues such as subordinated stress or unstressed ictus will be clarified in the course of discussion.

An additional division is often made into FEET, which is unfortunately a particularly ambiguous term in Germanic metrics. The term can refer to a linguistic unit, the PHONOLOGICAL FOOT, on which see further §2.2.8.2. The term also has a quite different and strictly metrical sense where it refers to verse-portion (though not all metricists acknowledge the foot as a metrical constituent of Germanic verse). The exact forms and placement of these METRICAL FEET do not always correspond to the types of feet used in the scansion of other types of verse. When I refer to a METRICAL FOOT, I usually mean the highly distinctive feet of the word-foot theory, which will be discussed at length below (beginning with §1.2.1).

In general, the labeling of rhythmic types used here follows Sievers' original system, rather than, say, the more elaborate notation of Bliss. Thus I use A2a rather than Bliss's 2A3 to refer to verses of the rhythm SsSw (see ?? in the following section). My choice in using Sievers' notation is primarily for its balance of simplicity and familiarity, and I use it merely as a labelling system, without prejudice as to whether SsSw verses really are a 'subtype' of the A pattern, or are best classified in some other way. I have included a full table of abbreviations in the front matter of this thesis.

When scanning a verse schematically, there are a number of conventions to choose from for representing lifts, half-lifts, and dips. I follow Stockwell (1996), who employs S for a lift, s for a half-lift, and w for a dip (or, where relevant, for an unstressed syllable).¹⁰ In a departure from Stockwell, I represent quantity, where necessary, with a macron or breve: $\bar{S}$, $\breve{S}$, and so on (lifts, unless otherwise noted, are assumed to be heavy). Where relevant, a resolved sequence can be symbolized as S^w (though in general S should be understood to stand for both $\bar{S}$ and S^w). Foot boundaries are marked with a slash, /, and word boundaries (where the need arises) with a full stop.

Most of the variation of symbolism and terminology in the literature is fairly low-level and without any serious implications for discussing metrical theory, which is perhaps why so many conventions have grown up over the years. Nonetheless, terminological variation can sometimes be confusing (for instance, the custom of Huthcheson and Suzuki of using S to represent not a primary stress, as I do, but a

10. This avoids using, as many metricists do, x for a weak position even while this symbol is often used by metrical phonologists to mark stress.

long secondary stress), and it is to be hoped that we eventually arrive at a greater consistency of convention in the field. Until such a consensus is achieved, however, each metricist will have to use the notation they find most useful and pleasing.

The components of a typical line, and my favoured conventions for scanning it, are illustrated in the following example. The on- and off-verses are separated by extra spacing (though in practice I usually cite half-lines independently). The alliteration, here on *h* and marked by underlining, ties the two half-lines together. The lifts in each line are given in capital letters, the half-lifts in italics, and the unstressed syllables are not specially marked; the schematic scansion is given below the translation:

- (6) HĒAH ofer HÆLEðum HOLMweall āSTĀH
 ‘high over heroes the sea-wall rose’ (Ex 468)
 Sww/S^ww Ssw/S

1.1.3 SIEVERS’ PRINCIPLES

One of the main criticisms levelled against Sievers from time to time is the charge that his five types are unmotivated, and that it would be unreasonable to suppose that Germanic poets really just had five arbitrary rhythms from which they would pick and choose when composing each half-line (see, e.g., Hoover 1985; Golston and Riad 2001, 2-4; Bredehoft 2005, 121, n. 1). Such a system would indeed be rather odd, but Sievers himself was perfectly clear in presenting his types as built up from smaller units: feet, stresses, and verse positions (*glieder*). Additionally, although this is often overlooked, Sievers (1893, 176-180) explained the remaining metrical peculiarities as relics, appealing to his theory of the origin of alliterative verse in an octosyllabic metre of purportedly Indo-European antiquity (comparing the Vedic *gāyatrī* and *anuṣṭubh* metres, as well the Young Avestan octosyllabic line identified by Geldner (1877); cf. §5.1.2).

The decomposition of verse patterns into METRICAL POSITIONS is Sievers’ strongest tool in creating a defined set of types. The basic argument is that the normal half-line contains precisely four positions, of which two are lifts and two are either half-lifts or dips (the emphasis on precisely two lifts per verse is partly based on the alliterative pattern, and has proved an enduring part of Sieversian theories). From this, Sievers’ five basic types are easily generated:¹¹

11. Examples are usually cited with reference to *The Anglo-Saxon Poetic Records* (Krapp and Dobbie 1953), which remains the standard edition of Old English poetic texts. This is unfortunately now

Type A – SwSw

- (7) gōdum dǣdum
 ‘with good deeds’ (*Wald* I.23a)

Type B – wSwS

- (8) þā middangeard
 ‘when middle-earth’ (*Cæd* 7a)

Type C – wSSw¹²

- (9) his hægstealdas
 ‘his young retainers’ (*Finn* 40b)

Type D – SSsw or SSws¹³

- (10) helm eallwihta
 ‘protector of everything’ (*GenA* 113a)
- (11) fāh fēðegāst
 ‘hostile moving spirit’ (*Ex* 476a)

somewhat dated, and furthermore does not mark metrically important information such as vowel length (though it does include far more speculative editorial features, such as punctuation). When citing from this series, I have accordingly silently added macrons to indicate vowel length. Where possible, I have generally also tried to consult on a range of other critical editions, and sometimes prefer their readings: Fulk, Bjork, and Niles (2009) for *Bēowulf*, *The Fight at Finnesburg*, and *Waldere*; Himes (2009) also for *Waldere*; Doane (2013) for *Genesis A*; Tolkien (1981) and Lucas (1994) for *Exodus*; Malone (1962) for *Widsið*; Gradon (1958) for *Elene*; Woolf (1993) for *Juliana*; Blake (1964) for *The Phoenix*; Squires (1988) for *The Panther*; Campbell (1938) for *The Battle of Brunanburh*; Brooks (1961) for *Andreas*; Gordon (1937) for *The Battle of Maldon*; Farrell (1974) for *Daniel*; Griffith (1997) for *Judith*. Old English works are cited by the short titles given in Mitchell, Ball, and Cameron (1975). All translations are my own unless stated otherwise.

12. Or wSSw. Sievers noted that the first lift was stronger than the second, though he presented them both as full lifts (1893, 195f.). Much recent research has taken the subordination of the second lift more seriously; see §1.2.3.

13. These two stress patterns were labelled by Sievers as types D1 and D4, respectively. Since Sievers’ types D2 and D3 have the same overall contour as D1 with only minor differences, I follow Russom in referring to D1-3 as Da and D4 as Db. Note that a two-stress SSww, although not recognized by Sievers, is almost certainly valid, and indeed appears to be by far the most frequent type D pattern.

Type E – SswS or *SwsS¹⁴

- (12) hēahfæstne dōm
 ‘high and lasting fame’ (*Wid* 144b)

Sievers’ system is full of subtypes, which he presents as easily derivable variants of the same pattern. Take a line like:

- (13) feorhhord fēondum
 ‘[defends] life-treasure [against] enemies’ (*Wald* II.22a)

This seems to have a stress pattern of SsSw. Sievers labels it as A2a, indicating that it is a type of A verse in which the first dip has been filled with a secondary stress (for SwSs, where the final position has secondary stress, Sievers uses the label A2b; for SsSs, he uses A2ab). The implication is that for the original poets, such a variation might well be noticeable, but because the half-stress makes no difference to the arrangement of lifts and dips it would still fall within the recognized bounds of the type A rhythm. On the other hand, in the verse types D and E the half-stress is metrically significant, and is needed to distinguish the two adjacent weak positions: logically conceivable types like SwwS do not occur, says Sievers, because a sequence ww would form a single polysyllabic dip (1893, 31). Only by use of a half-lift next to a dip (sw or ws) can two weaker metrical positions occur next to each other.

The reason why Sievers’ system gets so often represented as a set of arbitrary types is most likely because this system of metrical positions does not fully describe the metrical facts. Even with regard to four-position verses the type ‘E2’ variant SwsS is of dubious authenticity, as Sievers himself notes, though he cannot account for why this pattern should be particularly disfavoured or disallowed (1893, 132). The absence of the arrangements swSS or wsSS has also been noted (Bliss 1962, 108, n. 1), though secondary stress is often defined as having to follow a primary stress, which precludes such patterns on a purely linguistic basis.

More strikingly, an undeniable feature of the system is the presence of five-position verses, the most frequent of which is the type Da*, SwSsw:

- (14) sealte sǣstrēamas
 ‘salty sea-streams’ (*And* 196a)

14. This second variant, E2, seems to be hypothetical only, and no secure examples exist in Old English poetry.

Such verses appear to contradict the FOUR-POSITION PRINCIPLE as the fundamental organizing basis of the metre. Sievers nonetheless presents such verses as ‘expanded’ derivatives of more basic four-position types (hence their notation as one of the basic types with a star, indicating an extra metrical position), but he does not clearly explain why this sort of expansion should be possible if the four-position principle is really basic. Nor does he offer a convincing explanation of why some of his expanded types (namely D*) are frequent and play an important role in the poetic system, while others (B*, C*) are marginal if they in fact exist at all (see his doubts about the authenticity of A* in Old English verse, 1893, 134f.).

The matter is further complicated by Sievers’ habit of dividing half-lines into feet as well as metrical positions. Thus type A is decomposed into two trochees, Sw/Sw, type B into a pair of iambs, wS/wS, and C into an iamb followed by a trochee, wS/Sw. It is natural enough to want to see feet (some of which, at least, can be seen in familiar terms as iambs and trochees) in Germanic verse, and the use of feet also allows Sievers to present expanded verses in the same terms as the ‘normal’, four-position types: D*, for instance, can be notated Sw/Ssw, with both feet found in other rhythmic types (Sw in, e.g., type A, and Ssw in unexpanded type Da, S/Ssw). Whether it is appropriate to divide half-lines into feet remains a matter of discussion, but it is clear that Sievers’ particular presentation of the matter has obscured both the underlying principles of his scansion (which are the basic units of his metre: positions, feet, or the stresses that head his feet?), and undermined the potential naturalness of his types (why are some foot combinations allowable, while others are extremely rare or non-existent?).

Sievers’ own explanation of five-position verses lies not in any systematic considerations, but in his historical view of the metre. He held that the rhythmic types were derived from earlier octosyllabic lines whose linguistic content had undergone extensive syncope, and which were accordingly reinterpreted to give the new, distinctively Germanic pattern of line types. Thus he projects a normal line from *Bēowulf* back to an octosyllabic preform:

- (15) Grendles gūðcræft
 ‘Grendel’s battle-might’ (*Beo* 127a)

- (16) *Grándilasa gúnþa-kràftaz¹⁵

15. The example of disyllabic *gūðcræft* coming from Proto-Germanic *gunþa-kraftaz is Sievers’ own (1893, 181), which I have supplemented with a possible pre-Germanic form of *Grendles*. On the reconstruction, I should note that that even if the Germanic *o*-stem genitive singular ending *-as comes from PIE *-oso (as supposed in this example purely for metrical convenience), the final

This is meant to reduce to four metrical positions (and in this example, four syllables) through linguistically regular syncope (179-185). He derives the expanded types, especially the common D*, from verse patterns where syncope did not happen to reduce the verse down to a pattern interpretable as having just four metrical positions (1893, 183):¹⁶ expanded types are present, under Sievers' view, as the inheritance of tradition rather than the products of synchronic principles. He gives a similar explanation for long dips, where multiple unstressed syllables remained in a row without syncope (181f.).

Taken all together, Sievers' view of old Germanic metre appears to be hybrid: a logical core formed by the four-position and two-stress principles, but supplemented with a set of exceptions, limitations, and variations determined by a pre-Germanic heritage. Some sort of mixture of diachronic arbitrariness and synchronic regularity is familiar from linguistic grammars, but such a large degree of arbitration by tradition is perhaps somewhat more surprising in a metrical system (rather than specific formulas or lexical exceptions licensed by tradition). Could the parts of the system not derivable from the four-position principle really have been retained for so many centuries in England without seeing drastic remodelling (cf. §1.2.5.1)? Would such a system even have been viable for verse composition at any point in time? These very serious questions about the origin, psychological plausibility, learnability, and interpretability of Sievers' system justify the many objections to his original system.

1.1.3.1 *Resolution*

An important basic principle cogently proposed by Sievers and followed by everyone working in the Sieversian tradition is RESOLUTION: the combination of a light stressed syllable – that is, a syllable containing a short vowel followed by no consonants in the syllable coda – with a following syllable into a unit equivalent to a long monosyllable.

The most obvious, but least interesting argument for resolution is that it brings

*-a < *-o should have been lost by Proto-Germanic proper. This reconstruction is therefore pre-Germanic, and rather artificial, merely meant to build on one of Sievers' own examples to give a more concrete sense of his octosyllabic starting point than he himself provides (not that he suggests that this particular line, or any other given extant verse, was actually composed in pre- or Proto-Germanic; this is merely an illustration of the *type* of development in question).

16. Sievers' argument might have been much improved, and would certainly be easier to evaluate, if he had provided more concrete examples of octosyllabic preforms in which syncope would have yielded his proposed types. It is not clear that the historical processes he invokes lead naturally to the attested system.

a large number of otherwise non-conforming verses into the four-position framework:

- (17) **beadohrægl** brōden
‘adorned battle-shirt’ (*Beo* 552a)
- (18) wið wrāðra **gryre**
‘against the terror of enemies’ (*Ex* 20b)
- (19) oð **merestrēamas**
‘to the sea-surges’ (*Dan* 502b)
- (20) **cyning** æþelum gōd
‘king good in his nobility’ (*Beo* 1870b)
- (21) tīrēadig **cyning**
‘glorious king’ (*El* 104a)

Each of these verses would have five (or, in the case of 20, six) positions if the bolded sequences counted as trochaic, Sw rather than S^w. Resolution brings all these verses down to four positions.

That this view is correct, and not merely a convenience to make Sievers’ scansions fall out, is suggested by the fact that we generally do not find equivalents of (17-21) where long disyllables – unambiguous trochees – stand in place of the possibly-resolved sequences:

- (22) *hildehrægl brōden
‘adorned battle-shirt’
- (23) *wið wrāðra brōgan
‘against the terror of enemies’
- (24) *oð ēagorstrēmas
‘to the sea-surges’
- (25) *cyning weorðmyndum gōd
‘king good in his honours’
- (26) *tīrēadig þēoden
‘glorious king’

The non-equivalence of light and heavy disyllables has other consequences. The most frequent verse type in Old English verse is the trochaic pattern SwSw (type A; see §1.2.4). The most minimal form of this pattern has two words with long roots,

$\bar{S}w\bar{S}w$, while the lighter variants such as $\check{S}w\bar{S}w$ are found so extremely rarely (and often in textually suspicious contexts) that they are widely considered unmetrical:

- (27) folces hyrde
‘leader of the people’ (*Finn* 46b)
- (28) xwera hyrde
‘leader of men’
- (29) xfolces cyning
‘king of the people’
- (30) xwera cyning
‘king of men’

The conclusion drawn by Sievers (1885b, 219f.) is that a light syllable is not sufficient to stand as a lift on its own, and must count together with the following syllable as the equivalent of a heavy monosyllable: $\check{S}w = S^w = \bar{S}$. This is a sound conclusion, and holds as a useful way of explaining regularities in verse construction even if one does not accept Sievers’ own system wholesale.¹⁷

The importance of resolution in Germanic metrical studies is hard to overstate. Sievers (1885b, 217ff.) opened his first foundational discussion of Old English metre with an overview of these distributional facts, and the theory of resolution remains integral to the linguistically oriented Sieversian tradition (cf. Bliss 1962, 27; Cable 1974, 7f.; 1991, 16ff.; Russom 1987, 11f.; 1998a, 15ff.; Fulk 1992, 26f.; Hutcheson 1995, 68-70; Suzuki 1995a; 1996b, 171-205; Getty 2002, 24, 188ff.; Yakovlev 2008, 62-4). Much of the potential uncertainty about resolution comes from instances where it appears not to apply – is *SUSPENDED* – according to the same arguments of occurrence and non-occurrence that justify resolution in the first place. The complications created by suspension are significant – I discuss them further in chapter 2 – but the objections do not hold, and I take the Sieversian view of resolution as a given in the remainder of this chapter.

17. *Pace* Yakovlev (2008, 64), resolution is not actually dependent on the four-position analysis specifically. Its most fundamental motivation is its exclusionary power, a point made well by Stockwell and Minkova (1997, 400-3), though this argument has a much wider applicability than they grant – they seem not to realize that their [*3Pos] and GAP considerations are one and the same, with the implication that resolution has a much more robust role, and is potentially much less ‘fossilized’ than they assume.

1.1.4 BLISS'S REVISION

Given the concerns with Sievers' system, it is not surprising that his successors have tried to find a more reliable and theoretically rigorous way of explaining his typology, even as they retain the core of his observations about the rhythmic facts of Germanic verse. In his influential revision of Sievers' system, Alan Bliss proposes that the five types are derivable according to what he calls a displacement theory (Bliss 1962, 108). Bliss takes the type A pattern, by far the most common in *Bēowulf* and in Germanic metre generally, to be the basic rhythm of the half-line.¹⁸ The other types, he supposes, are derived from this structure by moving either stress forwards or backwards by one metrical position. This means that from a basic type A SwSw, the pattern C is achieved by moving the first stress forwards one position (wSSw), type E arises from displacing the second stress (SwwS),¹⁹ and type B occurs when both lifts are displaced forwards (wSwS). The first lift cannot be displaced backwards, since it is already at the start of the verse, but the second lift can, yielding type D (SSww).

At first glance, Bliss's system appears to have some strengths, deriving the basic types from a simple principle, and being grounded in a concrete and well-attested verse pattern rather than in abstract metrical positions. Furthermore, as Bliss (1962, 108) points out, it has some appropriate exclusionary power, since it rightly predicts that the pattern wwSS does not occur (since it would require the first lift to have displaced forwards across two dips, rather than just one). But Bliss's means of accounting for five-position verses – or rather specifically for D* half-lines, since he does not recognize any other expanded types – causes problems. The underlying type A pattern he works from is not actually simply SwSw, but rather Sw(w)Sw, with an optional extra syllable available when reckoning with displacement. This allows him to get from SwwSw → SwSww (D*) by displacing the second lift backwards one position. This sleight of hand gets him type D*, although he does not really justify why SwwSw should be as basic as SwSw, nor why the two syllable dip there should be more basic than other expanded dips. Even if SwwSw could be justified as a starting point, Bliss's system predicts many

18. The basic status of the frequent type A pattern plays a role in a number of theories. It is similarly underlying in Getty's (2002) constraint-based metrical system, and has a central place in determining the normative weight and structure of the verse in Russom's (1987, 1998a) word-foot theory.

19. Bliss allows SwwS directly in his system, when the two weak positions can be kept separate by a verse-internal caesura (1962, 76). He also recognizes the more frequent traditional type SswS, which uses a half-lift rather than a caesura to keep the two weak positions distinct.

patterns which do not occur. Displacing the first lift forwards in SwwSw should give wSwSw as a frequent pattern, although its absence or severe restriction is one of the more conspicuous features of much old Germanic verse. There are apparent sequences of wSwSw in Beowulfian metre:

- (31) ætgifan æt gūðe
 ‘give in battle’ (*Beo* 2878a)

But Bliss himself (rightly) considers all such verses to be type A with anacrusis, so that the initial w is an extrametrical prelude to the main rhythm of the verse rather than being part of the underlying structure (1962, 40-41).

Furthermore, it might be a problem that displacement of both lifts would give the pattern wSwwS. Perhaps this would simply be equivalent to type B with an expanded second dip (which is in fact restricted to two syllables), but on the analogy of Bliss’s derivation of type D* SwSsw from the ‘underlying’ pattern SwSww, this sort of displacement ought instead to produce verses resembling type E with an initial dip:

- (32) *þæt is Wēlandes geweorc
 ‘that is Wayland’s work’ (cf. *Beo* 455a)
- (33) *þā dēapfæge dēog
 ‘then the one doomed to die hid’ (cf. *Beo* 850a)

Such verses never occur in Old English, however, not even with anacrusis, and much less with preceding material of the sort normally filling an initial dip. These problems seem to demonstrate that Bliss’s proposed derivation of the five types is most likely simply incorrect.²⁰

1.1.5 SUZUKI

More recently, Seiichi Suzuki has made a number of very substantial and valuable contributions to the study of Germanic metre (including Old Saxon and Old Norse as well as Old English). Suzuki continues the Sievers-Bliss tradition with a small set of basic types and numerous subtypes. He emphasizes the relationship of frequency and complexity: the more complex the variation, the rarer the variant. Suzuki’s basic scheme resembles that of Bliss in that he tries to generate not only the sub-types, but also the basic types from a single underlying scheme, though his

20. I should mention that Bliss provides this theory only as something of an afterthought. His central interest is not in metrical theory, but in cataloguing (Yakovlev 2008, 45f.).

model is considerably more sophisticated than Bliss's, and it is not so straightforwardly falsifiable for over-generation. He works with three basic principles which are meant to account for all four-position patterns: he proposes that every normal verse has four metrical positions; that two of these are strong (lifts); and that the initial position must be (underlyingly) strong (Suzuki 1996b, 132).

This leftward prominence means that type A (SwSw) is, again, one of the most basic, and therefore frequent types in the system; the two kinds of type D (the *helm eallwihta* Da type SSsw and the *fāh fēðegāst* Db SSws type) are the other two theoretically very basic varieties. Other varieties are derived through processes of suppression or enhancement of lifts. Like Bliss, the absence of the pattern wwSS is attributed to the fact that one of the underlying lifts has to be verse initial (2014, 162-163). Where Suzuki improves on Bliss is in his treatment of five-position half-lines, since he has a somewhat more constrained system of augmenting verses. He points to the uniquely high stress conditions in the initial position of type D verses which, he argues, allow a single metrical position to be filled by a stressed syllable along with one or more enclitic syllables (Suzuki 1992; 1996b, 23-35, 103-7, 110-2).

This explanation is itself not without problems (see note 56 below), but Suzuki's approach is more sensitive to the empirical facts of Old English verse than Bliss's. He rightly makes the attempt to motivate the occurrence of some verse patterns and the exclusion of others, and his rules, if accepted, do generally seem to make the better predictions than Bliss's about what verse forms occur and which do not. His system is also thoroughly synchronic, and he does not invoke the ad hoc preservation of historically conditioned anomalies, as Sievers did. Nonetheless, empirical problems do remain, most obviously in the assertion that the Db pattern SSws is as basic as type A, though it is actually a very rare type. Furthermore, the general nature of Suzuki's metrical rules is highly questionable. Russom (1998b) points out that there is a tension between Suzuki's principle of leftward prominence and verses of types B and C, which begin with dips. To make his derivations work, Suzuki invokes rules of promotion and demotion which introduce both dips that are underlyingly lifts and lifts which are underlyingly dips – Suzuki does not adequately address how the underlying system would remain recoverable to poets or audiences. Put another way, Suzuki's rules may arguably meet our criterion of accurately generating the verse forms found without overgenerating, but they appear to fail to satisfy a reasonable standard of psychological plausibility.

The problem is not just one of learnability, but also (relatedly) of economy.

Suzuki often connects metrical phenomena to linguistic features, but he gives, as he says, a very high degree of autonomy to the metre as an independent system (Suzuki 2014, viii). His work abounds with highly specific metrical rules, analogies, and derivations. Complex metrical structures exist prior to their matching with linguistic material (and the mapping rules are themselves not always entirely straightforward). Suzuki does make the attempt to motivate the various aspects of his theories, but the final result is vastly more elaborate than other current four-position approaches (see the following two sections), without a corresponding increase in explanatory power over these simpler formulations. On many individual points Suzuki's contributions to the study of Germanic metre are invaluable, but in terms of general theory the approaches of Cable and Yakovlev are clearly preferable expositions of the four-position framework.

1.1.6 CABLE

A rather different attempt to rigorously refine Sievers' approach has been undertaken by Cable (1974, 1991). Cable points to the four-position principle as the fundamental basis of the system above any other considerations: every verse must have four positions (prototypically syllables, in Cable's later view), which must be adequately distinguished from one another. Stress plays a role largely as a means to differentiate positions. Cable notes that Sievers' system requires two adjacent weak positions to be differentiated by stress: *ww* usually counts as a single expanded dip, and adjacent non-lift positions are distinguished by having one be a half-stress, *sw* or *ws*. He observes that this role of stress can render the five types wholly epiphenomenal: they need not be derived from underlying patterns or feet, but are simply the logical possibilities of how stressed and unstressed syllables can be combined to create verses with four distinct positions.

Beyond this, much of Cable's work has focused on the issue of adjacent stressed syllables, and their potential for stress clash. Traditional scansion was content to note that a verse like the following began with two stresses:

- (34) *bād bolgenmōd*
 'he waited enraged' (*Beo* 709a)

Cable (1974, 75-8) focuses on (34) as containing a stress clash, which he suggests might be rhythmically dealt with by subordinating the second lift somewhat (*S* $\bar{S}$ *ws* rather than *SSws*). This leads him to depart from Sievers and classify it together with type E verses:

- (35) *dēaðfæge dēog*
 ‘doomed to die he hid’ (*Beo* 850a)

Here the rhythm is traditionally held to be SswS. But for Cable, the specific levels of stress are less important than the fact that in both verses (as he scans them) the stress decreases across the first three positions and then rises to the last. He thus argues that the contour Ssws would serve for both (34) and (35), granting that the exact degree of stress filling the s positions is less important than the overall contour.

One of the key insights to grow out of Cable’s concern with stress clash is his account of why D* (normally SwSsw) should be the one and only five-position type allowed in the four-position system. He notes that not all unexpanded Da verses have the same structure, and the s position can be filled by a range of linguistic material (1991, 142):

Secondary element of a compound:

- (10) *helm eallwihta*
 ‘protector of everything’ (*GenA* 113a)

Long derivational syllable:

- (36) *lindhæbbende*
 ‘shield carriers’ (*Beo* 245a)

Short derivational syllable:

- (37) *fēond treddode*
 ‘the enemy stepped’ (*Beo* 725b)

He suggests that the problem of initial stress clash can be avoided in the latter two types by subordination of the second lift, since even a subordinated $\dot{S}^{21}$ would remain more prominent than the following derivational syllables. But in the first type the second lift (*eall-*) cannot help but clash with either the preceding stress (*helm*) or (if demoted to s) the immediately following half-stress (*wih-*). Instead, Cable proposes, a pause was inserted between the two main stresses, breaking them up and

21. Or s – I am not entirely sure whether Cable means $\dot{S}$ as a distinct *metrical* entity, or as a phonological notation for a level of stress metrically equivalent to s. The difference is not entirely trivial, and the latter view is probably the more theoretically rigorous, since it avoids positing unnecessary levels of metrical stress (partly avoiding the criticisms of Yakovlev 2008, 72; though the exact subordinations involved may sometimes remain a problem from a phonological perspective).

so avoiding the clash. This would give a pattern S!Ssw, with ! being Cable's symbol for a silent beat. This extra beat could then be filled by an unstressed syllable, still being part of the natural rhythm of the four positions rather than counting as an extra, fifth position (Cable 1991, 143).²² D* verses should be strictly limited by phonology, only occurring as variants of D verses like (10), with a secondary stress in the half-lift (the empirical adequacy of this claim will be discussed below in §1.2.5).

This strict limitation on (apparent) five-position verses offers a version of the four-position theory which avoids the problems of arbitrary appeals to tradition (as per Sievers), over-generation and the prediction of large numbers of unattested five-position types (as under Bliss), and relies on a simple metrical rule grounded in natural phonological phenomena (in contrast to Suzuki, whose account is otherwise generally similar to Cable's). This is not to say Cable accounts for every aspect of Old English metre perfectly, as he himself is the first to point out. His theory includes a restriction against the sequence xsS, which rules out unattested types such as wsSS and 'E2' SwsS (Cable 1991, 148-151). Of these, E2 is of the most concern to exclude, as it is easy to envision natural combinations of words that would produce this pattern (Cable gives the example **hilderinc hār*, a simple and syntactically unproblematic inversion of the attested *Beo* 1307a *hār hilderinc* 'grey-haired battle-warrior'). Cable does not fully motivate this exclusion, though he suggests that the sequence sS would be a particularly problematic type of stress clash. He appeals in part to a general linguistic preference for falling patterns in intonational contours (Ss) rather than rising ones (sS).²³ If we do grant that this contour was disfavoured, it is easy to see that it would be difficult to deal with the clash in this context: the second stress is too strong to be subordinated (the normal means of resolving stress clashes), nor is the first stress strong enough to justify a large pause to resolve the clash.

Despite some fully acknowledged details which are not entirely motivated, Cable's particular formulation of the four-position principle is a major step forward for this family of proposals. It roots the metrical system in basic facts of language, giving a theory to generate a large number of types and variants from

22. This suggestion was, as Cable acknowledges, made some time back by Max Kaluza (1911, 84f.). Cable takes Kaluza's suggestion and integrates it into a holistic view of Old English metre (and furthermore grounds this means of resolving a stress-clash in phonological theory).

23. I assume that under this perspective, heavy A2a patterns, SsSw, are acceptable because the fact that the s is part of a falling contour after the first S takes priority over any possible stress clash with the following S.

a basic pattern using simple and generally well-motivated rules. The patterns predicted tend to occur relatively frequently, and it can exclude most of those that are not found, or are found rarely enough to be suspect. Cable's theory, particularly as formulated in his second book on alliterative verse, remains a primary point of reference for the current state of the Sieversian tradition.

1.1.7 YAKOVLEV

A further important further step forward in Sieversian metrics has been made in recent years. In his 2008 doctoral thesis, Nikolay Yakovlev retains the four-position principle as the fundamental basis of the metre, and follows Cable in many (though not all) of his means of accounting for apparently deviant verses. His key innovation is to argue that metrically, there is no difference between a full lift *S* and a half-lift *s*, except for their ability to take alliteration. Rhythmically, they are both open to resolution, and can condition suspension of resolution. And, most importantly, two adjacent stressed positions, whether 'full' or 'half', can never be elided into a single one the way two adjacent weak positions can be. Yakovlev therefore does away with the notation *s*, and characterizes stress verses non-stress as a binary 'yes or no' property (2008, 74). Under this view, the metrical rules are easily stated as:²⁴

1. 'There are two kinds of metrical positions: a lift and a dip. The better terms would be the "strong" and "weak position".'
2. 'A verse may have four and only four metrical positions.'
3. 'Two dips may not be adjacent, as in this case they merge into a single dip.'

Yakovlev gives eight rhythmic combinations of *S* and *w* predicted by these rules, excluding any further patterns by rule 3, disallowing two *w* positions in succession. This requirement leads him to posit at least two *S* positions in every verse, but as an epiphenomenon, not as the fundamental two-stress rule so many past researchers have held it to be; as we will see in §1.2.3, in principle Yakovlev's system also allows verses with only one *S* position, and such verses do, in fact, occur. The exact list of the eight 'types'²⁵ is a secondary matter for Yakovlev, who

24. See Yakovlev (2008, 74), where these rules form items 16-18 of the chapter.

25. Despite Cable's apt comment that 'there are too many lists in Old English metrics' (2008, 397), I give Yakovlev's types for clarity: *SwSw*, *wSwS*, *wSSw*, *SSSw*, *SSwS*, *SwSS*, *wSSS*, *SSSS*.

regards this schematic presentation less as a guide to a verse's 'rhythm' than as a shorthand for how linguistic material is mapped onto metrical positions. He, for instance, would classify Sievers' A2a and Da as the same 'type':

- (38) wīg Hengeste
 'battle against Hengest' (*Beo* 1083a)
 SSSw (Cable SSsw)
- (39) swātfāh syrce
 'blood-stained mail-coat' (*Beo* 1111a)
 SSSw (Cable SsSw)

There is no need, in Yakovlev's view, to use different levels of stress to distinguish the various non-weak positions: they could not be elided together anyway, and so are perfectly distinct merely by virtue of having any stress at all.

Indeed, these verses are not meaningfully different from verses with weak positions realized by a single syllable:

- (40) Finnes þegnas
 'Finn's retainers' (*Beo* 1081a)
 SwSw
- (41) on twā healfa
 'on the two sides' (*Beo* 1095b)
 wSSw

The proper scansion in all cases is simply a matter of counting to four positions. The exact arrangement of strong and weak positions is only relevant when a weak position contains more than one syllable: otherwise the mapping is simply syllable (or resolved foot) to metrical position in all cases. The fact of 'strong' and 'weak' positions is not so much a property of the metrical units themselves, but of the rules for mapping linguistic elements onto positions.

An important consequence of Yakovlev's approach is to remove the special status afforded to the two 'lifts' because of alliteration. Traditionally the distinction between types Da and A2a has been bolstered by the difference in alliteration: both alliterate on the first syllable, but any double alliteration falls on the second position in Da, and the third in A2a. But as Yakovlev points out, this distinction goes,

I will argue below (§1.2.3.1) that a slight restatement of the rules for mapping weak syllables onto metrical positions will add wSww to the list of valid 'tyoes', which also provides a concrete demonstration of how the presence or absence of this or any other type depends entirely on the underlying principles used to generate it.

with very few exceptions, hand in hand with the morphological structure of the verse; the most prominent lexical heads favour alliteration. Since the alliterative patterns are lexically predictable, Yakovlev sees no need to specify the alliterative potential of different S positions as most previous theories have done. This follows coherently from Yakovlev's general principles, and reinforces the point that the set of particular arrangements of S and w positions is not the core of his theory.

Despite the differences highlighted here, a very large portion of Yakovlev's theory is explicitly based on Cable's approach, and it seems fully justified to treat these theorists as allied representatives of the same tradition. Aside from Yakovlev's acknowledged heavy debt to Cable's observations and formalizations (2008, 60-4), Cable has noted of the strength of some of Yakovlev's insights: '[Yakovlev's] alternative proposal is clearly superior' (Cable 2009, 264). However, despite Cable's courteous comment, whether or not Yakovlev's changes are actually in every way an improvement is not clear. In general, I take Cable's work to be the primary representative of this tradition, but I will take full note of Yakovlev's revisions wherever they are distinctive and relevant.

1.2 SYLLABLES AND WORDS

In his 1991 book presenting a revised version of his theory, Cable lays particular emphasis on *syllables*, rather than abstract metrical positions, as the basis for Germanic verse (1991, 9-16, 35; see also Cable 2009, 264). That is, he presents the half-line not as an assemblage of abstract, purely metrical entities which are filled with linguistic material, but instead envisions a metrical unit built up from linguistic elements, where linguistic and metrical entities bear a clear, if inexact, relation to each other. This is important on general principle (see the works by Kurylowicz and Kristján Árnason referenced above), and also potentially in guiding comparative investigations of Old English metre.

Interestingly, the Cable-Yakovlev development of the Sieversian tradition shares a great deal, both in explanatory power and the evaluation of many specific details of metre, with another recent attempt to describe Germanic metre: the WORD-FOOT THEORY developed by Geoffrey Russom. The word-foot theory, as the name implies, grounds the metrical system in a different basic linguistic element, the word. The central principle is that every half-line is prototypically made up of two words, though either word may be replaced by a word group which has the same phonological shape as a single word (see immediately below, §1.2.1).

This section consists of a critical comparison of Russom's views with the Cable-Yakovlev iteration of the four-position theory. Although it will prove difficult to conclusively make a decision between the two approaches on the basis of Old English evidence alone – each accounts for a great many interesting facts, while neither is completely free from problems – it is useful to make some attempt. Aside from any goals of determining which is the 'better' theory, the process of comparison is revealing about the facts of language in Old English verse, whose patterning is the only final evidence in metrical argumentation.

1.2.1 THE WORD-FOOT THEORY

In essence [Old English verse] is made by taking the half-dozen commonest and most compact phrase-patterns of the ordinary language that have two main elements or stresses... Two of these, usually different, are balanced against one another to make a full line. (Tolkien 2013, 227-228)

This attempt to summarize the rhythmic essence of Old English metre for a popular audience²⁶ concisely articulates the impression of a number of metricists that the variety of rhythmic types found in the verse ultimately have their basis in natural speech. Such an intuition underlies the occasional attempts to see Old English verse as 'the spoken language rather tidied up' (Daunt 1946, 64; for a refutation of this view which still acknowledges the linguistic grounding of verse, see Fulk 1992, 27-28).

Geoffrey Russom's word-foot theory, first presented in his 1987 *Old English Meter and Linguistic Theory* and developed further in *Beowulf and Old Germanic Metre* (1998a),²⁷ rests on a similar idea, and it can reasonably be seen as the first rigorously theoretical exposition of this older 'speech rhythm' hypothesis – though it should be noted that Russom's theory differs in seeking the foundation of the metre in the rhythm of the word rather than the phrase. Aside from Russom's own publications, Thomas Bredehoft (2005) has developed a somewhat modified form

26. Tolkien's comments come from a BBC broadcast entitled *Anglo-Saxon Verse*, broadcast on 14 January 1938; the audience was therefore general, and this broadcast represents an attempt to convey the essentials of the metre without technical detail. Similar sentiments, somewhat elaborated, can be found in the work of Tolkien's student, Alan Bliss (1962, 4-5). Tolkien's view of Old English metre on a technical level was fundamentally Sieversian, as is clear from Tolkien ([1940] 1983, 61-71), a work which remains among the more widely-read introductions to alliterative metre among non-specialists.

27. For Old English, see also Russom 1995, 1996, 2001, 2002a, 2002b.

of the word-foot theory. Although I will touch on Bredehoft's version of the theory where appropriate, I focus on Russom's original (and more rigorous) formulation.

The fundamental principles of the word-foot theory are simple enough to state, but much of the real work of the system comes from the interactions of various principles (specifically: metrical rules, the Old English linguistic system, and purportedly universal preferences in versification). This makes the theory hard to summarize or simplify, and in this section I simply highlight some key aspects, and touch on particular points of strength or weakness as a preparation for a more detailed comparison with the four-position theory below.

As I said above, Russom points to a distinctive type of foot as the basic building block of alliterative verse (cf. §1.1.2). His feet are different from those of earlier metricists, for whom feet were mainly an intermediary step between metrical positions and verses (cf. Sievers 1893, Kaluza 1911, and others), and owe rather more to Heusler's *Kolon* or *Atemgruppe* (1925, 55) and Bliss's breath group (1962, 36-39). Russom defines his feet in a very innovative way, as the prosodic equivalent of a word. That is, each foot may be filled either by a single word (whether a simplex or a compound; elements of compounds may also sometimes count as independent feet), or by a word group which has the same prosodic structure as a word. For example, *gōdum*, in (7) above, is a Sw foot, the first foot of its verse; a two word phrase like *sār and* would fill out the same foot type, Sw:

- (7) **gōdum** dǣdum
 'with good deeds' (*Wald* I.23a)

- (42) **sār and** sorge
 'pain and sorrow' (*GenA* 75a)

The filling of a single foot by multiple words is called a BRACKETING MISMATCH, following Kiparsky (1977, 196), implying that there are linguistic word boundaries not aligned to metrical boundaries.

Left simply at that, there would be virtually no constraints on Old English metre at all. Russom restricts the possible range of verses by imposing limits – motivated, he argues, as the natural consequences of this verse mode or by general principles – on the possible combinations of feet into verses.²⁸ The most important limitation

28. An important general limitation on the system is the principle of metrical complexity, which must be present in some form in any robust theory of Germanic metre (Russom 1987, 47-58; 1998a, 5-8). That is to say, all adequate theories recognize variations and licences of some sort which can derive more complex versions from simpler, more frequent patterns. Since any given licence or variation adds to the complexity of the verse, poets tended to avoid combining too many in a given half-line.

is the identification of the pattern Sw/Sw (cf. *gōdum dāedum* above) as normative, since the word pattern Sw is the most basic in Old English (Russom 1987, 30). This establishes a basic weight to the verse. Given this, exceptionally long word-feet are avoided if they might resemble an entire verse on their own. For instance, the compound *middangeardes* ‘of middle-earth’ could in theory serve as a single word-foot (Ssws) which would be paired with another word-foot to form a half-line, but Russom (1987, 26f.) argues it would never be so used because it overlaps with the basic two-foot pattern Sw/Sw.

The foot patterns Russom does use range from one to four syllables, including ones based on unstressed words (1987, 12-13). Thus w (cf. *ond* ‘and’) and ww (cf. *oppe* ‘or’) are both basic word-feet, alongside stressed S (*word* ‘word’), normative Sw (*wīte* ‘punishment’), and long Sww (*ealgian* ‘defend’). Word-feet with secondary stresses are also found, formed on the basis of compounds: Ss (*gūð-rinc* ‘battle-warrior’), and the trisyllabic Ssw (*wīg-cræftig* ‘mighty in war’) and Sws (*middangeard* ‘middle-earth’). Russom (1987, 26-27) also allows one word-foot with four syllables, the pattern Swws, though words of this shape are rather few and far between (see §1.2.2).²⁹ An important feature of the system is that unstressed prefixes, such as the common *ge-*, are treated as proclitic elements rather than part of the word as such, which means that there are no rising feet of the shape ^xwS from words like *gesīð* ‘companion’ (Russom 1987, 8-9).³⁰ Further foot patterns are not found either because there are no Old English words of the right shape, or because they could only be derived from very large compounds which would always be more naturally decomposed, by poets and audiences, into groups of word-feet.

It is important to emphasize that the means Russom uses to get his foot patterns from actual words involves abstracting certain features, namely syllables and stress levels, while other features of words are ignored. For instance, while it can matter if the syllable in a word-foot is long or short, it does not matter whether this length comes from a long vowel or from a closed syllable: thus *wordum* ‘words (DAT.PL)’ and *dāedum* ‘deeds (DAT.PL)’ are metrically equivalent, while *winum* ‘friends (DAT.PL)’ is not. Thus Russom works with the same units of S, s, and w (as I notate them) as traditional research in the Sieversian tradition,

29. Bredehoft suggests that the word-foot inventory should be expanded to include an additional trisyllabic unstressed foot www (cf. words like *nænigne* ‘none’), and even the tetrasyllabic foot wwww (cf. *nohweðere* at *GenA* 1456b) (2005, 24; 128, n. 7).

30. The most significant change in Bredehoft’s system is that he does allow certain types of rising feet (Bredehoft 2005, 25-26; 130, n. 17). Pace Fulk (1992, 158, n. 11), this complicates the system considerably without much clear gain. On the linguistic implications of the exclusion of prefixes, see §5.2.1.

though their systematic place is different: they stand intermediate between feet and verses, whereas Sievers understood his feet to be intermediate between positions and verses. This is in many ways a strength of the word-foot theory, since it allows Russom to draw on and contribute to the rich Sieversian tradition of descriptive research which has noted so many interesting distributions and correlations of metrical features, many of which are not even describable without some such notational framework.

There is a danger that if the metrical positions are too much in focus, then the word-feet themselves might be sidelined to the point where they are unnecessary (cf. Cable 2008, 396): why should restrictions be formulated with reference to feet, if it is the positions and syllables which are really relevant? A potential illustration of this issue can be found in the constraints Russom proposes on the combination of word-feet into verses. Russom works with a general restriction on verses that depart too much from the normative weight of the Sw/Sw pairing (Russom 1987, 28-29): one-position feet (S, w) must be paired with heavy feet of three or four syllables (Ssw, Sws, Sww, Swws), and vice-versa. Russom grants, as a prominent exception, that the basic Sw foot may be followed by the simplest heavy foot, Ssw, to give the well-known D* pattern Sw/Ssw.

At first glance, such a constraint looks like an ad hoc way of introducing the four-position principle into the word-foot system by disallowing foot-pairings that would give more or fewer metrical positions (only without the systematic motivation of Cable for allowing D* verses). Indeed, Bredehoft seems to take these constraints in this way, and in his reformulation of the word-foot theory he simply stipulates that all half-lines must have at least four syllables (2005, 27). Bredehoft does not attempt to explain or justify this, presenting it merely as basic metrical rule not connected to any other aspect of his theory.

Russom, however, does attempt to motivate his principles within the context of his own theoretical framework rather than resorting to such stipulative rules: aside from his appeal to the normative influence of the Sw/Sw type, he argues that lighter verses are more concretely prohibited by OVERLAP AVOIDANCE. Pairings like w/w, S/w, and S/Sw would be much more naturally interpreted as the foot types ww, Sw, and Ssw, all of which could easily be filled by word-groups, w.w, S.w, and S.Sw. There is no need to state any further prohibition in terms of metrical positions to rule out such underweight verses, and while word-feet are built from syllables (and phonological feet), the important constraints of the system all apply to the word-feet themselves. It might still be objected that the four-position requirement is so

evidently fundamental to Old English verse that it should be given a more direct place in the system. As it happens, some flexibility on this point will turn out to be useful when we come to Old Norse, which does permit some three-position verses (cf. ch. 3).

An important further issue in verse formation concerns the order in which feet are combined. Russom and Bredehoft both assume that the natural ordering of unbalanced feet³¹ is light-heavy, with the heavier foot second (Russom 1987, 28-31; Bredehoft 2005, 28-30). For example, the following verses can be viewed as close variants, each with an S and an Ssw foot:

- (10) helm eallwihta
 ‘protector of everything’ (*GenA* 113a)
 S/Ssw
- (43) meredēaða mǣst
 ‘greatest of sea-deaths’ (*Ex* 465a)
 Ssw/S

The first, with the shorter foot first, is more basic (and more common), and the second is regarded as a REVERSED (and therefore rarer) verse.³² The complexity created through reversal is meant to be very high, and the more unusual heavy feet Sws and Swws cannot stand at the beginning of a verse – reversing these more complex feet would, it seems, be a step too far in metrical complexity, which explains why Old English does not tolerate ‘E2’ verses like **hilderinc hār* (Sws/S). The effects of normative word order and the restrictions on reversal are necessary but somewhat under-theorized parts of the word-foot system; see further §5.2.2.

One last feature of the word-foot theory should be mentioned before turning to a more detailed comparison with Cable’s theory: the use of extrametrical syllables. Most theories of Germanic metre allow for a limited form of anacrusis, an extra syllable or two at the beginning of (some) verses under certain conditions (requiring double alliteration on the on-verse, for instance). Russom allows extrametrical unstressed syllables much more freely: they can occur before any word-foot, subject to restriction only insofar as they contribute to general metrical complexity or could be confused with unstressed word-feet (1987, 19-20). These principles suffice, in Russom’s view, to limit the traditional sort of anacrusis fairly strongly,

31. A verse is unbalanced when one of the feet is lighter or heavier than the normative Sw. This includes longer like Ssw, the short feet S and w, and also the feet Ss and ww, which have the standard number of syllables but deviate from normative stress.

32. Bredehoft uses the equivalent term INVERTED.

but many sequences previously analysed as containing ‘expanded dips’ are instead held to contain extrametrical material. For instance, the following verse would be scanned by Cable as type C with an expanded dip, wSsw:

- (44) ne seah ic elþēodige³³
 ‘never saw I outlanders’ (*Beo* 336b)
 wwwSsw

Russom views the final word as a single word-foot of the shape Ssw, preceded by a light foot. Since all three unstressed syllables cannot belong to one unstressed word-foot (there being no www words available on which to base such feet),³⁴ one or two of them must be extrametrical: (w)ww/Ssw.³⁵

With the basic workings of the word-foot theory in mind, we can compare Russom’s and Cable’s theories in the context of a number of specific verse-types. I do not follow the sequence implied by Sievers’ alphabetic labels, and instead focus on a series of key issues that illustrate the kinds of constraints of we find in Old English verse. I do not intend to provide a definitive answer as to which theory is better in this section; evaluation will come later, but for now the focus is on the linguistic elements which a comparison of theories brings to light: limitations on unstressed syllables, stress (either as a constituent of the verse or a factor in licensing metrical variations), and alliteration.

1.2.2 TYPE B

I begin this review of metrical patterns with those verses grouped together by Sievers as type B, with the rhythm wSwS. Restrictions on this verse pattern, particularly with regards to the second dip, are crucial to all modern approaches to scansion, though in different ways for different theories.

33. The alliteration is on the vowel. The grapheme <ig> stands for the glide /j/ and does not constitute a distinct syllable.

34. Although Bredehoft works with www and wwww feet, he still retains Russom’s system of extra-metrical syllables, which are often necessary verse internally. Note that he also allows ws feet, meaning that he would scan this verse quite differently as ws/(w)Ssw (2005, 27).

35. In this sort of context it is not always clear which syllables belong to light feet and which are extrametrical. Russom argues that light feet are often supplemented with extrametrical syllables, since such a string of unstressed syllables (three in this case) is too prominent and always signals that one of them is a word-foot. The scansion I have provided assumes that the verb is the most prominent (semantically, if not prosodically) of these unstressed words, and therefore serves, together with its accompanying subject pronoun, as the metrical word-foot, with the adverbial *ne* being the extrametrical element.

Sievers' original observations on the type were very brief: he divided the half-line into two rising feet, wS/wS, and noted that the second dip was not freely expandable, being normally limited to just one or two syllables (1893, 33f.):

- (45) se þe mon**na** mǣst
 'who of men most' (*Wid* 2a)
 ww**S**wS
- (46) oft æt hilde gedrēas
 'often I slew in battle' (*Wald* I.4b)
 ww**S**wwwS
- (47) hē þe æt sunde oferflāt
 'he who outmatched at swimming' (*Beo* 517b)
 www**S**wwwS

'B3' verses like 47, with three unstressed syllables in the second dip, are extremely rare and can often be fairly easily explained away one way or another; Sievers, for instance, argues that the final vowel of *sunde* was elided before the following *o*- (1885b, 241). This limitation is taken as real by both Cable (followed by Yakovlev) and Russom, and each of them cites it in support of his own theory.³⁶

As mentioned above, Cable's revised theory points to the syllable as the fundamental building block of Old English metre, giving the rather abstract notion of the 'metrical position' a clear linguistic basis. In its most essential form, Cable argues, the Old English half-line consists of four syllables, each distinguished from its neighbour by its stress level (1991, 9). This proposition is, as Cable says, 'not very obvious' at first glance, since Old English verses clearly vary considerably in terms of syllable count, even accepting resolved sequences as syllable equivalents. This is chiefly on account of the 'expanded dips' (or, as Cable terms them, 'strong dips') which are found in roughly half of the verses of *Bēowulf* (11).

The chief restrictions on strong dips that Cable notes are: (a) that there can only be one in a given verse, and (b) that they are limited to one of the first two metrical positions. Taken as valid generalizations, this would imply that the strong dip would be a fairly strictly limited means of allowing some deviation from the basic four syllable principle. Only one such deviation would be tolerated, and they would all be limited to the first part of the half-line, in keeping with what Russom

36. Naturally Sievers' foot division is followed by neither Cable (who does not use feet) nor Russom (as they are of the rising sort that he does not recognize). It has been pointed out that Sievers divides his feet in extremely awkward places in most B (and C) verses; in all of the examples here it would fall between the root and ending of the first stressed word.

calls the PRINCIPLE OF CLOSURE, a probably universal inclination to regulate a metre more tightly towards the end of the line (Hayes 1983, 373; Russom 1998a, 39).

The strongest empirical challenge to Cable's generalization come from the type B verses with a disyllabic expanded dip, like (46). In such verses (Cable counts 171 in *Bēowulf*; 1991, 12), we seem to have two expanded dips in the same verse, including one in the third metrical position – thus violating both of Cable's restrictions at once. Cable notes that the expansion of the second dip is, however, not entirely comparable to that of the first dip. Firstly it is, as already mentioned, limited to just two syllables. Beyond this, in a significant majority of these late strong dips, the second syllable comes from a verbal prefix, such as *ge-* in example (46) (14). These verbal prefixes are among the lightest elements in Old English, and are elsewhere often discounted as extrametrical – most notably in anacrusis (Cable 1971, 98-100).³⁷ Yakovlev calls this the PREFIX LICENCE, a single rule which allows the morphological class of light prefixes (including the negative particle *ne*) to be counted as extrametrical where necessary (2008, 59-60).³⁸ Even discounting prefixes, there are still some 36 verses in *Bēowulf* with a long late dip, but Cable regards this residue as too small to stand against his general principles, noting that heavier elements sometimes stand in verse-initial anacrusis as well. These three dozen exceptions include a few verses where both syllables of the dip belong to the preceding word, which are particularly difficult for Cable:

- (48) wæs him Bēowulfes sīð
'Beowulf's quest was to him' (*Beo* 501b)

It seems difficult to explain this dip as being any variety of anacrusis, since the unstressed syllables all belong to the previous word. However, this verse is somewhat problematic in general, as the second element of the name *Bēowulf* must here be taken as filling a dip, *w*, while in other contexts such a medial syllable serves as a half-lift, *s* (Russom 1987, 35; 2001, 42f.). There are not many verses like this where all the syllables in the dip belong to the first word – just four in *Bēowulf* according to Bliss (1962, 53; cf. Fulk 1992, 211f.) – and two of them are used to accommodate a proper name, which may have allowed a certain relaxation

37. It is perhaps worth noting that in *Beo* 517b (47), two of the three syllables in the dip come from the verbal prefix *ofer-*, an element which is also found in verse initial anacrusis. Thus even without Sievers' elision of the vowel this verse may not be a problem for Cable.

38. Cf. also the rules for 'stressing' prefixes proposed by Kaluza (1894, 38-40 (§27); 1911, 60f. (§51)).

of metrical norms.³⁹ Bliss's count also ignores three verses where the dip is filled by the two unstressed syllables of *Ēotena* or *Ēotenum* 'of/for the Jutes', which he plausibly takes as representing *Ēotna*, *Ēotum*.⁴⁰ Whether or not the residue of verses unexplained by Cable is high enough to discredit his theory must be a matter of judgement; though it is worth noting that in a wide view 99.4% of the total verses in *Bēowulf* do conform to Cable's two rules regulating strong dips (1991, 14).

This interesting metrical regulation is given quite a different interpretation under Russom's theory. He would scan all type B half-lines as an unstressed w or ww foot (possibly supplemented by further extrametrical syllables) followed a stressed foot modelled on a compound. The normal, 'unexpanded' B verses have a second foot with the pattern of *blondenfeax* 'grizzled', Sws. By the normal rules of the theory, a word group can readily occupy this foot, so that these verses both scan as ww/Sws:

- (49) wolde blondenfeax
 'the grizzled man wished' (*Beo* 1791a)
- (50) seopðan Grendel wearð
 'after Grendel became' (*Beo* 1775b)

Russom also allows a tetrasyllabic word-foot of the shape Swws, modelled on compounds like *sibbegedriht* 'band of kinsmen' (1987, 13), and the presence of 'expanded' B verses is attributed not to extrametrical syllables (permissible only between, not inside word-feet), but to the use of this word-foot: (46) and (48) are both scanned as ww/Swws. It is the absence of any foot with more unstressed syllables, *Swwws or longer, which explains the inability of this 'dip' to be expanded further (1987, 24).⁴¹ Russom also sees in this word-foot structure a reason for the frequent use of weak elements like *ge-*, which led Cable to see them as internal anacruses: unlike most long dips, which are formed by using independent extrametrical words,

39. Along with *Beo* 501b, there is also *ic on Higēlāce wāt* (*Beo* 1830b), where scribal error has been suspected on grammatical as well as metrical grounds (Fulk, Bjork, and Niles 2009, 218f.). The other two verses Bliss notes are *þæt ic ænigra mē* 'that I for me any' (*Beo* 932b) and *ne bið þē nænigre gād* 'there will not be any lack' (*Beo* 949b). The second of these verses also shows apparently faulty concord and has often been emended (33, 174).

40. The verses are 902b, 1088a, and 1141a. Yakovlev suggests, somewhat tentatively, that the root syllable of this word was short, *Ēotena*, *Ēotenum*, with resolution leaving only one syllable for the dip in each case (2008, 60, n. 28). But it is more likely that we have syncope in the genitive, **Ēotna*, and a scribal substitution of <eotenum> for *Ēotum* in the dative, through confusion of the tribal name 'Jutes' and the poetic word *eoten* 'giant', dative plural *eotenum* (Fulk, Bjork, and Niles 2009, 171, n. 902^{b-4a}; Hogg and Fulk 2011, 45, n. 5; 53).

41. Thus Russom must follow Sievers in assuming that verses like *Beo* 517b, with its apparent Swwws foot *sunde oferflāt* has actually only two unstressed syllables; see above.

these unstressed syllables are attempting to replicate the rhythm of very weakly stressed word-medial syllables. This leads to a preference for the lightest elements, such as proclitic prefixes, whereas light feet and extra-metrical words are more open to normal unstressed words with more of an independent identity (conjunctions, pronouns, verbs, etc.; Russom 1996, 34; 2001, 48f, and n. 8).

From an empirical standpoint, each of the two theories has slightly different strengths and weaknesses. The 36 examples where somewhat heavier material is used are not problematic for the word-foot theory, since the preference for the lightest words is just that: a preference, and not a categorical rule. For Cable, they are real exceptions. If Cable's theory is taken up (and it does indeed have a very high general applicability) then a handful of verses that 'break the rules' must simply be tolerated, or else emended away, often purely *metri causa*. No such discomfort is found for the word-foot theory, which, if its premises are granted, explains the patterns of attestation for type B very straightforwardly.

On the other hand, the linguistic grounding of the Swws foot in compound words, central to Russom's scansion, needs some defence, both for 'B2' verses and for 'Db2' half-lines like:

- (51) *sēon sibbegedriht*
 'to see the band of kinsmen' (*Beo* 387a)
- (52) *swefan sibbegedriht*
 'the band of kinsmen sleeping' (*Beo* 729a)

As it happens, these two verses, with their final compound *sibbegedriht*, are the only relatively clear example of a Swws foot in *Bēowulf* expressed by a single word. Most Db2 and all B2 verses in that poem involve bracketing mismatches, with word groups rather than single compounds filling out the pattern Swws.

The most recent editors of *Bēowulf* have cast some doubt on the legitimacy even of *sibbegedriht*, supposing that the manuscript reading is a scribal substitution for **sibgedriht* (Fulk, Bjork, and Niles 2009, 329, Appendix C.23). In other poems, the same compound is found as *sibgedriht*, as in:

- (53) *eall sēo sibgedriht*
 'all the band of kinsmen' (*Ex* 214a)

So also at *Phoen* 618 and *GuthB* 1372. Certainly these other forms do raise the possibility that *sibbegedriht* is incorrect, but they hardly demand it. The editors' motivation to emend comes instead primarily from their interpretation of a metrical constraint on poetic compounds noted by Terasawa (1994, 8-15). Terasawa

observed that compounds like **hilde-fruma* ‘battle chief’ are avoided by Old English poets, although the minimal variant *hild-fruma* is securely attested. Since words of both structures are found in prose, Terasawa proposed a purely metrical constraint against poetic compounds with the shape Sw-šw (1994, 8, 11). This constraint seems to be both valid and interesting, but the editors of *Klaeber’s Beowulf* appear to be mistaken in trying to draw *sibbegedriht* into its scope. It is true that this word has the nearly same quantitative pattern as the disallowed sequence **hilde-fruma* (long-short-short-final), but the stress pattern is very different from the words discussed by Terasawa. However Terasawa’s law is motivated (on which see §2.4.4), it clearly has to do with the potential resolvability of the final two syllables. Since there is no question of the unstressed prefix being resolved with the following stressed syllable in *-gedriht*, Terasawa’s rule provides no evidence that $\bar{S}w-\check{w}-\bar{s}$ compounds are illegitimate (nor does Terasawa himself ever imply this).

Fulk (2007a, 312-7) offers further arguments against verse compounds with the shape Swws, including *sibbegedriht*. He points out that in two other words, *sibgebyrdum* and *sibgemāgas*, the shorter form *sib-* appears in a compound before *ge-*, which he takes as evidence that the longer form *sibbe-* was avoided before prefixes. However, Fulk’s examples just show that the variant *sib-* is more common across the board, not that there was any sensitivity to what followed.⁴² What is more significant is that *sibbe-* is so rare in general: it is the *lectio difficilior*, and its isolated occurrence in *Bēowulf* (found in a late manuscript, but almost certainly copied from much older sources) is perhaps more likely a sign of its authenticity than grounds for emendation.

More generally, Fulk argues that clear Swws compounds are more common in prose than poetry, which would suggest that poets actually avoided them (2007a, 315f.). Fulk finds only five further Swws compounds in the poetic corpus,⁴³ but he

42. Indeed, there is at least one further poetic counterexample to this supposed conditioning: the pair *sibgesihþ*, *sibbegesihþ* ‘Jerusalem, visio pacis’. The form *sibgesyhþe*, attested only in prose, has been recognized as a genuine compound, glossing the Latin simplex *Hierosolime* (*Ald* VI 1742). The single example of *sibbegesihþ* is found in verse, at *Christ* A 50a, where it is again equivalent to *Hierusalem* in the following half-line. Most editors have printed this as a phrase rather than a word, but we should at least seriously consider the possibility that we have another compound precisely parallel to *sibbegedriht*, both in phonological contour and morphology. For another possible compound that has generally been analysed as a phrase, see Russom (1987, 91f.) on *enta-geweorc*. If accepted as a compound, this would provide another example of a non-mismatched Swws foot in *Bēowulf*; cf. §1.2.5.2.

43. These are *hēafodgerīm* (*Jud* 308b), *pūsendgerīm* (*MSol* 291b), *ārendgewrit* (*Met* 1.63a, *CPPref* 1a), and, though Fulk is more doubtful of these, *inwitgecynd* (*MSol* 331b) and *pēodengedāl* (*GuthB* 1350a). The last in particular should certainly be admitted. The grounds for assuming hypercorrect non-parasiting in *pēoden-*, either here or at *Beo* 1675a and 1871a, are flimsy, based on dubious

is able to compile a non-comprehensive list twice as long from prose. Yet many of these examples, both from prose and poetry, have a relatively heavy second syllable (either a reduced lexical element, or a trimoraic derivational syllable): *hundred-*, *ēored-*, *ræding-*, *cēapung-*, *hālsung-*, *þūsend-*, *ārend-*. These would more readily fill out SswS feet than Swws. Of those Fulk lists as occurring in prose only, just *mōn-aðgecynd* would correspond directly to a Swws foot (*hiredgerēfa* and *hēafodgeāde* have suitably light second syllables, but both words are inherently pentasyllabic and so are not immediately relevant to type B2). This means that the pattern is, while still rare, actually somewhat more common in verse, with *hēafodgerīm* and *þēodengedāl*, and if valid *sibbegedriht*, *sibbegesihþ*, and *entageweorc*. There are no grounds for seeing a specifically poetic avoidance of Swws compounds.

It is also worth noting that the number of Swws compounds would have been bolstered over time through parasiting (the syllabification of resonants). The linguistic change (or changes, since not all parasited forms need have arisen at the same time) in question was very early, predating even the earliest poetry, although the conservative language of poetry preserved earlier, unparasited values in many words for a very long time. The slow infiltration of parasited forms from daily speech into poetry can be seen already in *Bēowulf*:

- (54) *aldorbealu eorlum*
‘life-harm to noblemen’ (*Beo* 1676a)
- (55) *aldorlēasne*
‘lifeless’ (*Beo* 1587a, 3003a)
- (56) *scolde his aldorgedāl*
‘his separation from life ought (to be miserable)’ (*Beo* 805b)

In (54), *aldor* must still be scanned with its historical value of **aldr*, but the newer disyllabic form is required in (55). In an early poem like *Bēowulf*, poetic compounds are much more likely than not to preserve unparasited forms, so the final foot of (56) is probably still Sws rather than Swws (Fulk 1992, 87-91, §§94-8). But as parasited forms became more ubiquitous, even in poetic speech, such feet would have been transformed into the form Swws, and it is not difficult to compile a short list of such compounds from poems conventionally dated from the 9th century on:

- (57) *ond þā wintergerīm*
‘and that count of winters’ (*El* 654a)

theoretical assertions about Old English metre which make insufficient distinctions between D* verses with and without poetic compounds (see below, §1.2.5.2).

- (58) þonne eall þæt mǣþpumgesteald
 ‘than all that treasure-hoard’ (*Jul* 36b)
- (59) ne wintergeweorp
 ‘nor snowfall’ (*Phoen* 57a)
- (60) hē hafað sundorgecynd
 ‘he has a nature apart’ (*Pan* 30b)
- (61) wæs wintergeteles
 ‘was of the count of winters’ (*CEdg* 14a)

Some potentially suitable parasited compounds are also found in inflected forms in other metrical contexts:

- (62) cumbolgehnāstes
 ‘clash of banners’ (*Brun* 49a)
- (63) wǣpengewrixles
 ‘exchange of weapons’ (*Brun* 51a)

The scarcity of compounds like *sibbegedriht* and *þēodengedāl* may really only be a problem for the very earliest stage of Old English poetry, namely the style represented by *Bēowulf* in which most of the poetic vocabulary still preserves non-syllabic resonants (at a rate of 4:1 in that poem; 83f.). This early stage may not actually have been a terribly prolonged one. In earlier Germanic, compounds often kept their stem vowels in composition, and at least in Gothic these medial vowels could be retained well after the same stem vowels were lost word-finally (Braune 2004b, 89f. (§88a)). In Old English, the frequent *a*-stem formant **-a-* had been lost long before in West Germanic, but the *ō-*, *u-*, and *i-*stems retained their vowels much longer, until high vowel deletion hit (perhaps rather less than a century before the earliest poems). Parasiting of final resonants probably followed fairly soon after these apocopes, and the oldest glossaries already have, e.g., *bebir* ‘beaver’ < **bibru-* (*ErfGl* 272; alongside *bebr*, *EpErf* 399) and *sculdur* ‘shoulder’ < **skuldru* (*ErfGl* 963; cf. Pheifer (1974, lxxviii (§67))). This means that although the conservative, poetic language of *Bēowulf* probably would have had *a* Sws forms such as **wintrgerīm*, both the earlier **wintru-gæ-rīm* and everyday, parasited *wintergerīm* would have had the longer Swws pattern (cf. Whitman 1993, 93-7). While we should expect word-feet to respond to linguistic changes, the window in which Swws compounds were at their rarest (they were never absent) may not have been long enough to cause any deep changes in such a conservative tradition.

It remains true that at any point in the attested Old English tradition, the Swws foot serves, to an even greater extent than the routinely mismatched Sws foot, far more to accommodate phrases rather than words. On the other hand, it is a core part of the word-foot theory that the set of available foot shapes is determined by a balance of factors, with naturalness, utility, overlap concerns, and tradition all playing a part. This makes it difficult to assess how problematic a more weakly justified foot pattern is for the theory as a whole. Swws feet alone can hardly be a decisive factor one way or another: if one has accepted the basic premises of the theory, then the place of the foot can be explained; if one is inclined to reject the theory, then the relatively slight linguistic basis for the pattern should be a contributing rather than a decisive criticism.

Both the modern four-position and word-foot theories give interesting theoretical significance to a phenomenon – the limit on expanded B half-lines – which had before been simply noted as an observational fact. Whether the specific explanations for this limitation support a syllable- or word-based account depends on what one regards as more problematic: non-anacrustic expanded dips, such as in *hē þæs Bēowulfes sið*, or the slender basis for the word-foot Swws.

1.2.3 TYPE C

In Sievers' typology of verses, he saw two full lifts in his type C: wSSw, or more accurately, with his foot division marked, wS/Sw (1893, 31-34). Although this scansion has remained a central aspect of much Sieversian research (Bliss 1962, 53f; but cf. 63-5), it has never gone completely unchallenged. Max Kaluza objected to the rising foot wS categorically, viewing type C as well as D as made up of a one-position foot followed by a three-position foot (1911, §§62-64). John C. Pope independently made a similar observation in his influential book (1966, 41, 65-79); Pope particularly emphasized that the second lift should be subordinate to the first, as is the standard view in type D, giving a basic rhythm of w/Ssw.

This subordination seems well supported by the linguistic material which is normally found in C verses. Very often the second lift is filled by the second element of a compound (whether short or long), or even more weakly by a derivational syllable:

- (64) ofer hronrāde
 'across the whale-riding' (*Beo* 10a)

- (65) in geārdagum
 ‘in ancient days’ (*Beo* 1b)
- (66) hū þā æþelingas
 ‘how those noble ones’ (*Beo* 3a)

This sort of subordination is an essential part of both Cable’s and Russom’s theories. For Cable, the pattern wSSw would produce a stress clash, and so a non-clashing pattern Ss, echoing (and often filled by) the stress contour of compounds like *hron-rād*, is used instead to distinguish the two medial lifts (1991, 143). The pattern sS is precluded in the first instance because of Cable’s definitions of secondary and tertiary stress, which only arise in compounds and derivational syllables (139). This analysis of type C as wSSw is an essential part of Cable’s views of stress clash and the ways that metrical positions are distinguished, and very elegantly folds a long-standing empirical observation into the four-position model.

For Yakovlev, the empirical observation that the second stress is usually lower has to be taken as a secondary phenomenon, caused by the language and completely devoid of metrical significance. Since stress of any sort keeps a metrical position distinct, it is irrelevant whether it is linguistically S or s – both metrically S in his view. That a linguistically subordinated stress should predominate is, under Yakovlev’s view, simply a result of the linguistic possibilities for achieving adjacent stresses.

For Russom, the significance of type C lies particularly in his commitment to Kaluza’s old observation that Germanic did not make use of a rising foot wS, and his objection to Sievers’ scansion as wS/Sw (Kaluza 1911, §63; Russom 1987, 23). This follows, Russom argues, from the nature of unstressed prefixes in the earliest Germanic, which had the nature of separate proclitic particles rather than essential parts of the word,⁴⁴ precluding them from contributing to basic word-foot patterns. From this it follows that the first foot must consist simply of the first dip (most frequently disyllabic ww), and the second foot must be a unitary word pattern (1987, 23). The fact that type C is normally formed with a compound or a compound-like pattern is taken to support this analysis: *ofer hronrāde* would be scanned ww/Ssw, the most prototypical pattern for type C.

Attention to the rhythm of type C verses highlights the essentials of how the

44. He points to the famous example of Gothic *ga-u-hva-sehvi* ‘if he saw anything’ in Mk 8:23, in which the enclitic particle *-u-* and the interrogative pronoun *-hva-* have intruded between the ‘prefix’ and the root (Russom 1987, 8f.). Further examples, though not quite as spectacular as this double insertion, could be given, e.g. Lk 18:8, Mt 9:28, Jh 9:35.

theories of Russom, Cable, and Yakovlev relate to each other. Both Cable and Russom depart from Sievers in the same observational way, viewing the second lift of type C as *s* or *w* rather than *S*, and arrive at the same conclusions about the actual rhythmic contours of most type C verses, but their theoretical explanations for this are very different. Of course, the subordination of a second stress in a compound is also a consequence of avoiding stress clash, but for Russom this is an incidental fact of the language caught up in the metre. If Old English allowed compounds with a fully stressed second element, *SSw*, then such a pattern would, in his view, also be fully acceptable in verse. But for Cable the avoidance of stress clash is an essential fact for the metrical system as well as the language. If *SS* sequences were unproblematic, then his metrical system would look very different – as we can see by a comparison to Yakovlev’s approach – since Cable would lose his explanation of type *D** verses (*SwSsw*) as a means of avoiding stress clashes. Yakovlev, who has no metrical role for stress clash, also has no synchronic explanation for *D** (see §1.2.5 below). There is no such interdependence of metrical facts in Russom’s theory: the existence of *ww/SSw* verses would in no way affect his scansion of the pattern *Sw/Ssw*. Type C provides, therefore, an excellent illustration of how the same empirical observation can be given very different theoretical interpretations (including Yakovlev’s dismissal of this as a metrically irrelevant linguistic fact, which is also a theoretical stance). These views are all nuanced and bound up with more general approaches to the metrical system, and each is to some degree exclusive of the others.

1.2.3.1 *The Rule of the Coda*

While many type C verses show some sort of stress after the initial lift, a number appear to have the linguistic pattern *wSww*, where the second ‘lift’ seems to have no stress at all. This is, understandably, also of theoretical interest to all the approaches here under discussion, and in fact is of central importance to the characterization of Germanic verse in general. The classic examples come from the stem vowels of class II weak verbs, which are short derivational syllables:

- (67) *penden rēafode*
‘meanwhile plundered’ (*Beo* 2985a)
- (68) *gewyrðode*
‘honoured’ (*Ex* 10a)

- (69) hēr geend**ode**
 ‘here ended’ (*DEdg* 1a)

From a linguistic viewpoint, there is little question that the penultimate syllable in these verses carries no stress. The stem formant for class II weak verbs historically comes from Proto-Germanic **-ō-*, as in **raubōdē*,⁴⁵ but this was shortened already in the prehistory of English (Dresher 1985, 47; Stausland Johnsen 2015; Fulk 2010b, 129-30, 135; Ringe and Taylor 2014, 301f.; Goering 2016, 16f. (§7.1)). Already in the earliest poetry these sequences must have been truly dactylic, and by the time of the late tenth-century *The Death of Ēadgār*, from which example (69) is taken, the vowel had been short for many centuries.

Traditional Sieversian scansion, still followed by Yakovlev, would require these verses to be scanned as wSSw, with some degree of stress on the penultimate syllable.⁴⁶ This discrepancy is a rather severe example of what Russom, following Kiparsky (1977, 196), calls a LABELLING MISMATCH, a lack of fit between metrical and linguistic prominence. Bliss (1962, 63-5, 82) invents a new label, d1, with the pattern wSww, and assumes that such verses were derived from his type 1D1 through replacement of the first lift with a dip.⁴⁷ This omission of the first ‘breath group’, as Bliss characterizes these light verses (82), is never justified as a principle of metrical variation, and he does not seem to realize the significance of such single-stress verses for the wider theory of metre.

In his thorough review of the linguistic bases of Old English metre, Fulk (1992, 179-183) acknowledges that verses like (67) do indeed seem to have only a single stress, but he remains committed to the old idea of two lifts per verse – a principle he regards as essential, particularly in the off-verse, because many verses happen to have (at least) two stresses, and because off-verses need to have two lifts so that one of them can fail to alliterate. He reconciles the linguistic facts with this metrical stipulation by distinguishing metrical ictus from linguistic stress (1992, 228). He posits a RULE OF THE CODA whereby each syllable in the later part of a verse

45. Cf. Norse *raufaðir* ‘you tore open’, Gothic *birauboda* ‘I robbed’ (Cowgill 1959; Ringe 2006, 254ff.).

46. It is interesting to note Sievers’ own initial hesitancy regarding the stress of class II weak verbs: he scanned verses like (67) as type C, but suggested that they might perhaps be instead type B (1885b, 254, 297).

47. Bliss, implicitly recognizing the problem of stress clash, reserves the label ‘C’ only for those types in which the second lift is filled by the root syllable of an independent word. This means that his counts for type C are greatly reduced, just 549, versus 616 examples of d1 (the type here under discussion), d2, and d3 together (122f.). While Bliss is right to identify wSww as a distinct pattern, he goes too far in downplaying the second, partial stress in verses like (65), with a short lexical head.

constitutes a metrical position, regardless of stress or quantity (1992, 201). He then assumes one of these metrical positions can stand as an ictus where necessary.

Cable arrives at very similar conclusions with his ANTEPENULTIMATE SYLLABLE RULE, which states that if the third-to-last syllable of a verse is long and stressed, the final two syllables are unresolved and occupy distinct metrical positions (1991, 19). The most important innovation in Cable's perspective is, as has been said, his view of Old English metre as having as its base four *syllables* per half-line. In the first half of a verse, an unstressed syllable may be 'expanded', and a change of stress is needed to show clearly where one position ends and a new metrically-distinct syllable begins. But in the second half of the verse, stress is not needed: some form of the rule of the coda or the antepenultimate rule will make every syllable count as a position on a one-for-one basis, regardless of stress. A verse may have the pattern wSww, meeting the four-position requirement with a single stress.⁴⁸

Linguistically, Cable and Fulk come to the same conclusions, but Cable makes a further step forward by noting that the existence of a rule of the coda does away with the necessity for seeing two ictuses in every half-line (Cable 1991, 151; 2003, 156). Such a change in perspective is a welcome revision to Sieversian metrics, since it acknowledges that many verses do indeed probably only have one linguistic stress, and reduces the degree of mismatch between linguistic stress and metrical ictus implied by Fulk's attempt to assign linguistically unstressed syllables to lifts.

Yakovlev does not incorporate this important insight into his model, as shown by his analysis of *Beo* 144a, *swā rīxode* 'thus ruled', as wSSw (2008, 76), leading to certain oddities in his scansion. He categorically disallows *any* adjacent weak positions, including verse-finally, according to his third basic metrical rule (that two unstressed syllables will be elided into a single weak metrical position): this excludes wSww as a valid verse pattern, and forces him to scan verses like *Beo* 2985a (examples 67-69) as wSSw. This is somewhat less problematic for Yakovlev than for Sievers, since he only has two levels of stress: 'none' or 'any at all', and these levels are determined first and foremost morphologically (2008, 75f.). But this remains an odd mismatch, essentially holding that an element with apparently no linguistic stress at all is regularly assigned to a non-weak metrical position on a purely conventional basis.

Moreover, in practice Yakovlev follows Cable in allowing expanded weak positions in the first half of a verse only (57, item 12), meaning that his rule on eliding

48. One consequence of this view, noted by Blockley and Cable (2000, 274), is that a verse-final particle need not necessarily be scanned as bearing ictus, *pace* Bredehoft (2005, 39, 138f, n. 8).

weak positions carries no force in the second half of a verse. It seems to me much more preferable to simply modify his third metrical rule, and bring his model more fully in line with Cable's: a verse-final ww sequence is perfectly fine, because there is no doubt that the two syllables are assigned to distinct metrical positions. The two positions are distinct, which is all that matters. This would mean we should add wSww as a new rhythmic type to Yakovlev's set, and it goes against his statement that a verse must have at least two S positions (74f.) – a requirement which was not fundamental to his theory anyway. Incorporating this further aspect of Cable's approach into Yakovlev's model can be regarded as a strict improvement.

This is not simply a minor readjustment to Yakovlev's theory, but solves some practical problems of scansion. Whether a given syllable maps to a strong or weak position is meant to be morphologically determined, and a syllable that regularly bears stress must *always* be scanned as an S position (2008, 75).⁴⁹ Since he would scan a half-lines like (67) as wSSw, he would have to see the second syllable as stressed in verses like:

- (70) fundode wrecca
 'the adventurer yearned' (*Beo* 1137b)
 ?SSwSw

Yakovlev, possibly misled by Bliss (1962, 44f.), does not reckon with the possibility of the sequence Sww.Sw constituting a verse, where the first Sww is formed by a single word (Yakovlev 2008, 60, n. 28; cf. Sievers 1885b, 227f.). He consequently does not address how we might scan verse (70), and it is not clear to me from his general principles how he would deal with this verse and others like it. If we are committed to a stressed -o-, then the only alternative to a five-position verse SSwSw would seem to be to scan it as SSSw, with resolution of -ōde. Aside from the linguistic unlikelihood of this element being stressed, this scansion would violate Kaluza's law (§2.1.1). If we take the more linguistically plausible view that the medial -o- is always unstressed, then we have a perfectly normal long dip in a type A verse.

One last feature of single-stress verses needs comment: alliteration. Fulk (1992, 183) maintains the two-lift view in large part because off-verses need a second ictus so that it can fail to alliterate, according to the prohibition against double alliteration in the second half-line. But this would elevate a negative constraint,

49. He has some allowance for the fluctuation of linguistic stress in morphemes with 'tertiary stress' that may have linguistically varied in stress (2008, 78), but such fluctuation is not plausible or motivated for the stem vowel of class II weak verbs.

that off-verses may not have two alliterating elements, into a positive one: that there must be a second potential alliterator in the off-verse which is banned from alliterating. Aside from being poorly motivated and at odds with the reality of single-stress verses, such a non-alliterator is unnecessary under the theories of alliteration presented by Russom (1987, ch. 7) and Yakovlev (2008, 77). They both emphasize that alliteration is a morphologically determined property of the line: it binds together the first prominent lexical head in each half-line. A second (or even a third) element may share in the alliteration in the first half-line, but in the off-verse only one such element can alliterate. Single alliteration in the off-verse is as much achieved by having only one potential alliterator as it is by having non-alliterating lexical heads.

Under either the Cable-Yakovlev or the word-foot approaches, the requirement of two-stresses per verse has lost any theoretical force: if all half-lines did have (at least) two stresses, this would be just an incidental fact, falling out from other factors. Verses like these ‘light’ type C lines help show that the two stress rule is not merely secondary, it is nonexistent. Single-stress verses are both theoretically expected and real (and not merely in type A3, where they have sometimes been deemed secondary; §1.2.6). It is possible to force a second ictus out of an unstressed metrical position by fiat, as Fulk has attempted, but this would be justified only by a prior commitment to a second ictus; since the current forms of neither the four-position nor the word-foot theories justify such commitment, and the empirical evidence points the other way, Old English (and by implication, Germanic) verse should not be spoken of as being a ‘two-stress’ system.

1.2.4 TYPE A

The basic pattern of type A, SwSw, is obviously not problematic for any theory of Old English metre, including those currently under consideration. Nonetheless, the variants of this type provide some interesting considerations for the relationship between rhythmic patterns and alliteration which are of particular importance to the word-foot theory. The basic form of type A has two trochaic words, i.e. Sw.Sw:

- (71) Grendles mōdor
‘Grendel’s mother’ (*Beo* 1282a)

Verses with the word boundary in this position are particularly frequent, and of all type A verses are the least inclined to show double alliteration (Bliss 1962, 37; Russom 1987, 83f.). If one of the trochees is filled instead by a word group, or

contain an expanded dip (in Russom's terms, an extrametrical syllable before the second foot), the incidence of double alliteration increases dramatically:

- (72) sinc æt symle
 'treasure at the feast' (*Beo* 81a)
 S.w.Sw
- (73) folce tō frōfre
 'a comfort to the people' (*Beo* 14a)
 Sw.(w.)Sw

These patterns are noted by Bliss (1962, 36-9) in support of his verse-medial 'caesura', but Russom reinterprets them in support of his word-foot theory. The idea is simple: double alliteration helps emphasize the word-foot structure in cases where the mapping of words to word-feet is less direct. Cable could explain verses like (73) easily enough, since the double alliteration could be as compensation for the complexity of the expanded dip, but he has no mechanism readily available to explain why double alliteration should be the norm in cases like (72). Since much of the motivation for Bliss's caesura has been refuted by Fulk (1992, 216-223), these patterns of alliteration seem to point solely to the word-foot theory among the currently available theories, and provide a fairly compelling initial reason to give the word-foot theory real consideration.⁵⁰

There is, it should be noted, a potential contradiction in this view of alliteration. If the function of double alliteration in type A (and also in type D; Russom 1987, 84ff.) is to make the word-feet clear, then how should we take double alliteration in types B and C? As we have seen, Russom regards both stresses in these feet as belonging to the second foot. Double alliteration within a foot has not always been seen as a problem (see, e.g., Pope 1966, 45), and it need not be in principle for Russom either. But if double alliteration is used as a device to signal foot boundaries in one instance, it is less clear why we should find double alliteration in a verse like this:

- (74) þenden wordum wēold
 'while he ruled with words' (*Beo* 30a)
 ww./Sw.s

50. Note that even Bliss's caesura, which gave a mechanism for describing the differences between these types of verses, fell far short of *explaining* them. The word-foot theory, by contrast, gives a direct motivation as well as a description of the phenomenon.

One might take the alliterative pattern as suggesting a scansion $^x(\text{ww})\text{Sw}/\text{s}$ or $^x\text{ww}/\text{Sw}/\text{s}$, though the first of these would go against Russom's careful distinctions between light feet and extra-metrical syllables, and the second would be an impossible tripartite verse. As it happens, B and C verses with double alliteration are relatively uncommon (Suzuki 1996b, 278), which from a word-foot perspective could suggest that there was a tension between using alliteration in its primary, line-level function (picking out prominent syllables in each half-line, even when foot-internal), and its verse-level use to emphasize foot boundaries. Even when double alliteration does occur, as in *Beo* 30a, the scansion of the verse is not in serious doubt. Since *þenden* is too heavy to be an anacrusis, it must be a metrical light foot, which forces whatever follows it to be interpreted as a single foot. Double alliteration is particularly rare in type B2, with an expanded second dip, which seems to fit with the notion that this is a particularly complex foot in which double alliteration might be more than usually disruptive to proper scansion.

1.2.5 TYPE D*

As discussed in §1.1.6 above, the patterns SwSsw and SwSws (and close variants) are of central theoretical importance to Old English metre as the only really common types of 'five-position' verse.⁵¹ Under the Sieversian tradition, there are only two viable explanations for the fifth position: either the type is traditional, preserved by a conservative poetic culture despite failing to conform to the prevailing four-position principle (so Sievers 1893, 183; Yakovlev 2008, 65-7); or else an 'extra' position is licensed by some synchronic phonological or metrical process (Cable 1991, 143; Suzuki 1992; 1996b, 29-30).

While there is an intuitive appeal to each of these explanations, a detailed look at D* (and plain D) verses shows that neither is sufficient to explain the existence of the type. Russom's word foot theory, by contrast, has no trouble producing D* verses, but faces a problem of over-generation: as it stands, the theory predicts certain variants of D* to be far more common than they actually are. Interestingly, it seems to be possible to incorporate the insights of Sievers, Yakovlev, and Cable into Russom's explanation of the type in order to account for it within a word-foot framework.

51. On the rarer type A*, see Russom (1987, 37f.).

1.2.5.1 *D* as a Traditional Relic*

Sievers and Yakovlev appeal to tradition, arguing that such verses were perfectly acceptable in an older metrical system, but failed to change linguistically to fit into the norms of classical OE verse (whenever it arose). D* verses were then preserved on a formulaic basis, which was helped by the frequent presence of poetic compounds in the type. Many attested examples could potentially continue much older Germanic collocations that failed to be reduced to four positions by syncope or apocope:

- (75) a. beorna bēaggifa
 ‘ring-giver of warriors’ (*El* 100a; cf. 1198a, *Brun* 2a, *DEdg* 10a)
 b. **bernô*ⁿ *bauga-gibô*

Obviously the plausibility of this approach depends largely on one’s view of earlier Germanic metre, since in order to survive as a formulaic residue, D* verses must have once been systematically regular. Inherent in this view is the assumption that the four-position principle is a relatively late development, and had not always been the fundamental organizing principle of Germanic verse. Whether or not this is plausible (I think it is not) is an issue I will hold off discussing until §5.1.

Prehistory aside, an examination of the Old English tradition itself prompts some concrete objections to this appeal to tradition. If D* verses are preserved on a traditional basis, then we might expect some evidence that they behave as a fossilized component within an oral-formulaic system. This does not seem to be the case, either within any given poem, or diachronically.

Firstly, D* verses are by no means limited only to plausibly inherited formulas or closely derivative variants of such. Such half-lines often have a specifically Christian reference, for instance, which must represent new compositions by poets who felt that the type was integrated enough into the system to allow such innovation:

- (76) cōlaþ Crīstes lufu
 ‘Christ’s love cools’ (*GuthA* 38a)
 (77) heofona hēahcýning
 ‘high-king of the heavens’ (*ChristC* 1339a)
 (78) hǣðne heremæcgas
 ‘heathen war-men’ (*GenA* 2485a)

- (79) engla ēadgifa
 ‘fortune-giver of angels’ (*And* 74a, 451a)

Such verses strongly suggest that D* verses were still productive at least at the start of the tradition of Christian poetry in England (on the chronology of which, see Eichner 1990, 311-14). Since there is no indication of any metrical upheavals between the beginnings of the Christian tradition in the 7th century (of which *Cædmon’s Hymn* may be a direct relic) and our recorded poetry, it looks as if this type was productive within a metrical system effectively the same as the familiar classical metre.

An equally important consideration lies in the chronological distribution of D* verses. If the type were really traditional, and preserved by the poetic culture, we ought to expect it to show something of the same distribution as other traditional features, such as parasiting and contraction: D* should be most frequent in the oldest poems, and show a gradual decline over the course of the Old English period due to the slow attrition of tradition (Fulk 1992, 34 (§37)). No such decline seems to have taken place. Over the course of the Old English period, most types that show complex, compound-like stress patterns (C, plain D, E) gradually decrease in frequency (Cable 1981; Fulk 1992, 255f.; Russom 2002b; Hartman 2014), but D* remains strikingly robust and common by any measure. *The Battle of Maldon* (c. 1000) has, for instance, proportionally about as many D* verses as *Daniel*, and slightly more than *Genesis A*, both widely thought to be among the earliest surviving poems.⁵² The early tenth-century *Battle of Brunanburh* shows an even higher proportion, a remarkable 14 D* verses in 73 lines (that is, 19% of lines contain a D* verse!), and the type remains common in the later chronicle poems⁵³ (14 examples in 129 lines, or 10.9%). For the mainstream tradition of Old English verse,⁵⁴ from recorded beginning to end, it is difficult to find any positive correlation between

52. *Maldon* has 9 D* verses in 325 lines, so D* verses constitute around 2.8% of on-verses (off-verse D* half-lines are always rare and not included in these counts). *Daniel* has 22 in 774 lines, so its rate is also 2.8%; *Genesis A* has 53 in 2319 lines for 2.3%. Rates across further poems conventionally seen as falling more in the middle of the OE tradition vary considerably: *Christ II* (7.3%), *Guthlac B* (7.1%), *The Phoenix* (6.8%), *Andreas* (6.4%), and *Christ III* (5.3%).

The data for D* verses is in general from Bredehoft (2014, 105f.), though the counts for *Maldon* and other late poems are my own, as they are not included in Bredehoft’s list.

53. *Capt*, *CEdg*, *DEdg*, *DAlf*, and *DEdw*.

54. The rather untraditional *Metres of Boethius* does show a markedly lower proportion of D* verses, 25 in 1750 lines (1.4%). Here, if anywhere, we are probably looking at the metrical consequences of departing from traditional Germanic style and poetic phraseology. But this is a wholesale departure, with widespread and obvious effects on style and on the frequencies of other metrical types. Plain type D half-lines, for instance, show an even sharper decrease, with only 7 type D on-verses found in the entire work.

those poems with higher numbers of D* verses, and the relative chronologies for any other traditional features (cf. Fulk 1992, 348-51, 393-414).

If anything, the correlation is inverse, and expanded D* appear to become more integrated into the poetic system over time. In the oldest poems, such as *Exodus* and *Genesis A*, the unexpanded type D occurs more frequently than D* in the on-verse, while the reverse is true for the majority of the Old English corpus (Hutcheson 2004, 306f.; Bredehoft 2014, 105f.). This is hardly an absolute development,⁵⁵ but even a limited movement in favour of D* verses during the Old English period would be surprising if the type were purely traditional. For at least some poets, D* was clearly the preferred choice in the on-verse over the four-position plain D type (see below, §1.2.5.3).

The proposal that type D* could be a traditional relic certainly has an initial plausibility, but the actual history of the type in Old English seems to be more or less the opposite of what we would expect. Odd examples, such as the exceptionally high number of D* verses in *The Battle of Brunanburh*, could perhaps be explained away as intentional archaisms, but there is no obvious expectation for why the changes to D* verses across the corpus as a whole should conform so poorly to the trends shown by other traditional features. It is not the usual habit of an archaism to be more prevalent in the late Chronicle poems than in *Bēowulf*, or in the Cynewulfian corpus than in what used to be called the Cædmonian.

1.2.5.2 D* and Stress Clash

If D* verses are unlikely to simply be the relics of tradition, then they must be somehow accounted for in a synchronic theory of Old English metrics. Cable's theory of stress-clash and silent beats has been introduced above (§1.1.6),⁵⁶ and

55. For instance, the very late *Maldon* also shows a preference for type D over D* (the types occur 14 and 9 times, respectively), just like the early poems.

56. Suzuki (1992; 1996b, 23-35, 103-7, 110-2), presents a fairly similar proposal, arguing that when a lift is sufficiently prominent, it may be equated with a phrase rather than a word. Since such prominence can only be achieved in Cable's stress clash contexts, the two accounts share a great deal (Suzuki 1996b, 396, n. 11). Suzuki's account is in some ways more flexible than Cable's, and more easily allows for, say, the extra dip to be polysyllabic. However, it also relies on highly idiosyncratic notions of how linguistic material maps to metrical positions. Suzuki suggests that every level of metrical 'prominence' of a position is equated with a particular linguistic unit: the lowest with the syllable, the second the foot, and third the word. The fourth level, which Suzuki uses to explain D* verses, is held to be the phrase. In most cases, what this means is that a metrical position is typically filled by a syllable that heads the relevant category, so that a level three lift is filled by the *root syllable* of a word, not a whole word (unless that word happens to be monosyllabic). In many ways, Suzuki's first three levels are similar to more conventional views of relative prominence within verses. Suzuki's fourth level, however, is not merely filled by the

provides a potential way of scanning D* verses as ‘really’ having just four positions.

Yakovlev (2008, 68, n. 37) objects to Cable’s explanation on theoretical grounds, arguing that Cable makes an unwarranted leap from linguistic to metrical units by allowing the purely phonological phenomenon of stress clash to license a distinct verse type: why should linguistic material become invisible to the metre just because it is useful in avoiding stress clash? This remains a valid criticism, though it is fair to note that Cable more generally associates metrical units with syllable saliency. If extra syllables are allowed in expanded dips essentially by virtue of their lack of saliency, then perhaps it is in principle arguable that the same goes for the extra ‘dip’ between two clashing stresses.

Even if we grant that Cable’s account might be possible in theory, there are certain complications that arise when we look at the data. Cable takes as his point of departure typical D* verses, such as:

- (80) *rondas regnhearde*
‘powerfully-hard shields’ (*Beo* 326a)
- (81) *burston bānlocan*
‘bone-joints burst’ (*Beo* 818a)
- (82) *fæste frioðuwære*
‘firm peace-pledge’ (*Beo* 1096a)

These verses, like many others, show the following constellation of features:

1. Occurrence in the on-verse.
2. Double alliteration.
3. A final poetic compound.
4. A final word of the shape S[̃]sw.
5. An initial word of the shape Sw.

Many of these features are difficult to disentangle, with items 1-3 being particularly closely intertwined (Russom 1987, 92-5). All of these features play a role in Cable’s explanation, though 4 and 5 are the essential ones. The necessary extra beat is

head syllable of a phrase, but by one or more enclitic syllables in that phonological phrase as well. Suzuki’s conflation of units and the heads of units has numerous potential implications which he does not address, and if taken seriously would result in a virtually unconstrained metrical system. Given these problems, I focus my criticisms on Cable’s theory, which brings with it less problematic theoretical baggage, and invites more directly empirical criticism.

created specifically in the environment S-Ss, where two main stresses are close together, and a following third stress prevents the second from being demoted – the heavy stresses ‘back up’ so that the clash can only be resolved by a pause (Cable 1991, 143). This extra moment of pause can then be filled by a minimally weak syllable: S!Ssw → SwSsw. It is therefore somewhat problematic that, while this type is common, there are a number of examples that fail to show some or all of the above features, including 4 and 5.

Perhaps the most obviously problematic subset of D* verses are those that may be labelled Db*, ending with the sequence -Sws (cf. note 13 above):

- (83) enta ærgeweorc
‘ancient work of giants’ (*Beo* 1679a)
- (84) ēode ellenrōf
‘the brave one went’ (*Beo* 358a)
- (85) þrȳðlic þegna hēap
‘mighty band of retainers’ (*Beo* 400a, 1627a)
- (86) licað leng swā wēl
‘pleases (me), at more length, so much the better’ (*Beo* 1854a)

Such verses ending in Sws are considerably less common than those in S[̃]Sw, but are securely attested nonetheless (33 Db* against 114 Da* verses in *Beowulf*, following Bliss’s scansion). These verses lack the supposedly necessary ‘back up’ of stress. Why, under Cable’s framework, would the second stress not simply be demoted to give S[̃]Sw or Ssws, as Cable (1974, 75-8, 88) in fact proposes in his analysis of types Db and E? Or if an extra position can be generated merely by the potential contact of any two stresses, than why do we not find variants of type C with extra beats, w(w...)SwSw?

The beginnings of D* verses can also be problematic when they do not conform to the prototypical Sw structure:

- (87) wīn of wunderfatum
‘wine from wondrous vessels’ (*Beo* 1162a)
- (88) mynte se mānscaða
‘the villainous enemy meant’ (*Beo* 712a)
- (89) deorc ofer dryhtgumum
‘dark over war-men’ (*Beo* 1790a)

- (90) sellice sǣdracan
 ‘wondrous sea-dragons’ (*Beo* 1426a)

Example (87) is not problematic in Cable’s proposal – an extra beat could be filled with any suitably unobtrusive linguistic material, and there is no particular reason this should always have to be the final syllable of the first word – but (88-90) seem to show the licence for expanding dips applying to these supposedly secondary ‘beats’.⁵⁷ Some of the syllables might be emended away metri causa (like the *se* in 88), but the polysyllabic dip is unavoidable in (89), (90), and similar half-lines.

A further question is whether the alliterating finite verbs that so often provide the initial alliterating element in D* verses carry enough stress to create the preconditions for a major stress clash. A number of alliterating finite verbs have already been exemplified in (81), (84), (86), and (88); Yakovlev counts some 50 such examples in *Bēowulf* (2008, 66). As we will see in §1.2.6, finite verbs show highly variable stress, and in some positions may be wholly unstressed. When alliterating, they are most plausibly taken as at least partly stressed, but their fluctuation may suggest that this stress is not very strong. A linguistic pattern such as s-Ss- certainly has a potentially awkward sequence of stresses, but it lacks the strong initial stress which Cable (1974, 79, 81, 86f.) argues is necessary to create the following pause, turning type D into D*.

A final, and rather involved, difficulty for Cable’s explanation comes from ‘light’ D* verses, which fail to show the secondary stress in the environment SSs supposedly necessary for the stress ‘back up’ that creates the extra beat. Bliss finds a number of such verses with a ‘tertiary stress’ (usually from a derivational element) on the penultimate syllable:

- (91) eallum æþelingum
 ‘to all (his) nobles’ (*Beo* 906a)
- (92) idese onlicnæs
 ‘likeness of a woman’ (*Beo* 1351a)

That these ‘light’ verses are really distinct, and not trivial variants of ‘normal’ D*, is made clear by their ability to break from features 1 and 2 identified above: *pace*

57. Bliss (1962, 38f. (§45)) would classify (87) and (89) as variants of type A2b, with a resolved final position (in violation of Kaluza’s law; see §2.3.8). Since Bliss’s decision was motivated primarily by his problematic theory of the caesura, it seems best to recognize that such verses do, in fact, end with a Sśw compound, and are therefore related to other D* half-lines (Hutcheson 1995, 146ff.). In any case, even Bliss would grant that (90) is type D* (cf. further the interchange of Russom 1995, 162, n. 38 and Bredehoft 2005, 130f, n. 22).

Bliss (1962, 57 (§64)), they can have single alliteration, and occasionally appear in the off-verse. Most of the possible examples with single alliteration have been emended away (for a list including many less convincing examples, see Hutcheson 1995, 142), but in many cases the emendations are unconvincing. Several verses are arbitrarily dismissed by Bliss (1962, 57 (§64)), who argues that the second syllable is non-syllabic:

- (93) ē**ð**el Scyldinga
‘homeland of the Scyldings’ (*Beo* 913a)
- (94) þēo**ð**en Scyldinga
‘king of the Scyldings’ (*Beo* 1675a, 1871a)
- (95) brō**ð**or oðerne
‘(one) brother (slew) the other’ (*Beo* 2440a)
- (96) doht**or** Hrōðgāres
‘Hrōðgār’s daughter’ (*Beo* 2020b)
- (97) ðēo**ð**en Heaðo-Beardna
‘king of the Heaðo-Beards’ (*Beo* 2032b)

Bliss is followed by Fulk (1992, 88-90 (§§95-6)), and Fulk, Bjork, and Niles (2009) accordingly print these verses with the second syllables underdotted to indicate their supposed inauthenticity. This practice follows from no coherent criterion of etymology or metrics. In particular, (94) is a precisely repeated formula, to which (93) and (97) are closely related. Etymologically, the initial words of all of these verses are disyllabic, and their monosyllabic scansion here supposedly represents analogical de-parasiting, on the model of the variation between, e.g., *aldor*- and *aldor*. Such analogy is highly suspect. In general, non-parasiting is strongest in compounded elements, and tends to be eliminated in free forms: it would be odd for new ‘de-parasited’ free forms to be created analogically. Most reasonable examples of analogical de-parasiting are found in compounds like *ealdordōm* (*GenA* 1197b); the only potentially affected simplexes are in these light D* verses. Furthermore, genuinely non-parasited etymological monosyllables can freely appear in other metrical positions where a monosyllable is called for, such as at the end of a type B or E verse (Fulk 1992, 76-86 (§§88-92)):

- (98) þā mec sinca bal**dor**
‘then me the lord of treasures’ (*Beo* 2428b)

- (99) wālfāgne winter
 ‘slaughter-stained winter’ (*Beo* 1128a)

There are no supposedly de-parasited forms in such clear contexts.

Beyond this, in the entire OE corpus of verses there are only two examples of genuinely parasited forms that could provide a specific model for analogical de-parasiting at the start of a D/D* verse:⁵⁸

- (100) wundor scēawian
 ‘to look upon the wonder’ (*Beo* 840b)
- (101) wundur scēawian
 ‘to look upon the wonder’ (*Beo* 3032b)

In *Bēowulf* alone there are three times as many supposedly analogical D(*) half-lines as with real non-parasiting. It seems more likely that (93-97) are simply what they appear to be: genuine singly alliterative light D* verses, not to be underdotted.

One further possible example is superficially similar to (93) and (94):

- (102) Bēowulf Scyldinga
 ‘Bēowulf of the Scyldings’ (*Beo* 53b)

This is most likely corrupt (Fulk, Bjork, and Niles 2009, xlviii-l). The question is whether the conventional restoration to **Bēow* is correct, or whether, as is at least as likely, we should emend to a disyllabic **Bēowe*/**Bio(w)ī* (or just possibly *Bēowa*). Any of these options would leave this as a light D* off-verse.⁵⁹

58. A possible third example is *GenA* 979a *tiber scēawian* ‘to look upon the offering’, but the root vowel here is probably short (Kroonen 2013, 516, s.v. *tibra-*).

59. There are a number of difficult problems involved; see especially the thorough discussion by Fulk (2007b, 126ff.). He argues that this name should be restored to the cognate of Old Norse *Byggvir*, which should further be equated with the euhemorized theonym found in various forms in the West Saxon genealogies contained in year 856 of the *Anglo-Saxon Chronicle* and in works by Asser, Æthelweard, and William of Malmesbury; these works are all conveniently reproduced in Fulk, Bjork, and Niles (2009, 291f. (Appendix I.1.1-4)). Fulk argues that both the etymology and genealogical forms point to the form *Bēo(w)*, but this is not clear. On the genealogical side, the variant *Beowi* in MS D of the *Anglo-Saxon Chronicle* may be more original, and some such form seems presupposed by the form *Bedwig* (a corruption based on misreading <o> as <d>) widely found in the same genealogies. The Latinized form *Beowius* is most readily taken as further support for a form *Bēowi*.

Etymologically the situation is also complex, and unfortunately not decisive. As Fulk points out, *Byggvir* comes from a PGmc *ja*-stem **beuwjaz*. Sound changes should have produced allomorphy. In the NOM.SG this should have become early Old English **bioī*, with the **w* lost before **i*; but in oblique case forms the **w* would be retained before **j*, e.g. DAT.SG **biowjæ*. Compare the contrast of 3SG *gyrēð* ‘prepares’ < **gærwiþ* versus INF *gyrwan* < **gærwjan* (Ringe and Taylor 2014, 300ff.). **Bioī* should eventually have been contracted to **Bio*, which is presumably the origin of the genealogical form *Bēo*. However, this word may still have had an uncontracted, disyllabic value for the

There are a number of further light D* verses which, regardless of their alliteration, Bliss has explained (away) by positing resolution of the final two syllables:

- (103) dēad is Æschere
 ‘Æschere is dead’ (*Beo* 1323b)
- (104) him on andsware
 ‘(spoke) to him in answer’ (*Beo* 1840b; alliteration on *h*)
- (105) word wāron wynsume
 ‘words were joyful’ (*Beo* 612a)
- (106) eard ond eorlscipe
 ‘land and nobility’ (*Beo* 1727a)
- (107) lif ond leodscipe
 ‘life and tribe’ (*Beo* 2751a)

However, resolution of such low-stress elements is unlikely, if not impossible (§2.1.1; see further Cable 1991, 19, 151; Fulk 1992, 201 (§226)).

Lastly, there is a frequently repeated formula used to introduce speeches which belongs to this type:

- (108) Wulfgār maþelode
 ‘Wulfgār spoke’ (*Beo* 348a)

No emendation or metrical reinterpretation seems possible for the 25 examples of this formula, which have tended to be regarded as a particularly loose licence accommodating the proper names of speakers.

Since these examples of ‘light’, singly alliterating D* verses are not easily explained away, it seems better to accept them, and recognize that they fit into well-known patterns of alliteration in OE verse (Fulk 1992, 86f, n. 45; Hutheson 1995, 143). The majority of D* verses have double alliteration (and so are confined to the on-verse; features 1 and 2 above) because their second elements are (poetic) compounds (feature 3). Poetic compounds must alliterate, according to what is now sometimes called KRACKOW’S LAW (Krackow 1903; Kendall 1981, 43f, n. 17;

Bēowulf poet (cf. the apparently disyllabic spelling of *streidæ* in the early glossaries (*ErfGl* 899 and *CorpGl* 1910), and the disyllabic scansion of *strêd* at *Beo* 2436b, all from **strawid-*). Furthermore, it would be a very slight analogy to reintroduce the **w* from the oblique into the nominative, giving **Bīowi*, where the **w* would block any contraction; that this happened in at least some varieties of OE is suggested by the attested *Beowi*, etc. Given this range of possibilities, it is impossible to be sure whether this name would have had one or two syllables for the *Beowulf* poet, though the latter option seems more likely to me.

Russom 1987, 92-7; Fulk 1992, 57f. (§66)).⁶⁰ That the alliterative and on-verse requirements are based on words, not verse types, can be illustrated by the following examples with *heorugrim* as the second foot:

- (109) hrēoh ond heorogrim
‘fierce and sword-grim’ (*Beo* 1564a)
- (110) hild heorugrimme
‘battle the sword-grim’ (*Beo* 1847a)
- (111) hētend heorugrimme
‘sword-grim enemies’ (*El* 119a)

The alliterative properties of *heorugrim* and other poetic compounds explain why the same constellation of features (especially double alliteration in the on-verse) always occur together, whether the type is A2b, D*, and that subset of D verses containing such compounds (on A2b verses, see Sievers 1893, 131 (§84.3b); Bliss 1962, 47f. (§54); Hutcheson 1995, 189ff.; Russom 1987, 84, 92ff.).

This requirement for double alliteration, it should be stressed, appears to be a requirement of POETIC COMPOUNDS specifically, not merely of compounds in general as suggested by Krackow (1903, 2-6 (§2)), Bliss (1962, 25 (§32)), Kendall (1981, 43f, n. 17), Hutcheson (1995, 27, and n. 106), and Pascual (2015, 3f.). Most compounds in poetry are in fact poetic – traditional and artful groupings whose elements are often specific to the poetic lexicon – but a certain number are prosaic, such as *ærdæg* ‘early morning’. As Russom (1987, 92-7) points out, these prosaic compounds do not appear to show the same strict alliterative requirements (cf. the list in Krackow 1903, 43f. (§14.III)). This distinction may be essentially prosodic, with prosaic compounds showing more lexicalization and weaker stress than the often-metaphorical poetic compounds that are so prominent in Old English verse (Russom 1998a, 92f. Fulk, Bjork, and Niles 2009, 334 (App. C, §39a)).

This distinction may help explain the one, extremely troublesome apparent example of a Db* verse with single alliteration (in the off-verse no less):

- (112) seah on enta-geweorc
‘looked upon the work of giants’ (*Beo* 2717b; alliteration on s)

This has generally been a source of some despair for editors and metricists, particularly because its metrical reality is strongly supported by a similar verse in *The Ruin*:

60. Phrases – what Russom would call mismatched feet – appear to share this same alliterative requirement; cf. exx. 85 and 86.

(113) *broснаð enta-geweorc*

‘the work of giants decays’ (*Ruin* 2b; alliteration on *b*)

Russom argues that *enta-geweorc* in (112) is a lexicalized architectural genitive compound, rather than a phrase or a strict poetic compound, which is why it can occur without alliterating. *Ruin* 2b is also in the off-verse, and its *enta-* does not alliterate.

More generally, if these alliterative and distributional properties can be attributed in the first instance to *words* rather than *verses*, then it follows that the frequent single alliteration in the ‘light’ D* half-lines cited above – which all lack poetic compounds – is not in itself grounds for emending away this type or doubting its authenticity in any way (Fulk 1992, 220 (§249)). A word like *Scyldinga*, not being a poetic compound, does not have to alliterate in any verse in which it occurs, whether D or D*:

(114) *helm Scyldinga*

‘protector of the Scyldings’ (*Beo* 371b)

(94) *þēoden Scyldinga*

‘king of the Scyldings’ (*Beo* 1675a, 1871a)

Light D* verses do still show a preference for double alliteration, but hardly to an extent where this can be regarded as a categorical property. Hutcheson (1995, 242), who takes a more liberal approach to D* verses, finds in his wider Old English poetic corpus some 147 lighter examples in the on-verse with double alliteration, 50 such half-lines in the on-verse with single alliteration, and 10 in the off-verse. Tolerance for single alliteration in the on-verse can hardly be doubted, since they constitute over a quarter of the total. The rules governing their distribution are perhaps less certain, since the number of off-verse examples is rather small, but the reality of the type is clear.⁶¹

If we acknowledge light D* verses, with their (mostly) derivational second elements, as a real type with a distinctive set of alliterative and distributional properties, it becomes even more difficult to accept the stress clash explanation for their first dip. The supposedly necessary ‘back up’ of stress is absent. Either light D* verses have some other explanation from the majority, or else Cable’s explanation of D* verses through stress clash is wrong. Either option is difficult within the

61. At least a few off-verses have proven very resistant to emendation, cf. Fulk (1992, 142, n. 5). Note that Hutcheson (1995, 118, 147f.) also errs very much on the side of classifying verses of the shape SwSww as type A rather than D* (§2.1.1), which removes some possible off-verse D* verses from consideration (e.g. *Wid* 123b, *Beo* 1323b, 1840b, *El* 884b).

four-position framework.

1.2.5.3 *D* Verses and the Word-foot Theory*

In contrast to approaches relying on the four-position principle, the word-foot theory has no trouble in forming D* half-lines using its ordinary methods of versification. The type is meant to consist, in most cases, of a ‘standard’ Sw foot followed by a long Ssw, Sws, or Sww foot (Russon 1987, 28f.). The type exceeds normative weight, but is otherwise not particularly complex: it is not reversed, and one of the feet is normally of the most basic sort, Sw. The unusual length of the verses accounts for their comparative rarity, and possibly also for the preference for the on-verse even among the types not containing poetic compounds. The presence of desinences in Sws and Sww is a non-issue for the theory, as is the occasional realization of a final foot as a phrase.

There is a minor problem with the few verses that seem to have two long feet, the pattern Sww/Ssw:

- (88) mynte se mānscaða
‘the villainous enemy meant’ (*Beo* 712a)
- (89) deorc ofer dryhtgumum
‘dark over war-men’ (*Beo* 1790a)
- (90) sellice sǣdracan
‘wondrous sea-dragons’ (*Beo* 1426a)

Verses like (88), and perhaps also (89), can be explained as having extra-metrical elements before the second foot: Sw/(w)Ssw and S/(ww)Ssw respectively. It is not possible to explain (90) in the same way, since a word is either metrical or extra-metrical in its entirety. In conformity with his principle that two long feet cannot be combined, Russon chooses scan this verse as variant of type A, with resolution of the secondarily stress *-dracan* (1995, 162, n. 38). Resolution is, however, very unlikely here, and would furthermore violate Kaluza’s law (§§2.3.8, 2.4.3). Assuming the few Sww/Ssw verses are not somehow corrupt (Fulk 1992, 164, n. 17),⁶² their rarity suggests they are pushing the very limits of metricality under any theory. The word-foot theory is perhaps better equipped to deal with such marginal cases than other approaches, due to the preferential rather than absolute nature of its restrictions.

62. The only further examples I am aware of are *And* 1015a, *Brun* 64a, *Beo* 3173a, and *Wand* 78a.

As with Cable's stress clash theory, 'light' Sw/Sww verses remain somewhat problematic, though for more or less the opposite reason. Instead of their presence being difficult to account for, the potential problem is why they are not more frequent. Among unexpanded type D verses the 'light' pattern S/Sww vastly outnumbers the heavier types S/Ssw and S/Sws, exemplified in (115), (10), and (11) respectively:

(115) hræw bryttian
'to share out the slaughter' (*Brun* 60b)

(10) helm eallwihta
'protector of everything' (*GenA* 113a)

(11) fāh fēðegāst
'hostile moving spirit' (*Ex* 476a)

In D* verses, the situation is reversed, with Sw/Sww being the rarest pattern. Aside from this, Sw/Sww should be closer to normative weight, and so we might expect it to be more common than its heavier counterparts. Its relative scarcity is as puzzling under the word-foot theory as its mere presence is under the stress clash approach.

To my knowledge, no explanation of this has currently been proposed by a word-foot theorist, but if we take a more holistic perspective, and apply the intuitions of Sievers, Cable, and Yakovlev within a word-foot framework, it may be possible to give a coherent account of the type. While neither the traditional role of heavier D* verses as the carriers of poetic compounds nor the problems of stress clash may be enough to justify the very existence of type D*, these factors may explain why, among the available D* variants, those with poetic compounds predominate.

It seems likely that Cable is correct in his intuition that stress clash was undesirable in OE verse. Most types of Ssw feet are found much more frequently in D* verses than plain D. Final $\bar{S}sw$ feet, with an unrelieved sequence of long stressed syllables, are particularly rare in unexpanded D (Hutcheson 1995, 235ff.):

(10) helm eallwihta
'protector of everything' (*GenA* 113a)

D* verses ending in such compounds are much more normal (Kaluza 1896, 131; Hutcheson 1995, 235, 238):⁶³

63. Plain D verses with a resolved stress are found somewhat more readily, but the equivalent D* variants are more common still. Only the foot type $\bar{S}sw$, with a short penultimate syllable, is actually found more frequently in plain D than D*.

- (80) *rondas regnhearde*
‘powerfully-hard shields’ (*Beo* 326a)

This distribution does indicate that avoiding stress clash is a real and important factor in Old English metre, as Cable argued, but its exact role need not be the one he saw for it. Instead of the first dip filling a preexisting beat created by a stress clash, we might instead see the extra syllable as a means of avoiding a stress clash in the first place. When poets wished to use a poetic compound with a preceding modifier, they seem to have preferred an initial word-foot of the shape Sw over simple S, with the avoidance of stress clash motivating the otherwise more anomalous long verse.⁶⁴

If it is primarily the avoidance of stress clash which justifies the otherwise metrically anomalous pairing of a Sw foot with a following trisyllabic foot, then it follows that lighter Sw/Sww verses should occur less often. They fall into an awkward gap: above normative weight, but lacking any motivation from stress clash avoidance. Sww feet occur, as a consequence, far more frequently in S/Sww verses than Sw/Sww. This is concretely demonstrated in the range of variations found in an aforementioned formula:

- (114) *helm Scyldinga*
‘protector of the Scyldings’ (*Beo* 371b)
- (94) *þēoden Scyldinga*
‘king of the Scyldings’ (*Beo* 1675a, 1871a)

Most of the initial elements of the expression LORD/PROTECTOR + *Scyldinga* are monosyllables or resolved equivalents: *helm*, *wine*, *frēa*, *eodor*, and *lēod*. The two instances of (94) are the only D* variants, despite the potential availability of further trochaic synonyms like *dryhten* or *wīsa*.

This integrated perspective retains stress clash as an important factor without placing undue emphasis on the precise SSs condition for an ‘extra beat’, an environment which cannot be essential for the ‘extra’ position. Poetic tradition also plays its role. Five-position verses would remain a rather minor variant in the system – as ‘light’ Sw/Sww and Db* Sw/Sws in fact are – except for the problems of stress clash potentially created by the large number of Ssw poetic compounds (and equivalent phrasal collocations) frequent in verse. But in contrast to the views of

64. Type E verses, which frequently have the shape $\bar{S}\bar{S}w/S$, could be seen in much the same way. In each case, the pressure to avoid stress clash licenses a more marginal metrical strategy, whether the creation of long verses or reversal.

Sievers and Yakovlev, the type is only *encouraged* by the need to accommodate traditional compounds, not maintained as a wholly anomalous pattern that otherwise violates the basic metrical principles of the system: in the word-foot view, D* verses are still constructed using the same principles of foot combination that generate every other verse.⁶⁵

On a theoretical level, D* verses would seem to provide better support for the word-foot than the four-position theories. More immediately, the debate itself is revealing about the relationship between metre and language. Evaluating the two approaches, both focused on the details of the patterning of language in poetry, sheds light on the possible roles of stress clash, alliteration, poetic compounds, formulaic possibilities, and tradition in Old English poetic language. These factors appear to play an essential role in governing the range and distribution of rhythmic patterns, even though they are not all strictly ‘metrical’: stress in particular need not be an actual metrical constituent to have important metrical effects.

1.2.6 TYPE A3

The ‘light’ metrical type traditionally labelled A3 shows the opposite problem from D*, having a single stress and only three apparent metrical positions.⁶⁶

(116) nū scylun hergan
‘now we ought to praise’ (*Cæd* 1a)

(117) þāra þe hē on ðām fyrste
‘of those whom he (might find) at that time’ (*Ex* 189a)

65. The trend towards increasingly favouring D* over D verses over the course of the OE period, noted by Bredehoft (2014), may perhaps be seen as an ongoing response by a conservative tradition to a relatively abrupt increase in clashes due to West Germanic and prehistoric Old English syncope (Whitman 1993, 93-7). The late *Battle of Brunanburh* has carried this process very far. It has 14 Da* verses, and no ‘heavy’ Da verses at all: there are four Db half-lines (35a, 39a, 45a, 63a), one Da verse (50a) with a single compound with a presumably continuously falling contour (Cable 1991, 142), and one (46a) containing the lighter derivational word *inwitta* ‘enemy’. A comparison with *The Battle of Maldon* shows that clashing plain D half-lines did not completely vanish from late verse (cf. 61a and 66a), but there too most unexpanded D verses with poetic compounds are Db (43a, 107a, 169a, 210a, 219a, 238a, 247a) and most Ssw compounds are found in D* verses (38a, 96a, 102a, 127a, 286a).

66. This type seems to be confined to the on-verse. Hutcheson (1995, 125) finds some 15 exceptions, ten of which are from *Genesis A*. It is reasonable to suppose that in most poems occurrence in the off-verse is wholly unmetrical, but Hutcheson seems undecided as to whether or not we should see the metre of *Genesis A* as more permissive in this regard (1995, 198f.). I am inclined to see 10 verses lacking other signs of corruption as more than incidental for that poem, but it is hard to be sure.

- (118) *ne āhicgan*
 ‘nor find out’ (*Dan* 147a)

In each of these cases, the only alliterating and so clearly stressed element is the penultimate syllable. By the principles of the four-position theory, this should mean that the entire opening run of unstressed syllables counts as a single weak position, much as it does in types B and C:

- (119) **þæt hē in þæt** *būrgeteld*
 ‘that he into that pavilion’ (*Jud* 276b)

- (44) **ne seah ic** *elþēodige*
 ‘never saw I outlanders’ (*Beo* 336b)

This metrical licence to expand dips in the first half of the verse is absolutely essential for the four-position theory to account for types A, B, and C, and by the same standards applied to the beginnings of (119) and (44), A3 half-lines appear to open with a single metrical position.

The classic explanation, going back to Sievers, is that the initial syllable does, in A3 half-lines, carry a certain degree of stress, enough to let them stand as a metrical ictus but not enough to warrant alliteration:

...so muss der erste der beiden versichten notwendig vor der alliterationssilbe gesucht werden, denn es ist nicht daran zu denken, dass die ictenzahl des ersten halbverses, der eher nach erweiterung als nach verkürzung drängt, jemals wirklich auf 1 reduciert worden sei. (Sievers 1885b, 283)

Cable repeats this argument virtually unaltered:

All of this is not to deny that there are verses in which the stress is less than obvious. But if a principle is established in the great majority of lines, it is reasonable to assume that ambiguous verses are constructed upon that same principle instead of upon a completely new one. If the principle requires a minimum of two stresses to the verse, it is reasonable again to assume that the poet and his audience felt two stresses in those occasional verses where the stress is less obvious to the modern reader. (Cable 1974, 24).

Although Sievers and Cable have misidentified why the missing stress is problematic – there is no two-stress quota (§1.2.3.1), but an extra stress would be useful

in creating an extra metrical position – their solution still would potentially bring these verses in line with four-position principles.

This claim that most upbeat words are ambiguous, and can quite reasonably be scanned with an extra stress at the start, is traditionally supported by an appeal to finite verbs. These occur fairly frequently at the beginnings of A3 verses, and their stressability is supported by a comparison with half-lines in which such words bear the sole alliteration:

(120) *hruron him tēaras*
 ‘his tears fell’ (*Beo* 1872b)

(121) *lēt se hearda*
 ‘the hardy one let’ (*Beo* 2977a)

The alliteration is on *h* in both (120) and (121), guaranteeing the ictus of *hruron* but leaving the non-alliterating *lēt* in doubt. Against this, we find examples like *seah* in (44), which is clearly non-alliterating and where the four-position approach would not want an extra ictus:

(44) *ne seah ic elþēodige*
 ‘never saw I outlanders’ (*Beo* 336b)

There are several possible responses to this apparent variability. Whitman (1993, 85-90) is in favour of simply always assigning ictus to any finite verb; this has some measure of consistency, but creates a very large number of patterns which are tolerated only when a verb is involved. This seems unlikely, and Whitman provides no coherent explanation of how such a metrical system is meant to work. Bliss (1962, 9-23 (§§12-29)) takes nearly the opposite approach, frequently denying ictus to finite verbs, even alliterating ones, though granting that in some circumstances (such as in 120) they absolutely must be stressed. Thus he scans the following verse as type C (in his notation, d2c), just like (44):

(122) *geseah ðā sigehrēðig*
 ‘then, glorious in victory, he saw’ (*Beo* 2756a)

Kendall (1991, 24ff, 33f.) has a similar view, but is much more explicit about what ‘incidental’ or ‘extra-metrical’ alliteration should mean.⁶⁷ Pascual (2015, 6-9) relies

67. Kendall (1991, 33f.) is quite clear that ‘incidental’ alliteration is different from *accidental* alliteration: it may be employed for artistic effect, and is integrated into the alliterative structure to the point where its use rarely results in prohibited off-verse double alliteration, or disfavoured on-verse triple alliteration (Russom 1998a, 128-35; Hutheson 1994, 134ff. 1995, 147). It is differentiated from normal alliteration only in falling on a non-ictic syllable. It seems to me that this distinction is

primarily on the four-position principle to determine stress, downplaying the relevance of alliteration one way or the other. Cable seems to take the approach that alliteration is a sure sign of stress, but that non-alliterating verbs can carry even an initial ictus, where needed for the four-position principle. Bredehoft (2005, 39-44) assigns a special status to verbs to explain their alliterative properties, which formalizes the problem without clearly solving it. Russom (1987, 102-7; 1998a, 128-34) and Hutcheson (1992, 134-6) take perhaps the most pragmatic approach, using alliteration alone as a guide to stress for initial verbs.⁶⁸

If we limit our view to finite verbs and a few similarly behaving adverbs, the matter might seem genuinely ambiguous. Taking *lēt* in (121) as the first ictus is a somewhat uncomfortable licence, but hardly one that can be rejected as inherently impossible. But verbs do not tell the whole story. The upbeat of A3 verses frequently contain runs of *Satzpartikeln*, such as the *nū* at the start of *Cædmon's Hymn*. Cable refers to 'occasional' verses in which the initial ictus is 'less obvious', implying that finding an initial stress is in most of these upbeats relatively straightforward: he allows that some cases really are difficult, but he presents these as a few marginal cases.

The problem is that there is little to no independent metrical support that most of the non-verbal particles frequent in A3 verses could be stressed (Neuner 1920, 33ff. Bliss 1962, 61f. (§§68-9); Stanley 1974, 142; Hutcheson 1995, 124f.; Suzuki 1996b, 47-59; Terasawa 2011, 37f.). The temporal adverb *nū* in (116), for instance, is occasionally lightly stressed (cf. *Beo* 658a), but not when in its normal position at the start of a clause (Momma 1997, 177). We can certainly imagine that *nū* shows a freer variable stress, but if so, we ought to find at least occasional verses like the following:

- (123) *nū ic gehȳrde*
'now I have heard' (*alliteration on *n*)

Clause-initial *nū* never seems to carry ictus when this could be verifiable on any other grounds, and the assumption of such ictus exists solely as a tool to find an extra position in this one verse type. The lists of Neuner (1920, 34-43) show that such rarely- or never-stressed elements are very frequent at the start of A3 verses:

dubious, since integration into the overall alliterative scheme is precisely the definition of metrical alliteration: there simply is no other sort. Since alliteration otherwise falls on the more prominent syllables within a line, when it affects a finite verb it can reasonably be taken as direct evidence for some degree of stress.

68. For non-displaced verbs, that is. Verbs displaced later in the clause are much less controversially generally stressed, regardless of alliteration (see the extensive discussion by Kuhn 1933).

this is not an ‘occasional’ problem, but the norm in type A3.

Furthermore, the selection of which element to stress is often arbitrary. Many A3 verses have multiple particles in the upbeat:

- (117) *pāra þe hē on ðām fyrste*
 ‘of those whom he (might find) at that time’ (*Ex* 189a)
 wwwwwwSw

To find four, and only four, positions in this verse, we would have to assume stress on *pāra* – which is wholly unparalleled (Momma 1997, 178) – but not on any of the other pronouns (*hē*, *pām*). It is of course always possible to stipulate that precisely and only the needed elements are stressed, but there is no independent grounds for this except the four-position principle itself.

If one wishes to avoid ‘eking out’ an ad hoc extra ictus in A3 verses, the only alternative is to propose an abstract, unrealized ictus. Suzuki (1996b, 49-59), for instance, argues that the upbeat of A3 half-lines is genuinely unstressed, but represents a ‘demoted’ lift, which remains underlyingly present: SwSw → wwSw (usually with one, or perhaps both, of the initial w positions expanded). The motivation for this demotion is, however, never properly justified. Suzuki argues that demotion of the first lift is necessary to accommodate the runs of clause-initial *Satzpartikeln*, but types B and C can do the job just as well without apparently violating the four-position principle, and such runs can furthermore occur in the second position of a typical type A half-line.⁶⁹ Only types D and E, decidedly less common in Old English verse, are really incompatible with a typical clause opening (Kendall 1991, 29-42). It is true that, in practice, A3 verses are a convenient type for starting a new clause, but poets had other tools, and it is hard to see that syntax alone would really necessitate a violation of what is meant to be the most fundamental principle of the metrical system.⁷⁰

Under the word-foot theory, by contrast, type A3 behaves more or less precisely as expected on general principles. It is a particularly light type, of the form ww/Sw, which motivates its restriction to the more permissive on-verse. Many conceivable light patterns are prohibited because they would overlap with word-feet, but A3 verses have no such issues: at least under the classical formulation of the theory, there are no rising (wS or wSw) feet, meaning that the only possible point of ambi-

69. Suzuki points all this out himself, but does not seem to recognize how this undermines his justification for type A3.

70. Different in the details, but similar in outline is the supposition by Stockwell and Minkova (1997, 68) and Minkova (2003, 40) of an initial ‘silent ictus’ as is the older proposal of a harp stroke used to repair a supposedly defective rhythm.

guity would be whether the initial *w* syllables were extrametrical or constituted a light foot. This potential ambiguity helps explain the rarity of initial monosyllabic *w* feet in the metrical system. Even in types B and C monosyllabic upbeat are less common than polysyllables, and extrametrical words are usually added on to make it clear that the dip is a real metrical constituent rather than an anacrusis (Rusom 1987, 35f.). In the case of A3 verses specifically, the lightness of the final *Sw* foot probably encourages the use of more extra-metrical syllables in the upbeat to provide balance, as Bliss (1962, 62 (§69)) suggests (cf. Suzuki 1996b, 52, 58). Furthermore, since the type is almost solely used for clause openings, syntactic factors encourage longer groups of unstressed syllables (or, put the other way around, the particle chains of Old English poetic syntax are long and complex enough that they are preferentially followed by relatively light, normative *Sw* feet).

As with *D** verses, which also show an (apparent) departure from the four-position structure, A3 verses seem to fall into place more smoothly under the word-foot theory. This is to a large extent due to the flexibility of this approach: there are some strictly unmetrical patterns, but there is also room for metrical gradation, which can account for differences of frequency and distribution. On the other hand, these over- and under-weight verses are not necessarily damning for the four-position approach. Since so few four-position theorists have taken the lack of initial ictus in A3 seriously, it is hard to say that the problem of explaining them has really been tackled as intensively as other metrical problems. The concept that on-verses are more loosely regulated is not specific to the word-foot theory; perhaps in attempting to explain how *D** and A3 verses ‘really’ have four positions, theorists have missed a property of metre that occasionally allows verses that genuinely vary by a position extra (*D**) or fewer (A3) in the on-verse. Such an approach would have further consequences, and may not be tenable,⁷¹ but in general, alternative possibilities within the four-position framework deserve more attention than they have traditionally received.

1.3 CONCLUSIONS

The wider implications of this chapter are twofold. Firstly, there is the concrete question of metrical theory. Given the current state of research, there seem to be only two reasonably viable theories about what principles Old English poets

71. The most obvious question is why other three- and five-position types are entirely absent, even from the on-verse.

used to generate the verses that they did (and no others): the four-position theory, particularly in its mature form outlined by Cable and Yakovlev; and the word-foot theory, proposed and still most rigorously developed by Russom.

The evidence of Old English verse alone makes it difficult to conclusively decide which of these approaches is superior. Cable (2008) and Russom (1998a, 194-204) have each commented explicitly on the other's theoretical approach, but each has tended to obscure the strengths of the other. Cable (2008, 396), for instance, claims that Russom's feet 'would occupy a level between the syllable and the position', implying that the core units of the word-foot theory are unnecessary and theoretically superfluous. But this is to (understandably enough) read the word-foot theory through a positional lens: Russom presents his feet as basic, with positions being the intermediate units. On the other hand, Russom (1998a, 194ff.) directs his criticism of the positional approach primarily against Sievers' now severely outdated presentation of it, rightly criticizing Sievers for incorporating a number of unmotivated types beyond those generated by the four-position principle, but not acknowledging that later four-position theorists have at least made the attempt to explain these types.

Looking at both theories on their own terms and in their current forms reveals significant strengths on both sides. Both approaches attempt to explain *why* patterns occur (and do not occur) through the interaction of core metrical principles and properties of the language. In neither do 'types' of any sort have any genuine reality (though Sievers' labels remain useful descriptive tools, especially for discussing the more frequent patterns found). The positional theory perhaps stands out for being particularly simple and elegant, and its basic statements need relatively little elaboration to account for a significant core of attested verse patterns. The word-foot theory also rests on fairly simple basic principles, but their interaction to produce the attested patterns is often more complex. This additional theoretical apparatus is, however, balanced by the word-foot theory's apparently greater success in accounting for some patterns – most obviously types D* and A3, but also subtler distributions of alliteration and relative frequencies – which positional theories struggle to explain. This makes any final judgement between them very difficult on the basis of the Old English evidence alone. I will return to this question most directly in chapter 4, where I argue that the distinctive metrical patterns of the Norse líóðahátt form are much more amenable to a word-foot than a positional explanation.

Beyond metrics, the comparison of these two theories is revealing about the

linguistic features of verse, and the potential roles of language in metre. Perhaps the most important conclusion is that the two-stress principle, regarded by a very long line of researchers as one of the fundamental features of Germanic metre (Sievers 1885b, 220; 1893, 25; Heusler 1925, 145; Lehmann 1956, 27; von See 1967, 2; Cable 1974, 20, 30; Stockwell and Minkova 1997, 68; Naumann 1998, 695ff.; Minkova 2003, 40; Schulte 2009, 5-7; 2010, 47-50; Marold 2011, 64), has no core role under either the positional or word-foot theories in their most rigorous forms. Many verses do have at least two stresses, and further stresses are often more subordinate, but these facts appear to be incidental by-products of the interaction between language and metre, but not part of the metrical system at all, as shown especially by those types – light C (§1.2.3.1) and A3 (1.2.6) – with only one stress. Even without these single-stress verses, neither theory leaves any role for stress as a constitutive feature of the system. The rhythm of Old English verse is not ‘zweihebig’, or indeed ‘hebig’ at all.

This is not to say that stress is irrelevant in the language of verse. A strength of both the positional and word-foot frameworks is that they allow considerable scope for patterns and constraints to be generated by the interaction of linguistic and metrical features. Under either view, for instance, the limitation of ‘heavy’ D* verses to the on-verse is a natural consequence of the more general properties of poetic compounds, not a fact that either theory can (or should) ascribe directly to the ‘type’. Furthermore, though Old English verse is by no means based around stress, avoidance of stress clash can still play an indirect role, favouring the use of D* (or E) verses over D when using an $\bar{S}\bar{S}w$ word with another stressed element. That the study of Old English metre, particularly in the Sievresian tradition, gives so much attention to precise linguistic features – even when they do not necessarily have direct representation as metrical entities – allows a reciprocal relationship with linguistics. This is particularly true when there is a clear relationship between linguistic and metrical phenomena, as in the case of resolution, which I have so far refrained from discussing in any detail. This process provides a particularly rich field for exploring the interactions between language and verse, as we will see at length in the next chapter.

Chapter 2

Resolution and Kaluza's Law

The principle known as RESOLUTION, discussed in §1.1.3.1 in the previous chapter, is central to the Sieversian tradition of metrical research, and in general provides one of the most ready points of contact between language and metre. The operation of resolution is, however, significantly complicated by what some have seen as a certain arbitrariness in its application: sometimes a light syllable forms a single metrical position in combination with the following syllable, while at other times it stands as a distinct metrical position in its own right. That resolution sometimes does not apply seems certain, but whether this is really arbitrary is another question. An important line of argument, developed especially by Kaluza (1896), Bliss (1962), and Fulk (1992), proposes that the distribution of resolution and non-resolution is not arbitrary, at least not in the apparently early poem *Bēowulf*, and is instead governed, at least to a large extent, by a principle now known as Kaluza's law.

In broad terms, Kaluza's law is the proposition that, in certain metrical or phonological contexts, the resolvability of a pair of syllables depends on some quality of the second, most likely weight. This idea has attracted a very great deal of attention in Old English studies in recent years. This is largely because of its literary and cultural implications, since it provides important evidence for a relatively early date of composition for *Bēowulf*, which in turn has implications for situating the poem in a particular cultural and political context. Of more immediate importance is the considerable theoretical interest the law has as a phonological and metrical phenomenon, with its regularities and patterns of exceptions shedding light on how linguistic elements – especially syllables and feet – are used in the metrical system.

The first part of this chapter is largely data-oriented, consisting of a thorough re-evaluation of Kaluza's law. Drawing on previous scholarship, I first formulate a

working hypothesis for when resolution should and should not occur in the metre of *Bēowulf* (§2.1). Discussion of Kaluza's law is considerably complicated by problems of etymology: the law is held to make reference to the historical length of unstressed vowels in early Old English, but determining precisely which vowels were historically long and which short requires a relatively involved discussion of linguistic reconstruction (§2.2). With these (extensive) preliminaries in place, I undertake a full quantitative test of this provisional formulation of the law, noting where it seems to hold, and what exceptions we appear to find (§2.3). The results, summarized in table 2.1 below, indicate that Kaluza's law clearly holds at least 90-95% of the time in *Bēowulf*, and furthermore that nearly all exceptions are patterned, occurring in very specific contexts (namely in the second elements of verse-final compounds).

The general trend of these empirical findings – both the regularity of the law and the particular nature of most exceptions – is robust enough to warrant an explanation, which I attempt in the final portion of this chapter (§2.4). Drawing on early Old English foot structure, the linguistic basis for resolution, I argue that the core workings of Kaluza's law can be explained by reference to metrical phonology. The prosodic structures of the language are taken over in the metrical system, where they are slightly extended in the context of metrical compounding. This combined metrical-phonological view can, I suggest, also explain nearly all apparent exceptions to the law through a straightforward metrical extension of the phonological process of final defooting. Certain aspects of both phonology and metre remain unclear, but Kaluza's law, along with poetic resolution more generally, emerges as a highly consistent and 'coherent' system, in which a few basic linguistic and metrical principles can largely account for a relatively complex set of surface facts.

2.1 KALUZA'S LAW AND RESOLUTION

The background of Kaluza's law is the general metrical principle of resolution, which is the combination of one light syllable with another syllable, so that they both occupy a single metrical position (see §1.1.3.1). This can be simply illustrated by the following verses, which are effectively equivalent despite the different number of syllables in the second position:

- (124) **bānfatu** bærnan
 'bone-vessels to be burned' (*Beo* 1116a)
- (125) **dryncfæt** dēore
 'precious drinking vessel' (*Beo* 2254a, cf. 2306a)

The scansion of (124), Ss^w/Sw, is not appreciably different from that of (125), Ss/Sw. If this were all there was to it, resolution would be relatively uninteresting, but not infrequently potentially resolved sequences are instead treated as two separate metrical positions; such non-resolution is termed **SUSPENSION OF RESOLUTION**.

- (126) **mundbora** wæs
 'was a protector' (*Beo* 2779b)
- (127) **lofdædum** sceal
 'with honourable deeds ought' (*Beo* 24b)

The scansion of (126) and (127) is identical, Ssw/S. There is no resolution in *mundbora*, which occupies three metrical positions, even though the sequence *-bora* appears to be very similar in structure and position to resolved *-fatu* in (124). It is worth emphasizing that resolution in (124) and suspension in (126) are necessary to make either verse conform to a valid scansion. There are no verses like the following, which might justify an alternative scansion of either verse:

- (128) ***bānhringas** bærnan
 'bone-rings (vertebrae) to be burned'
- (129) ***gūðrōf** wæs
 'was brave in war'

Kaluza's law is a proposal to explain why *-fatu* resolves and *-bora* does not: it is the suggestion that, within certain metrical environments, the ability of disyllables to resolve or be suspended is not random, but depends on whether the second syllable is 'heavy' or 'light'. The definition of just what 'heavy' means in this context has been disputed (see further §§2.2.1 and 2.3.10 below), but the most appropriate definition is probably the normal linguistic one: a heavy syllable is bimoraic – containing a long vowel or ending in a consonant – while light syllables have only a short vowel with no coda consonants.¹ In recorded Old English, both the *-u* of

1. I follow standard assumptions about Old English syllable weight and syllabification. A short vowel contributes one mora to a syllable or phonological foot, a long vowel or diphthong two. Old English has a variety of 'short diphthongs', which are monomoraic. Every consonant in the coda

(124) and the *-a* (126) appear to be light, but Kaluza's law, it is proposed, makes reference to the earlier, reconstructed lengths of these vowels:

- (124) *bānfatu* *bærnan*
 **bānfatū* *bærnan*
 'bone-vessels to be burned' (*Beo* 1116a)

- (126) *mundbora* *wæs*
 **mundborā* *wæs*
 'was a protector' (*Beo* 2779b)

Thus resolution is allowed, or required, in the former verse because both syllables of *-fatu* are historically light, while suspension is mandatory in *-borā* because the second syllable is historically heavy (on the chronology, see further §2.2.1 below).

This description of Kaluza's law implies that it is a constraint on the weight of (some) resolved sequences: the resolved unit may have two moras, but not three. This constraint on weight is, as is generally recognized, specific to certain metrical contexts. It is clear that in many environments, such as the first lift of type C verses, a light syllable must resolve, regardless of the total weight of the resolved sequence:

- (130) *ac hē sigewæpnum*
 **ac hē sigiwēpnum*²
 'but he against victory-weapons' (*Beo* 804a)

- (131) *ac se maga geonga*
 **ac se magā ġongā*
 'but the young kinsman' (*Beo* 2675a)

- (132) *of gomenwāpe*
 'from a fun trip' (*Beo* 854b)

contributes a mora, but consonants in a syllable onset are irrelevant for weight. A monomoraic syllable is light (or short), one with two moras is heavy (or long), and anything heavier is overheavy (or overlong).

Since consonants in a syllable onset are irrelevant, the rules for how consonants are assigned to syllables are significant. A single consonant between two vowels belongs to the onset of the following syllable, so that the first syllable of *fa.tu* 'vessels' is light, but the NOM.SG *fæt* is a heavy syllable (the . marks a syllable boundary). In clusters following a short vowel, at least one consonant stands in the coda of the preceding syllable, closing the syllable: a word like *yl.fe* 'elves' thus has a heavy first syllable. These rules also mean that the second syllable of NOM.SG *cy.ning* 'king' is overheavy, and that it becomes bimoraic (normally heavy) due to resyllabification in the GEN.SG *cy.nin.ges*. I discuss some comparative evidence for Germanic syllabification from a Norse perspective in §3.2.2.

2. Throughout this chapter, I use reconstructed verse forms of this sort very sparingly in examples, only using them to illustrate cases where the etymological length of an ending is potentially different from the apparent length of the attested form.

- (133) hæfde **kyning**wuldor
‘the king-glorious had’ (*Beo* 665b)

All of these verses have the same scansion, (w)wS^wsw, regardless of whether they have two moras in the resolved unit (130), or more (131-133), and are all equivalent to a verse in which the initial lift is a heavy monosyllable:

- (64) ofer **hron**rāde
‘over the whales’ riding’ (*Beo* 10a)

Suspension of resolution never occurs in such verses and *Beowulf* has no type C half-lines like:

- (134) *tō þāem cyninge
‘to the king’

Such verses are perfectly conceivable, and indeed occur in Norse fornyrðislag (see §3.3.1.3), but are wholly absent from *Bēowulf*: the implication, as recognized cogently by Sievers (1885b, 218f.), is that resolution is obligatory in many contexts, rather than being an arbitrary poetic licence. Suspension of resolution is only possible under specific conditions, and therefore Kaluza’s law – a principle meant to regulate the possibilities for suspending resolution – is only relevant in certain marked metrical contexts.

Defining these marked contexts in which suspension is possible has proved somewhat difficult. In his classic exposition of the law, Fulk (1992) restricts the application of Kaluza’s law in two ways. First, he argues that it applies only to elements with secondary stress, excluding sequences under primary stress, such as (130-133), as well as any low-stress sequences (whether with some degree of ‘tertiary stress’ or completely unstressed). Beyond this phonologically-based criterion, he also limits its application to certain metrical types, most importantly excluding the second lifts of type C verses from the scope of the law categorically (even though these are often secondarily stressed).

This reliance on certain metrical types – which are purely epiphenomenal under most current theories – is difficult to describe precisely and hard to motivate. Fulk (1992, 157-9 (§§174-5), and n. 12) does offer some suggestions as to what the metrical conditioning might be, though he acknowledges that the matter is problematic. He proposes using Bliss’s caesura as a possible conditioning factor for the law. However, the verse-internal caesura is a rather idiosyncratic feature of Bliss’s system, and one Fulk elsewhere argues convincingly against (1992, 216-23 (§§246-54)). He alternatively suggests that ‘Kaluza’s law applies only when the resolvable

syllables immediately follow a lift in the same foot'. But he acknowledges that this restriction is also difficult to motivate, relying as it does on Sievers' particular foot divisions which are followed by few current metricists. Problematic as Fulk's exclusion of type C verses is, it does touch on potentially interesting patterns to the apparent exceptions to Kaluza's law; see §2.4.3 below.

A more fundamental issue is the association of Kaluza's law with secondary stress. The core data gathered by Bliss involves only types where resolution occurs or is suspended in secondarily stressed sequences, and the early focus on this factor is understandable. However, Fulk (1992, 236-41 (§§271-5)) also noted that Kaluza's law might have a wider application, and subsequent research, especially by Suzuki (1996a), has shown that suspension can apply even to certain primary stresses, in which case it appears to be conditioned by the law. The bolded sequences in the following verses, for instance, are suspended, apparently in keeping with Kaluza's law, since they would have three moras if resolved (see further §§2.3.1 and 2.3.2):

(135) wordgyd **wre**can

'to recite a word-song' (*Beo* 3172a)

(136) feorh **cyn**inges

'the body/life of the king' (*Beo* 1210b)

By contrast, in very similar metrical environments, resolution does sometimes occur, but only when the resolved lift is bimoraic (cf. Yakovlev 2008, 76, n. 49):

(137) ealdsweord **e**otenisc

'giantish ancient sword' (*Beo* 1558a; cf. 2616a, 2979a)

(138) feorh **æ**belinges

'the life of the prince' (*Beo* 2424a)

In light of these observations, I set stress aside, and instead adopt a working hypothesis that EVERY INSTANCE OF SUSPENDED RESOLUTION IS POTENTIALLY GOVERNED BY KALUZA'S LAW.

The common factor among the various places we find suspended resolution – and therefore, where Kaluza's law seems to apply – seems to be, not stress, but rather the presence of an immediately preceding heavy syllable.³ This conditioning

3. Fulk (1995, 494) offers a characterization that would combine these two factors, proposing that 'secondary stress is defined positionally, as any full stress that immediately follows another'. The description of the environment is nearly accurate – though the conditioning syllable need not be a 'full stress' – but the label 'secondary stress' no longer seems appropriate for the syllables in

syllable could bear primary stress, as in (124), (126), and (136), secondary stress, as in (135), or even 'tertiary' stress (the conditioning syllable is underlined, the suspended sequence in bold):

- (139) rīdend **swefað**
 'riders sleep' (*Beo* 2457b)

Here Kaluza's law prevents resolution in *swefað*, apparently conditioned merely by the preceding participial formant *-end*.⁴

Combining this conditioning for potential suspension with the weight-based characterization given above, we can formulate a succinct working statement of Kaluza's law:

- (140) When immediately following a heavy syllable, a short syllable bearing some degree of stress resolves with the following syllable if, and only if, the result is a precisely bimoraic unit.

2.1.1 KALUZA'S LAW AND LOW-STRESS SYLLABLES

The provisional statement of Kaluza's law above limits its scope to syllables 'bearing some degree of stress', a restriction also endorsed by Fulk. Unlike the exclusion of primary stressed syllables, there seems to be good empirical and theoretical justification for leaving unstressed elements outside the law's scope (Fulk 1992, 146 (§172)). The most important theoretical consideration is that low-stress syllables probably cannot be resolved in the first place.

In the following examples, the bold sequences are treated as a single metrical position:

- (141) prēatedon **pearle**
 'they assaulted sorely' (*Beo* 560a)
- (142) eorlscipe **efnde**
 *eorlscipi **æfndæ**
 'accomplished (deeds of) nobility' (*Beo* 2133a, 3007a; cf. 2535a, 2622a)

Kaluza's law position. Pascual (2014, 807, n. 15) formulates the conditions accurately, though he too later introduces 'secondary stress' as a factor (808).

4. It is interesting that the conditioning factor seems to be a preceding heavy *syllable* specifically; one resolved sequence cannot provide the conditioning for potential suspension in another, though in most other ways resolved sequences are 'heavy syllable equivalents'. This is perhaps unexpected, but after resolved lifts, suspension of resolution is so rare as to be highly suspect – this is the well-known constraint against *heretoga*-type sequences, and will receive special discussion in §2.3.12 below).

Bliss (1962, 31f. (§38)) assumes that (141) and (142) are resolved; if so, the constitutes an exception to Kaluza's law. However, as Bliss notes, similar sequences normally occupy two positions at the end of a verse, again regardless of weight (32-4 (§39)):

- (143) glēd fæðmie
 *glēd fæðmiǣ
 'fire should embrace' (*Beo* 2652b)
- (144) grim andswaru
 'grim answer' (*Beo* 2860b)

Bliss's assumption that these patterns have anything to do with resolution and suspension is unwarranted. Under both the four-position and word-foot theories, there is no reason why verses like (141) and (142) should be scanned any differently from Sww/Sw verses where resolution is absolutely not a possibility:

- (145) wēox **under** wolcnum
 'grew beneath the clouds' (*Beo* 8a)

This verse shows the familiar principle of an expanded dip (or, under the word-foot theory, an initial Sww foot), where multiple syllables fill the dip without resolution being in any way involved.

When verse final, the rhythm of words like *fæðmie* as Sww also falls out naturally without any reference to resolution or suspension. Under a four-position approach, the rule of the coda (§1.2.3.1) would map the two final syllables onto separate metrical positions by default (Suzuki 1996b, 107-9). Similarly, under the word-foot theory, Sww feet are perfectly acceptable (cf. 145), and may freely occur at the end of a verse as well as initially. *Pace* Bliss (1962, 32 (§38)), resolution is not 'ambivalent' in any of these cases: it is wholly absent, and the unstressed syllables are then scanned precisely as expected.

Given these theoretical considerations, it is unsurprising that in actual practice low-stress syllables show little regard for Kaluza's law (Hutcheson 1995, 148, and n. 19). Bliss (1962, 31f. (§38)) lists a number of low-stress 'A2l' verses like (141) above, which show a mixture of etymologically heavy and light endings: seven end with short vowels (four of these are variants of the same formula, *eorlscipe efnan*), four have consonantal endings, and nine contain the 3SG preterite ending of class II weak verbs, *-ode* < **-odǣ* (on whose length see §2.2.8).⁵

5. Hutcheson (1995, 148) acknowledges that Kaluza's law should not apply to low-stress syl-

Because of its non-application to low-stress elements, there are a small number of problematic verses whose scansion can probably be determined without reference to Kaluza's law:

- (105) word wæron wyn**sume**
 'words were joyous' (*Beo* 612a)
- (106) eard ond eorl**scipe**
 'land and nobility' (*Beo* 1727a)
- (107) lif ond lēod**scipe**
 'life and princesship' (*Beo* 2751a)

These endings have in the past been scanned variously, either as light D* (SwSww) or resolved as A or A2b (SwSw^w or SwSs^w). Given that the former is a valid verse type (see §1.2.5.2), and fits better with the general picture of non-resolvability in low stress endings, it seems better to take these few examples as SwSww, with the two final syllables occupying distinct weak positions by the rule of the coda.

There is one verse in which this solution is more problematic:

- (146) fyrdsearu fūs**licu**
 'ready war-gear' (*Beo* 232a)

This notoriously difficult half-line would, if scanned as D*, have the apparently unparalleled pattern of Ss/Sww. There are no good parallels for this rhythm with a true secondary stress in the second position (Russom 1987, 158f, n. 20; 2001, 53, and n. 12, though see note 98 below for parallels with 'tertiary' stress). It is probably better to emend the verse by removing the final -u, which is the reading of the otherwise identical 2618a, scanned Ss^wSw.⁶

It is also worth mentioning one further problematic verse which falls outside the scope of Kaluza's law due to lack of stress, though it remains anomalous:

- (147) lāð**licu** lāc
 'loathsome spoils' (*Beo* 1584a)

This verse appears to have the metrical pattern Sww/S, a type which is at best highly marginal, and most likely simply unmetrical (Pascual 2013). For the four-position theory, it is too short: not being under the influence of the rule of the

lables, but nonetheless frequently applies it 'so that those types without secondary stress will parallel those with secondary stress in their classification'. It seems to me quite incorrect to insist on parallelism between two classes of words whose behaviour is clearly not actually parallel.

6. Fulk (1992, 220 (§250)) has further suggested that *Beo* 612a (105) should also be taken as having an inauthentic final syllable.

coda, the medial syllables count as a single weak dip, leaving the half-line with just three positions. Under the word-foot theory, the entire verse has the pattern Sww/S, which is banned as overlapping too much with the Swws foot. I do not know how to explain this verse, but its isolation suggests some sort of error in composition or transmission.

It has been suggested that non-stress might also be used to explain certain supposed exceptions to Kaluza's law, such as:

- (148) ūhthlem **þone**
 'that pre-dawn clash' (*Beo* 2007b)

The verse is traditionally scanned as Ss/Šw, type A2k, with the displaced particle *þone* acquiring stress and therefore coming under the scope of Kaluza's law. Fulk (1992, 239, n. 4), who regards the second syllable of *þone* as short (though I do not; see §2.2.8), tentatively suggests that this and five more similar half-lines⁷ might be low-stress enough to fall outside the scope of the law. The idea is that even when displaced, these particles would not acquire enough stress to resolve in the first place. This, however, is not a conclusion supported by the behaviour of other low-stress particles, which become resolvable when displaced. Compare the B verse (wwSwS^w):

- (149) þonne Grendel hine
 'than Grendel (counts) himself' (*Beo* 678b)

It is unlikely that *þone*, uniquely among words of its sort, had some special property that kept it effectively unstressed even when displaced: *þone* should be treated as a genuine example of suspended resolution.

The non-resolvability of low-stress syllables has one final important consequence when it comes to investigating Kaluza's law in its proper environment. The deuterotheremes of Old English names are notoriously difficult to characterize metrically, and they often seem to count variably as having secondary and no stress. This makes it difficult to evaluate verses like the following, where the second element of a name consists of a short disyllabic sequence:

- (150) hēah Healf**dene**
 'high Healfdene' (*Beo* 57a)
 (103) dēad is **Æschere**
 'dead is Æschere' (*Beo* 1323b)

7. 2334b, 2588a, 2959a, 2969b, 3081b.

In (150) there is not much wiggle room: the verse pattern SSs is clearly disallowed, so resolution is not possible. Either the deuterotheme has secondary stress and is suspended as SSšw (in violation of Kaluza's law), or the final element has reduced stress, and the scansion is SSww, with no possibility of resolution. The longer verse in (103) is less clear-cut, since there are parallels for both SwSs and SwSww half-lines (see further §2.3.8 below). Neither pattern is usual in the off-verse, but only because they both usually end in poetic compounds, which would demand double alliteration, a restriction not shared by proper names like *Æschere*. Either way, there is no need to see it as violating Kaluza's law: either *-here* has secondary stress, and resolves in conformity to the law (SwSs^w), or else it is unstressed and so it is not subject to resolution at all (and instead follows the rule of the coda, SwSww). When a proper name has to have secondary stress to scan, I treat it like any other word in the evidence for Kaluza's law; but most deuterothemes are ambiguous, and I discuss these separately as a group in §2.3.11.

2.2 ETYMOLOGIES AND ANALOGIES

The characterization of Kaluza's law, already a thorny task in terms of describing its proper scope and precise effects, is significantly complicated by issues of historical phonology. As we saw above, the law has been framed as depending on the lengths of endings as reconstructed for EARLY OLD ENGLISH, a term which I use to refer to the period when unstressed vowel length remained contrastive: when there would still be a distinction between, e.g., NOM.SG **winī* 'friend' and NOM.PL **winī*. Before we can see how well this archaic phonological system explains Kaluza's law, we need to establish what this system was.

The chief problems of the early Old English system discussed in this section concern historical vowel length. Any ending in a consonant was heavy, and remained so throughout the historical period, but the length of vocalic endings must be reconstructed on a linguistic basis using the comparative method and internal reconstruction. Strictly speaking, these linguistic methods can, for the most part, only identify those vowels which were long at the time of high vowel deletion, a prehistoric process perhaps dating to the early 7th century (Luick 1921, 287; Ringe and Taylor 2014, 292; see further 2.2.8.2). That these vowels remained long until the composition of *Bēowulf* has not traditionally been assumed by Germanic philologists, and is demonstrated only by the validity of Kaluza's law itself.⁸ There

8. I argue against the alternative possibility that Kaluza's law is preserved purely formulaically

is, however, also little to speak against the retention of length until the time of *Bēowulf*. It is true there is no positive evidence (e.g. from orthography) that these length distinctions were still active in the earlier historical period, but here absence of evidence is probably not good evidence of absence. In root syllables length is sporadically marked in the earlier texts by doubling of the vowel, but this is not common, and it is not surprising that the less salient unstressed vowels would never be so marked, even if long.

The only real terminus for their shortening is, it seems, the merger of unstressed *-i* and *-æ* as the *-e* familiar from the later language, a qualitative merger which presumably postdates the loss of quantitative distinctions (Fulk 1992, 386-9, cf. Dahl 1938, 186-91). The earliest evidence of <e> for **-ī* is difficult to interpret: in the oldest glossaries, I can find only two examples, *teblere* and *flitere*,⁹ which are shared by both the Épinal and Erfurt glossaries (entries 7 and 854, respectively), and plausibly go back to a common exemplar from the later 7th century (the former word is found with final <i> in other glossaries, e.g. Leiden 140 *teblheri*, Erfurt³ 1141 *tebleri*, suggesting this spelling does not go back to the earliest, mid-seventh-century layer of glosses). If these two rather isolated examples are not merely scribal errors of no significance, then they *might* suggest that **-ī* had already been shortened – at least in the variety of North Mercian represented by these glossaries – to **-ī̃* so as to allow for sporadic lowering or laxing to **-e*. This is a rather tentative conclusion, based on very slender evidence, and in any case it does not follow that unstressed vowel shortening was found in all dialects of Old English by this date. General confusion between *-i* and *-æ* only becomes discernible south of the Humber rather later, around the middle of the 8th century (Luick 1921, 300). Fulk (1992, 386-9) argues reasonably that more conservative dialects in this area could potentially have retained length until a generation or so before that (i.e. into the earlier 8th century). Furthermore, if *Bēowulf* should be Northumbrian – and the evidence for precisely which variety of Anglian it belonged to is relatively slim – the window is even larger, since in this region *-i* and *-æ* only merged in the middle of the 9th century. All together, non-metrical evidence can only place shortening in the broad span between the early 7th and the beginning of the 9th centuries.

after the phonological conditioning was lost in §2.4.3 below. It is nonetheless possible that the conservative register of poetry retained older phonological distinctions somewhat longer than daily speech, which adds further latitude to the chronological issues discussed here.

9. I leave aside here further examples of **-ī̃* written as <e>, which can tell us nothing about the chronology of shortening, as well as all examples of <e> for **-ǣ̃*, as these cannot be distinguished from casual omission of the hook in the grapheme <ę>. The treatment of medial vowels is also not relevant, as these likely shortened before final vowels (Stausland Johnsen 2015).

Bēowulf has often been considered relatively archaic, and its composition relatively early in the historical period is plausible on other grounds (Fulk 1982). It may well date from the 8th century, and even a late seventh-century origin is difficult to rule out.¹⁰ The independent evidence for the shortening of unstressed vowels and the composition of *Bēowulf* provides a window of overlap (a very large one in Northumbrian), so there seems to be no initial objection of plausibility against the poem being composed while the early Old English phonological system was still in place.

Beyond the linguistic problems discussed in the remainder of this section, there are important issues of textual interpretation. *Bēowulf* is not always a straightforward text, and whether or not we see a historically long or short ending in any particular example sometimes depends on uncertain grammatical judgements, or the acceptance or rejection of particular emendations. Fortunately, a large number of emendations in the relevant half-lines are either fairly secure, or are not relevant for the workings of the law. A few specific problems remain, and are considered in this section. Unless a half-line receives particular comment, I accept the readings and interpretations of the standard edition, Fulk, Bjork, and Niles (2009).

2.2.1 THE HISTORICAL PHONOLOGY OF LONG VOWELS

Determining whether or not a syllable is historically long is often not entirely straightforward. A traditional starting point for determining the early Old English length of an ending has been to work forwards from Proto-Germanic, and assume that any CIRCUMFLEXED or 'TRIMORAIC' (or 'TRIMORAIC') vowel in the earlier language is long (that is, bimoraic) at the time of Kaluza's law. As Fulk puts it:

An inflection is long [in *Beowulf*] if (1) it ends in a consonant in Old English, or (2) the form reconstructed for Proto-Indo-European or Proto-Germanic is written with a circumflex accent, in actuality probably representing disyllabic pronunciation in Proto-Germanic... (Fulk 1992, 419)

This emphasis on the earlier stages of Germanic has some usefulness as a rule of thumb, but determining the length of an ending in early Old English is not simply

10. As far as I can tell, there is nothing that precludes the poem dating as far back as c. 650. *Pace* Fulk (1992), loss of intervocalic **h* must have already begun by the time of the very earliest glossary work in the middle of the 7th century, and there seem to be no other linguistic features that would require the poem to be later.

a matter of working forwards phonologically from Proto-Germanic. For one thing, Fulk holds that all Proto-Germanic final bimoraic vowels had become short before the Old English period, which I argue below is incorrect. Beyond this, morphological changes can and do confound the expectations of historical phonology.

Still, Germanic ‘trimoraic’ vowels do provide an important core of long (synchronically bimoraic) vocalic endings for early Old English. The full arguments establishing the existence of ‘trimoraic’ vowels in Proto-Germanic, and determining which Old English vowels are historically ‘trimoraic’ (> bimoraic), are bound up with the extremely tangled issue of the Germanic *Auslautsgesetze* and cannot be fully elaborated here. Simply put, a ‘trimoraic’ vowel is a Proto-Germanic vowel in absolute auslaut¹¹ that is more resistant to shortening and showed different qualitative outcomes than other final long vowels (which are termed ‘bimoraic’). The most securely reconstructible ‘trimoraic’ vowel is Proto-Germanic **-ô*, which may equally well be written **-ō̄* or **-ō̃* (Stiles 1988, 126ff.; Ringe 2006, 73ff.). This vowel is differentiated from bimoraic **-ō* by a greater resistance to shortening (cf. Gothic *-ō* < **-ô*, but *-a* < **-ō*), as well as by different qualitative outcomes in the attested languages (though this need not necessarily imply any original qualitative distinction).

Most instances of Germanic **-ô* arose through contraction, e.g. the *a*-stem GEN.PL **-ôⁿ* < PIE **-oHom*. Word-final true long **-ō̄* in PIE – but *not* the later Germanic **-ō̄* < **-eH₂* – also seems to have become a ‘trimoraic’ vowel in PGmc, to judge from the *n*-stem NOM.SG **-ô* < PIE **-ō̄* (Jasanoff 2002, 35ff.). It is hard to be sure what linguistic feature distinguished ‘trimoraic vowels’, with the three most commonly proposed options being true overlength (i.e. that the vowels counted for three moras), disyllabic pronunciation, or some sort of intonational or accentual quality.¹² What the precise character of ‘trimoraic’ vowels might have been is less important than the reconstruction of the contrast itself, and the different devel-

11. There is some evidence that the distinction also applied in final syllables before a consonant (Stiles 1988, 130-5), but this is not directly relevant to Kaluza’s law.

12. There are approaches that do not reconstruct ‘trimoraic’ vowels for Proto-Germanic. Boutkan (1995, 138-44, 163), for instance, looks largely to the late preservation of certain final consonants to protect long vowels from shortening, combined with a certain amount of analogical change (though he does resort to a hiatus sequence in the GEN.PL, which he gives as disyllabic **-ōan*). Schrijver (2003, 196-217) presents a modern formulation of a different tradition that attempts to explain Germanic vocalic developments through an appeal to qualitative differences in the vowels (namely, the non-merger of **ō* and **ā* in Proto-Germanic). I generally accept the arguments for a genuine distinction of two kinds of long vowel put forward by Stiles (1988) and the similar reconstructions of Ringe (2006), but even if one wishes to adopt a different approach, the reconstructions for West Germanic and early Old English turn out largely the same.

opments that the different types of vowels underwent in the individual Germanic languages.

Some diphthongs have also been reconstructed as ‘trimoraic’, but this distinction is irrelevant for Kaluza’s law. Even clearly ‘plain’, bimoraic diphthongs, such as the MASC.NOM.PL **-ai* ← pronominal **-oi*, and most likely the PGmc DAT.SG **-ai* (← LOC.SG **-oi*),¹³ have long reflexes indistinguishable in Old English from those of long (overlong?) diphthongs. Both **-ai* and **-ōi* become Old English **-ǣ* > *-e*.¹⁴

Contrasting with this core of long endings in early Old English (made up of the now-bimoraic reflexes of Proto-Germanic diphthongs and ‘trimoraic’ vowels, along with endings with surviving final consonants), there are a large number of short endings from a variety of sources. Most Proto-Germanic final short vowels have been lost, but nasalized **-iⁿ* and **-uⁿ* sometimes survive (found most importantly in the accusative singular of *i*- and *u*-stems, respectively). Other short vowels became final through the loss of final consonants, such as **-iz* > *-i* and **-uz* > *-u* in the (non-neuter) nominative singular of the same classes. New vowels were sometimes created from vocalized sonorants, e.g. the *wa*-stem ending *-u*, syllabified from **-w* after the loss of the rest of the original Germanic ending, **-waz*.

At least some final vowels that were ‘bimoraic’ – long but not ‘trimoraic’ – in Proto-Germanic were shortened in Northwest Germanic (Ringe and Taylor 2014, 14-6). This shortening certainly affected the high vowels **-ī* and **-ū* (raised from Proto-Germanic **-ō*). These shortened early enough to undergo high vowel apocope after heavy stems (e.g. **bandī* ‘bond’ > **bændī* > *bend*), exactly parallel to historically short **-ĩ* and **-ũ* (e.g. **wurmiz* ‘worm, dragon’ > **wyrmi* > *wyrm*). Whether non-high bimoraic vowels were shortened at the same time is debated; I argue in §2.2.8 they remained long, merging with the now-bimoraic reflexes of older ‘trimoraic’ vowels.

High vowel deletion often provides the most useful test in determining whether a given high vowel was short in early Old English, though analogy can interfere and some historically short vowels are restored morphologically. In Anglian Old

13. Cf. Gothic *-a*, which must reflect **-ai* rather than PGmc **-ōi* < PIE *-ōi* < **-o-ei*. The Gothic ending is still not infrequently derived from instrumental **-ē* instead (Boutkan 1995, 187; Nielsen 2000, 162), but the reconstruction of a single dative (earlier locative) **-ai* seems preferable, as argued cogently by Prokosch (1939, 235) (followed more recently by, e.g., Syrett 1994, 88 and Ringe 2006, 200).

14. Proto-Germanic **-ōi* is found in, for example, the *ō*-stem DAT.SG ending. This ultimately comes from PIE **-eH₂ei*, and shows up in Gothic as *-ai* (proving less resistant to shortening than **-oi* > **-ai* > Gothic *-a*). There is no reason to make a distinction between **-ōi* and **-ōi*. There is no direct comparative basis for such a distinction, and **-ōi* is already ‘trimoraic’ in the literal sense of the term.

English, for instance, we find verbal forms like *singu* ‘I sing’ < PGmc **singō*, where the final vowel has been restored from verbs where it escaped apocope (namely short-stemmed strong verbs and heavy class I weak verbs).¹⁵ That the ending was actually lost, rather than simply retained on a morphological basis, as suggested by Hogg (2000, 363), is shown by the West Saxon generalization of the 1SG subjunctive ending into the indicative, e.g. *singe*. This was presumably a different morphological response to the same apocope; on why the different dialects may have favoured the one solution or the other, see Cowgill ([1965] 2006, 428-31 (45-9)).

Fulk (1992, 419ff.) provides a useful short survey of the expected lengths of early Old English endings based on their Proto-Germanic forms. Many of these are uncontroversial, and where I do not explicitly discuss a form I follow his conclusions. However, a number of forms call for further discussion. For some, such as the reflexes of PGmc **-ō̄n*, there is evidence that they are still long despite coming from ‘bimoraic’ vowels (Fulk relies perhaps too heavily on ‘trimoraism’ to predict Old English vowel length), while for others there is evidence of analogical interference that could have an effect on length. In each case, I have tried to approach the reconstruction on a primarily linguistic basis (though where metrical evidence has been invoked by others I do not disregard it), in order to provide as fair as possible a basis for evaluating the explanatory power of Kaluza’s law.

2.2.2 THE PRETERITE SUBJUNCTIVE (*-I OR -Ā?)

There are six verses potentially relevant to Kaluza’s law which contain a preterite subjunctive ending, such as 676b,¹⁶ as well as one instance of the 2SG strong preterite ending, which is most likely subjunctive in origin:

(151) *ǣr hē on bed stige*

‘before he climbed into bed’ (*Beo* 676b)

(152) *ymb sund flite*

‘(you who) should have contended across the sea’ (*Beo* 507b)

There is no question that these come from PGmc **-ī-*, a generalized reflex of the zero-grade of the Indo-European optative formant **-iH₁-*. This ending should have been shortened in Northwest Germanic, and if continued directly would still be short for Kaluza’s law. It seems clear, however, that the endings of the present, long

15. Just as *ricu* ‘dominions’ developed regularly from PGmc **rikijō*, an unapocopated class I weak verb like *dōmu* is probably the phonologically expected outcome of **dōmijō*.

16. Also 966b, 2818b, 2976b, 3073b, 3126b.

*-*ǣ* < *-*ai*, ultimately from PIE *-*oiH₁t*, etc., were extended into the preterite at a very early date in the prehistory of Old English.¹⁷ In texts that distinguish between unstressed -*i* and -*ǣ*, only the latter is attested in this category (Pheifer 1974, lxxxvii (§84); Bammesberger 1982; Ringe and Taylor 2014, 356). Heavy-stemmed preterite subjunctives like *hēolde* (*Beo* 1099a, 2344b) or -*wurpe* (*Beo* 2872a) also show an overt ending where historical *-*i* would have been lost. While in principle the ending *-*i* could have been restored or morphologically maintained¹⁸ (compare the Anglian 1SG -*u*), the necessity of some analogy combined with the early orthographic evidence strongly suggests that the lack of apocope in these verbs is due to the presence of the ending *-*ǣ*, either generalized already before high vowel loss, or else making its entry into the preterite after the original endings were affected by apocope. In general, Old English gives every sign of having regularized these preterite subjunctive endings on the model of the present quite early on, and there is no reason at all to suppose that *Bēowulf* is exceptional in this regard.

Matters are much less clear concerning the historically similar preterite-present subjunctive, found in eight relevant verses:¹⁹

- (153) þēah þīn wit duge
 ‘though your wit might suffice’ (*Beo* 589b)
- (154) þonne ðū forð scyle
 ‘when you should (go) forth’ (*Beo* 1179b)

The form *scyle* in particular looks like a direct continuation of West Germanic **skuli*, and there is no real reason to assume this frequent word was ever renewed in any appreciable way. Some remodelling has occurred in *duge*, with the form updated at least to the point of removing umlaut from the stem. It is possible that the ending was also remodelled in the process. Some restoration of the endings certainly took place in the heavy-stemmed preterite-presents, and was usually ac-

17. It is interesting that Old Frisian also seems to have no sign of umlaut in the preterite subjunctive of strong verbs. This may simply be due to later levelling, but it is perhaps worth entertaining the possibility that the spread of *-*ǣ* had begun already in the late Ingvaenic dialects. On the other hand, this would mean that the ending was spreading even before high vowel apocope, and it is less clear what the motivation for this extension would have been before the potential confusion caused by the loss of so many subjunctive *-*i*’s.

18. This is evidently the view of Hogg and Fulk (2011, 215 (§6.8, n. 3), who speak of the reflex of *-*i* being ‘retained’ in the preterite subjunctive on an analogical basis, and of its later ‘lowering’ to -*e*.

19. 589b, 680b, 1179b, 1367b, 2031b, 2530b, 2749b, and 3176b. One could include 1660b as well, if *wāpen* is there read as monosyllabic, without parasiting. Since this verse is perhaps more naturally read as type B, and is so printed in Fulk, Bjork, and Niles (2009), I have left it out of consideration for Kaluza’s law.

accompanied by the removal of umlaut, as in *purfe*, *cunne*, *mōte*, etc. It is tempting to see such verbs as having been remodelled after apocope, using the default (un-umlauted) stem and ending, i.e. $*pyr\bar{f}i > *pyrf \rightarrow *purf\bar{a}$.²⁰ This might or might not have been accompanied by parallel changes in the light stems. Verbs like *duge* could potentially have kept their $*-i$, or been remodelled to have default $*-\bar{a}$ (or even have extracted $*-i$ from the plural, where the length could have been preserved by the final consonant in $*-in$). Analogy is too plausible to be dismissed, but too uncertain and potentially variable in its effects to be assumed.

In general, I have assumed that all instances of the preterite subjunctive of strong verbs involve long endings, but I treat the preterite-presents as ambiguous. There should be no objections in principle to treating the two types of verb differently, since they are far from being perfectly parallel in ways we can be more sure about. The retention of umlaut in the preterite-presents (especially in the lighter members of the class) points to a greater degree of conservatism in general, and (in contrast to the strong verbs) we have no early orthographic evidence to suggest that the ending $*-\bar{a}$ ever intruded into their inflection. Any differences in development might be partly due to the general irregularity of the preterite-presents, many of which served core grammatical functions. Furthermore, if the extension of $*-\bar{a}$ was partly motivated by the need to replace apocopated endings, the relative frequencies of light and heavy members of each type could have played a role. Around half of the preterite-presents, including some of the most widely attested members (e.g. *witan*, *sculan*, and *magan*), had light stems in the subjunctive. By contrast, among the strong verbs only members of classes 1 and 2 had light preterite subjunctive stems. Among our records, only six of the commonest 100 verbs belonged to classes 1 and 2 together, while 34 are found among the other five classes, which all had long subjunctive stems (Hogg and Fulk 2011, class 1: 236 (§6.46), class 2: 238 (§6.50), class 3: 242 (§6.57), class 4: 245 (§6.60), class 5: 248 (§6.64), class 6: 250f. (§6.68), class 7: 256 (§6.76)). High vowel apocope would therefore have had a considerably larger effect in the strong verbs than in the preterite-presents, and it should not be surprising if the latter had less need to turn to the ending $*-\bar{a}$ than did the former. In general, I would assume that *if* the preterite-presents showed any analogical reworking, it involved restoring a long $*-i$ on the basis of the plural rather than $*-\bar{a}$.

20. The remodelling of stem and ending need not have happened all at a stroke, since we do find variants with a restored ending still showing umlaut (e.g. *dyrre* at *Beo* 1379b, or more generally *pyrfe* as a less common form of *purfe*).

2.2.3 ADVERBS IN *-E* (*-*Ē*)

The normal adverbial ending in Old English is *-e*, whose length is relevant to Kaluza's law in several verses in *Bēowulf*: there is one example of *fore*,²¹ two of *geare*,²² and six of *hraðe*.²³ This ending is only frequent in the Ingvaemonic languages, and there are several possible etymologies available. It is most often connected to Gothic place adverbs, either the allative adverbial *-ē* in *hvaðrē* 'whither', *hitrē* 'hither', and *jaindrē* 'thither', all apparently from *-*ê*;²⁴ or else to the locative adverbial *-a* in *inna* 'within', *ūta* 'without', *iupa* 'above', etc. (Ringe and Taylor 2014, 164; Kroonen 2010, 368; 2013, s.v. *innai*).

Of these two options, the second is more likely than the first, both because it is more common in Gothic itself, and because the Old English adverbs most directly corresponding to *hvaðrē* and *hitrē*, namely *hwæder*²⁵ and *hider*, never appear with a corresponding suffix. It seems unlikely that the same suffix would at once have been salient enough to be adopted as a productive adverbial formation, while also being eliminated in the core of words that provided the base from which it spread. The locative adverbs like *inna*, aside from their greater frequency in Gothic, also preserve the suffix as *-e* in Old English: e.g. *inne*, or *fore* corresponding to *faura*. This locative suffix might in principle reflect bimoraic *-*ē* (on which see below, §2.2.8), though its origin is unclear. More likely it comes from the diphthong *-*ai*, and is ultimately a locative formation in *-*oi* (Kroonen 2010, 368; 2013, s.v. *innai*). An ending of this shape would explain the a-umlaut in *fore*. It is also worth considering the possibility that when deadjectival, the suffix may represent, at least in part, an inflectional ending. If so, it must be formally the dative *-*ǣ* < MASC. *-*ai*, FEM. *-*ōi*.

Regardless of which analysis we prefer, *hraðe* and similar adverbs seem to clearly end with a long *-*ǣ* in early Old English.

2.2.4 THE *I*-STEM NOM.PL (*-*ī*)

The NOM.PL of the masculine *i*-stems has a clear origin in PIE *-*ejes*. Within Old English, the *a*-stem ending *-as* typically replaces the inherited ending, but *Bēowulf*

21. 136b.

22. 2062b and 2656b.

23. 224b, 740a, 748b, 1541a, 2117b, and 2968b.

24. The reconstruction of 'trimoraic' *-*ē* versus *-*ē* is not supported by the same sort of widespread correspondence sets we find for *-*ō* versus *-*ō̃*, *-*ō*, but it does seem to be the most straightforward way to account for unshortened *-ē* surviving in Gothic (Stiles 1988, 120f.).

25. Alongside more frequent *hwider*.

preserves a large number of instances of an ending *-e*, which should directly continue the inherited suffix. From PIE, this ending should have developed into pre-Germanic **-ijiz*, contracting into Proto-Germanic **-īz*, or perhaps **-îz* (see §2.2.5). Whether or not the vowel was actually ‘trimoraic’ is not immediately relevant, since the final consonant should have protected even a plain ‘bimoraic’ **-ī-* from Northwest Germanic shortening, which occurred before the loss of final **-z* in West Germanic (Ringe and Taylor 2014, 14f.). The *-e* of our manuscript should therefore reflect early Old English **-ī*.

This view is supported by the lack of apocope in the plurals of heavy *i*-stems. The most frequent examples are tribal names, e.g. *Myrce* ‘Mercians’ < **markīz*, and a few nouns (themselves often referring to groups) such as *lēode* ‘people’ < **liudīz* or *ylfe* ‘elves’ < **albīz* (Hogg and Fulk 2011, 45 (§2.70)). It is unlikely that these endings were restored by analogy, and the same lack of apocope is seen in Old Saxon plurals such as *gesti* ‘guests’.

Despite this apparently clear situation, Fulk (1992, 421) argues that the ending underwent an extra shortening, which must be placed in the relatively narrow window between high vowel loss and the composition of *Bēowulf*, so that it should count as short for the purposes of Kaluza’s law. Fulk appeals to the apparent parallel of Old High German, where plurals such as *gesti* are never written with an indication of length over the final vowel (Braune 2004a, 201 (§215, n. 4)). This is meant to demonstrate the possibility of a long high vowel surviving apocope, but shortening particularly early. Even if the German change is strictly phonological (Prokosch 1939, 246), this at best a parallel, not evidence for a similar change in English.

The only evidence Fulk gives for such a shortening is metrical, from Kaluza’s law itself. While the law can perhaps be used to aid historical-linguistic judgments, this needs to be done with caution, and preferably only after assessing how uniformly the law applies to the endings as we understand them on a more purely linguistic basis. In any case, the metrical evidence for a short reflex of **-īz* is extremely slender, consisting of a single verse:

- (155) *lāðbīte* lices
 ?‘cruel-bite(s) of the body’ (*Beo* 1122a)

Here *-bite* must be resolved (the scansion is *Ss^w/Sw*), which, according to Kaluza’s law should mean that the *-e* is historically short. Against this there is one type C verse in which conformity to Kaluza’s law would require the NOM.PL *i*-stem ending to be long:

(156) þæt mægwine

‘(my) kin-friends (avenged) that’ (*Beo* 2479a)

There are also five more similar verses ending in names.²⁶ This metrical context does show more exceptions to the law (see §2.3.5), and the name elements could conceivably be unstressed, but it is still striking that the ending is found suspended six times, and only once resolved.

Even on its own terms, (155) does not carry much statistical weight: there are at least two clear exceptions to the law in this type of verse (A2a; see §§2.2.8 and §2.3.7), so this type does not show *absolute* conformity to the law. Scanning 1122a as a further violation would raise the rate of nonconforming A2a verses from 3.4% to 5.1%; the avoidance of a 1.7% increase in non-conformity is a slender basis on which to propose an extra phonological event (the early shortening of *-ī). Indeed, the very rarity of *i*-stem plurals in the second position of type A2a may be an indication that the ending is long, and does not belong there.

Metrical issues aside, I am inclined to doubt that *Beo* 1122a actually contains an *i*-stem NOM.PL at all. The verse is rather awkward to interpret, and it is by no means clear that the traditional grammatical analysis is correct. Here is the line in context, as printed in Fulk, Bjork, and Niles (2009, 39):

(157) Hafelan multon,

bengeato burston ðonne blōd ætspranc,

lāðbite liċes; liġ ealle forswealg,

gæsta ġifrost, þāra ðe þær gūð fornam

bēga folces.

(*Beo* 1120b-1124a)

‘Heads melted, wound-openings broke asunder when blood burst out, **hostile bites in the body**. The flame, most ravenous of spirits, swallowed all of those of both nations whom war had carried off there.’ (Trans. Fulk 2010a, 159ff.)

The assumption of *-bite* as NOM.PL depends solely on taking *lāðbite* as appositive to *bengeato* in 1121a, a parallelism that is somewhat disrupted by the clause of 1121b, with its singular verb *ætspranc*. If one wishes to retain the manuscript reading, it would be at least as plausible to take *lāðbite* as a dative (or instrumental) singular dependent on *ætspranc*: ‘blood sprang out through the cruel bite of the body’. This dative would then present a different set of etymological difficulties; see §2.2.5.

26. 116b, 1279b, 1996a, 2363a, 2916a.

Another possibility, and perhaps a more plausible one, would be to take *lāðbite* as a NOM.SG, in apposition to *līg* in the following half-line: ‘a cruel bite of the body, the fire swallowed all, that greediest of spirits’.

For my part I am not convinced that the manuscript can provide an entirely satisfactory reading, and am inclined to accept the emendation of Tolkien (1982, 113). He proposed (without reference to any metrical concerns) that *c* and *g* had been transposed by a scribe, corrupting an original reading **lāðbite liges / līc eall forswearlg* (cf. 2080b; this suggestion also implies a further ‘correction’ by some scribe of **eall* to *ealle*). Tolkien observes that a major difficulty with the traditional reading is that *-bite* is elsewhere an action noun, making its concrete application to wounds well after the act of wounding at best very unusual. He still seems to take *lāðbite* as a dative or instrumental of some sort, translating ‘the blood sprang away from the cruel bite of flame’. I regard it as a nominative singular, and translate 1120b-1124a as:

Heads melted; gaping wounds burst when blood sprang out. The cruel bite of fire, greediest of spirits, swallowed up all the bodies of those whom battle had there taken away of both peoples.

To my mind, this places the least strain on both the syntax of the whole passage and the semantics of *-bite*. This reading is not mainly motivated by metrics or etymology, but it would remove the only shred of evidence that *-ī* had been shortened before *Bēowulf*. The verse would, of course, then conform to Kaluza’s law, the NOM.SG being short **-ī* < PGmc **-īz*.

However one takes these lines, it is interesting to observe how troublesome 1122a has proved on the whole, even for those unaware of its potential implications for Kaluza’s law. By contrast, the syntactic interpretation of most verses of the same rhythmic pattern, Ss^wSw, is very straightforward. This ought to make us wary of placing too much weight on this one verse, with respect either to Kaluza’s law or to the etymology of the *i*-stem plurals. Since the historical-linguistic considerations discussed above point clearly to the plural being long, and since the only potential counterevidence is highly doubtful, I count the reflex of Germanic **-īz* as a long ending – though I list 1122a as an ambiguous verse given the debates about its grammatical interpretation.

2.2.5 THE *I*-STEM DAT.SG (*-*I* AND *-*Ā*)

Another problematic *i*-stem case form is the dative singular, which appears in 24 type C verses,²⁷ as well as one A2a (Ss^wSw) verse (1534a). Whether we should expect the ending to be long (which would make the C half-lines conform) or short (which would be better for the A verse) is difficult to say from a linguistic standpoint, and it is very possible that either option was a synchronic possibility.

In later Old English, the ending is always written *-e*, which could in principle go back to the inherited *i*-stem instrumental or dative, or be analogically imported from the *a*-stems. The first of these options would clearly be short, with PIE *-*iH*₁ becoming Germanic *-*ī*, which, being in absolute auslaut, would be shortened in Northwest Germanic to *-*i*. Since the heavy-stemmed members of this class always show an overt ending, this instrumental ending has either been extended to them analogically, or else they reflect one of the other options. Of these, the clearer is the *a*-stem dative *-*ā*, which is certainly long, and would have readily survived after light and heavy stems alike.

It is less obvious whether the inherited *i*-stem dative ending ought to have become long or short. The PIE ending was *-*eġeġ* (Sk. *-aye*), which would have contracted in Proto-Germanic into either *-*ī* or, if such a phoneme existed, *-*î*. The other Germanic languages are of no help; any evidence for *-ī* (such as the fully apocopated null ending in Norse) might simply reflect the instrumental, and the Gothic (feminine) *-ai* is probably analogical to the *ō*-stems. There is, it should be said, no very solid comparative basis for reconstructing an overlong **î* phoneme anywhere in Germanic, and only the fact that ‘trimoraic’ **ô* is (partly) the result of contraction really makes the possibility worth entertaining in this case.²⁸ The only

27. 380b, 443a, 482a, 492a, 647a, 695a, 976a, 1094a, 1082b, 1326b, 1513a, 1515a, 1639a, 1938a, 2010a, 2030a, 2083a, 2139a, 2515a, 2635a, 2786a, 3053a, 3097a.

28. The only other form which might be taken as reflecting a ‘trimoraic’ ending is the Gothic IMP.SG ending in class I weak verbs, heavy *sōkei* ‘seek’ and light *nasei* ‘save’, instead of **sōki*, **nas(j)i* (Fulk 1992, 425). This ending is often derived from the PIE causative imperative *-*eġe* (Streitberg [1896] 1974, 347f. (§223); Luick 1921, 275 (§299, Anm. 1); Boutkan 1995, 356 (§3.4.3.4)), which for some reason escaped the remodelling of the class I weak verbs in Germanic by weight according to Sievers’ law and its converse (Ringe 2006, 121, 176, *contra* Hirt 1894, 520f.). The other finite forms of class I weak verbs do all pattern by Sievers’ law, regardless of their original shape, e.g. 3SG **nosēġeti* > **nazjīpi* > **nazīpi*, and it is not clear why the imperative should have been resistant to this.

Outside of Gothic, the evidence is conflicted. Old English and Old Norse show the expected developments for a bimoraic vowel in *sēc*, *nere*; *sók*, *tel* (< **taljan-*; the verb *nazjan-* did not survive in North Germanic). On the other hand, Old High German, Old Saxon, and Old Frisian retain *-i* even after heavy stems: *suochi*, *lēsti* (< **laist-ī/î*), *dēle* < **dail-ī/î*). It should be noted that although forms with a final ending are more frequent, they are also easier to account for analogically: if *-*eġe* became bimoraic in Germanic, Old English and Norse would simply show the regular phonological

piece of possible direct evidence from within Old English itself is the single attestation of a DAT.SG *-i* after a heavy stem in the early glossaries: (*sumae*) *dæli*, (*sume*) *daeli* at *ErfGl*, *EpGl* 731 (Dahl 1938, 161-3; Pheifer 1974, lxxxvi (§79)). However, while this could be *dǣli*, a direct phonological reflex of **dail̥*, a similar *-i* ending is also found in some early *a*-stems, and even a few *ō*-stems, where it is probably analogical (Ringe and Taylor 2014, 374f.; but cf. Hogg and Fulk 2011, 16f.). With this ending being secondary in a number of examples – perhaps ultimately adopted under the influence of the instrumental pronominal endings (Ringe and Taylor 2014, 379) – we can hardly rely on this single glossary entry as providing any useful evidence for an inherited **-ī < *-î*.

Whatever we make of the dative, it seems plausible that early Old English had both a short **-i* from the instrumental and a long **-ǣ* from the *a*-stem dative. Both endings are found in the early glossaries after short stems, it is difficult to have any strong linguistic expectation about the length of the ending in any particular instance in *Bēowulf*. This case-form therefore cannot really be used to falsify the law, since we could always just assume whichever historical variant would be needed in a given verse. Given this, it seems safest to simply exclude such endings, counting them (at least in the first instance) as neither conforming to nor breaking the law.

2.2.6 THE *U*-STEM ACC.PL (**-U*)

There is a single verse which clearly contains a *u*-stem ACC.PL in a Kaluza's law environment:

- (158) **bordwudu** beorhtan
 ‘bright shield-woods’ (*Beo* 1243a)

The grammatical interpretation of the verse is crystal clear, but the etymological value of the ending is potentially debatable. Its Proto-Germanic form was **-unz*, which ought to develop directly into the short *-u* seen here. However, most recorded Old English shows an ending *-a*, which is probably the nominative plural (*< *-awiz*, remodelled from PGmc **-iwiz*) extended into the accusative as part of

outcome, while the Continental languages restored the length of the shortened imperative on the basis of the 2/3SG forms (**sōkiz*, etc.) in which the final consonant protected the long vowel.

Even if *nasei* perhaps gives some support to a ‘trimoraic’ **-î* (and it is by no means straightforward evidence), Old English and Old Norse provide evidence against the phoneme. The English evidence is particularly important, suggesting that even if Proto-Germanic had a phoneme **-î*, it fell together with **-ī > *-ī* early on in this language.

a general syncretism of those cases (Ringe and Taylor 2014, 57f., 376). Since the details and chronology of the analogical replacement of early OE *-u by *-ā are hardly clear, it seems best to take the verse at face value, showing the inherited (short) ending. This would hardly be the only example of poetry showing particularly archaic morphology.

2.2.7 *FELA OR FEOLU?*

There are some eleven occurrences of the indeclinable element *fela* in Kaluza's law environments in *Bēowulf*.²⁹ As spelled, the ending -a would seem to point to a long ending, *-ā, presumably derived from an oblique *u*-stem ending generalized in an adverbial capacity (e.g. DAT.SG, corresponding to Gothic -au).

Bēowulf was almost certainly originally an Anglian, possibly Mercian text, and in the Anglian dialects the forms of this word are more complicated. The more archaic Mercian texts available show a development of **felu*, where the fossilized ending is NOM.-ACC.SG short *-u. In the early glossaries we find *felu* (or the variants *felo*, *feolu*) as the combining form in compounds (*EpGl*, *ErfGl* 807, 1009, 1027; *CorpGl* 1613, 2049, 2035), and as an independent word *feolu* is the normal form in the *Vespasian Psalter* (39.6, 65.16, 73.3, 77.3). Similarly, *feolu/feolo* is found in Northumbrian texts (*Li*, *Ru2*). This picture is suggestive – but no more – of a general older Anglian form **felu*, and it may well be that this form was the one familiar to the *Bēowulf* poet (Hutcheson 2004, 309f.).

However, as Fulk points out to me (p.c.), the later Mercian portions of the *Rushworth Gospels*, written by Farman, contain the distinctive form *feola* (Mt 6.7, 13.3, 15.34, 16.21, 27.19). The form *feola* is also found in a few other scattered contexts, including five times in the most 'Mercian' manuscript, T, of the Old English *Bede*,³⁰ where it several times corresponds to *fela* in other copies more West Saxon in dialect (Miller 1890, 76, 330, 334; 1893, 52, 389, 394; Deutschbein 1901, 170ff, 232). These forms could be old, and suggest that *feolu* was not necessarily uniform across the Anglian area.

The status of *fe(o)lu/fe(o)la* in *Bēowulf* is therefore extremely uncertain: we do not know the precise dialect in which the poem was composed, and while *fe(o)lu* may be more common in the recorded Anglian texts, *fe(o)la* seems clearly attested

29. Resolved: 2950a. Disyllabic: 530a, 869a, 883a, 1265b, 1525b, 1783b, 1837b, 2349b, 2378b, 3029b.

30. The text is by no means straightforwardly Mercian, and *fela* predominates even in the T manuscript, occurring some ten times.

as well (and there is no reason to assume our very patchy records of Anglian are particularly representative). I treat these forms as ambiguous.

2.2.8 THE NON-HIGH VOWELS $*-\bar{o}^n$ AND $*-\bar{e}$ ($*-\bar{æ}$)

While bimoraic high vowels in absolute auslaut (including $*-\bar{u} < \text{PGmc } *-\bar{o}$) clearly shortened sometime before high vowel deletion, the development of the bimoraic non-high vowels is less clear. The most important vowels of this sort for Kaluza's law are $*-\bar{o}^n$ (found as the ACC.SG of feminine $\bar{o}$ -stem nouns, the NOM.SG of feminine n -stems, in the MASC.ACC.SG pronominal/adjectival suffix $*-an\bar{o}^n$, and probably as the 1SG preterite ending of weak verbs) and $*-\bar{e}$ (the 3SG weak preterite ending, and less probably the Ingvaeonic adverbial suffix).

A lot of the grammatical literature assumes that these bimoraic non-high vowels were, like the high vowels, also shortened before the Old English period (e.g. Hogg (1992) 2011, 227f. (§6.27); Hogg and Fulk 2011, e.g. 30 (§2.39)). This is the view also frequently adopted in metrical investigations of the law (Fulk 1992, 381f. (§406), 420; Hucheson 1995, 91f.).³¹ This assumption probably grows out of the traditional emphasis on Germanic 'trimoraic' vowels with regards to Kaluza's law, and the analogy of Gothic, in which all bimoraic vowels are shortened. It is nevertheless not well founded.

It seems clear that when final $*-\bar{i}$ and $*-\bar{u}$ were shortened in Northwest Germanic, the non-high vowels were unaffected and remained long. North Germanic shows short reflexes of the high vowels, which were eventually completely lost (though often detectable through umlaut), but $*-\bar{o}^n$ in the 1SG.PRET of weak verbs survives intact as $-a$; similarly, 3SG $*-\bar{e}$ appears as $-e/-i$ (Grønvik 1998, 132; Ringe and Taylor 2014, 14-16). This suggests that these vowels remained long into the separate histories of North and West Germanic.

We thus have to deal with up to four developments, which might traditionally be ordered: (1) the shortening of high vowels in Northwest Germanic; (2) the shortening of non-high bimoraic vowels separately in North and West Germanic; and (3) the reduction of 'trimoraic' vowels first to bimoraic long vowels, and then (4) to short vowels. There is, however, no need to place (2) before (3): a merger of $*-\hat{o}$ and $*-\bar{o}^n$ was avoided by transforming a quantitative distinction into a qualitative one: $*-\hat{o} > *-\bar{o}$; $*-\bar{o}^n > *-\bar{a}$, later becoming Ingvaeonic $*-\bar{a}/-\overset{\circ}{a}$ and $*-\bar{æ}$, respect-

31. Even Suzuki, who counts the ending as 'long' for purposes of resolvability, seems to grant that such endings were monomoraic; on his views, see further §2.3.10.

ively (cf. Stiles 1988, 129ff.), though he presents these vowels as being short well before early Old English). With this in mind, economy suggests that (2) and (4) are actually the same, late change. Under this view, non-high bimoraic vowels, all ‘trimoraic’ vowels, and diphthongs all became plain bimoraic vowels in Northwest Germanic, and were all shortened together in the separate history of English, after the operation of high vowel deletion. This simpler chronology is adopted by, e.g., Ringe and Taylor (2014, 301ff.), but has not received much consideration with respect to Kaluza’s law.

2.2.8.1 *Metrical Evidence for Early Shortness*

Fulk’s main reason for supporting an early special shortening of bimoraic vowels is metrical, specifically Kaluza’s law itself. He argues that the FEM.ACC.SG *-e* < **ōⁿ* seems to favour resolution under the law. Even aside from any potential circularity in using metrical evidence to decide a linguistic issue with metrical consequence,³² metrical evidence is mixed at best. The FEM.ACC.SG itself occurs only three times, twice in Ss^wSw verses where a long ending would otherwise be very exceptional (1778a and 3149a), and once where a long ending would conform better but where unexpected suspension is fairly well paralleled (2877a).

Aside from these clear examples of the accusative, there are two further more ambiguous suspended examples of the noun *-ceare* dependent on the verb *sēoðan* (189a and 1992a). This often has the literal meaning ‘to boil X’, with an accusative object, which is the case assumed for these by Fulk, Bjork, and Niles (2009, 409, 413). But in these cases the verb is used in an extended metaphorical sense ‘to seethe about, to brood over’, which would not necessarily govern the same case. The normal sense of *sēoðan* calls for a patient object, for which the accusative is entirely appropriate, but here the semantic role of *-ceare* is that of stimulus, which is usually placed in the dative or especially the genitive in Old English (Plank 1981, 28). The only reasonably parallel usage I can find for this construction is in Norse, *Njáls saga* ch. 98 (Einar Ól. Sveinsson 1954, 252), and this has a prepositional argument with *fyrir*.³³

32. This is not in general bad practice, and metrical evidence can be truly invaluable for linguistics. But in the present context, where the regularity of the metrical processes is itself at stake, only the most clear-cut metrical pattern could be taken as decisive.

33. Cleasby and Vigfusson (1874, s.v. *sjóða*) list a further example (or more properly, small group of examples) referring to mental states on folio 83 of the *Old Norwegian Homily Book*, which do show direct accusative objects. However, this passage involves an extensive and explicit analogy with the literal act of cooking, and hardly provides an appropriate parallel for our verses in *Bēowulf*.

If *ceare* in these verses is in the genitive, the question is still potentially open whether the *-e* here represents an etymological long or short vowel. The $\bar{o}$ -stem GEN.SG is sometimes presented as if it were unambiguously from Proto-Germanic $*-\bar{o}z < \text{PIE } *-eH_2-e/os$ (Flasdieck 1930, 57ff.; Dahl 1938, 133; Sievers 1965, 206 (§252, Anm. 2); Campbell 1983, 234 (§586); Fulk 1992, 420; Hogg and Fulk 2011, 29f. (§2.38, 40)), and this is not wholly baseless from a comparative perspective (Szemerényi 1989, 200 (§7.1); Sihler 1995, 269 (§263.7)). This has led to many discussions of the ‘problematic’ GEN.SG *-e* (instead of $*-a$) in Old English and West Germanic generally (see the references immediately above), which would appear to lack any really good analogical source. There is, however, probably no need to assume any alteration of this ending in West Germanic. In PIE, the GEN.SG morpheme shows ablaut, and varies between $*-es$, $*-os$, and $*-s$, and this last option would, when following the stem $*-eH_2-$ give PGmc bimoraic $*-\bar{o}z < *-eH_2-s$ (Bammesberger 1990, 102f. (§4.2.3.3)). This would not only account straightforwardly for the Old English ending,³⁴ but also for the ending in every Germanic language. Gothic and Norse are ambiguous, since their $-\bar{o}s$, $-ar$ could come equally well from bi- or ‘trimoraic’ endings, but Old High German $-a$ and Old Saxon $-a/e$ can, like the exactly corresponding Old English form, only reflect a bimoraic vowel. From a Germanic perspective, the evidence seems to unequivocally favour a genitive $*-\bar{o}z$ (Stiles 1988, 139, n. 17).

The reconstruction of PIE $*-eH_2-s$ has been put forward on a more purely Indo-European basis by Rix (1992, 132 (§143)), who notes that the more traditional reconstruction $*-eH_2-es$ (*vel sim.*) would involve two full-grades in subsequent syllables, and that the circumflex accent in Greek $-\tilde{\alpha}\varsigma/-\tilde{\eta}\varsigma$ could very easily be analogical.³⁵ Reconstruction of the exact situation in PIE is complicated by the clear analogical remodelling of the ending in Indo-Iranian and the lack of a feminine eH_2 -class in Anatolian. It may well be that, as with the masculine o -stems, the GEN.SG ending was somewhat unstable, and prone to adjustment in the various daughters. If so, even greater weight should be placed on the uniformity of the Germanic evidence for bimoraic $*-\bar{o}z$, and $*-eH_2-s$ (or some later reflex thereof) should certainly be reconstructed as the pre-Germanic form of the suffix.³⁶

34. Its outcomes would be identical with those of the $\bar{o}$ -stem ACC.PL $*-\bar{o}z < *-eH_2-ns$ (Flasdieck 1930; Dahl 1938, 124-33).

35. On the potentially problematic Baltic GEN.SG ending, see further Olander (2009, 170f.; 2015, 129-31; with references).

36. Schaffner (2001, 368) suggests that the Proto-Germanic ending was influenced by the ending of the $*-iH_2-/-\dot{i}eH_2$ -stems. The general point is that if any restructuring of the ending took place, it did so in pre-Germanic (and likely early on therein). The inner-Germanic reconstruction is consistent

If we accept this reconstruction of the GEN.SG as bimoraic $*-\bar{o}z$, we are still left with the question of its later length. It shows the same qualitative developments as $*-\bar{o}^n$, becoming West Germanic $*-\check{a}$, Ingvaeonic $*-\check{æ}$. Even if we were sure that $*-\bar{o}^n$ had been shortened, however, it would not follow that $*-\bar{o}z$ was as well, since it should have been protected from any early shortenings by its final consonant, just as $*-\bar{i}z$ survives unshortened into early Old English. It seems safe to conclude, therefore, that if the examples of *ceare* in *Beo* 189a and 1992a are in the genitive, we should reconstruct the ending as long, $*cear\bar{e}$.

Once we set aside 189a and 1992a, we are left with only the three aforementioned instances of the FEM.ACC.SG, which on their own might seem to support Fulk's view somewhat. However, the evidence for the length of $*-\bar{o}^n$ is not limited to this one ending. A reflex of $*-\bar{o}^n$ is probably found, for example, in two verses ending in 1SG *dyde*.³⁷ Six more have 3SG *dyde*, which probably shows the reflex of $*-\bar{e}$, whose development involves the same questions as $*-\bar{o}^n$; the two sounds are closely parallel, and they probably merged in Ingvaeonic after the fronting of $*-\bar{o}^n > *-\check{a} > *-\check{æ}$.³⁸ Whenever either form of *dyde* appears in a Kaluza's law environment, it shows suspension of resolution, against Fulk's claim that this ending is prone to resolution.

The MASC.ACC.SG demonstrative *þone*, discussed in §2.1.1, is also metrically relevant. It is found in six A2k verses, where it is suspended in an environment in which Kaluza's law otherwise appears to apply fairly strictly:

(148) *ūhthlem þone*

‘that pre-dawn clash’ (*Beo* 2007b)

This word is best reconstructed as $*þan\bar{o}^n$, though its etymology is somewhat involved. It clearly contains PIE $*tom > þan-$, but the origin of the second syllable is not obvious (Boutkan 1995, 297-300; Ringe 2006, 85). Whatever its origin, comparison of OE *þone* with Gothic *þana* and, more limitedly, with Old Saxon *than-a/e* (alongside *then-a/e*) supports a reconstruction of the ending as $*-\bar{o}^n$. In principle $*-\bar{e}$ would show the same developments in these languages, but related Gothic pronouns clearly reflect *o*-vocalism, which is preserved before a following clitic, e.g.

and unproblematic.

37. 1381b and 1824b.

38. The original endings of *dyde* were probably those of the subjunctive (and therefore should be short, and irrelevant to the question on non-high vowel length), but since the form served as the synchronic past indicative of *dōn*, it seems most likely that they had adopted the normal weak preterite endings (Fulk 1992, 110 (§113)).

hvanoh ‘every’ alongside *hvana* ‘whom’.³⁹

The Old Norse cognates are more problematic, but ultimately inconclusive. The early runic inscriptions do show a pronominal ending *-o*, which could reflect **-ō̃*, but the later demonstrative is the very obscure *þann*. This most likely cannot represent the regular outcome of **þanō̃*, which would have been **þana*.⁴⁰ This does not mean that the Norse form provides evidence for a variant of **þan-* which might show some other ending than **-ō̃*, since it is difficult to reconstruct any Germanic ending that would have protected the final nasal of **þan-* (**þā*), while also being lost without leaving any traces through umlaut. The conclusion is that *þann* is almost certainly the result of analogy, and provides no direct evidence as a point of comparison for Old English *þone*.

Granting that the usual derivation of *þone* < **þanō̃* is the most likely option,⁴¹ the verses in which this word is suspended should be added to the metrical evidence when evaluating Fulk’s argument. This gives us, in total, two resolved examples of **-ō̃* against nine suspended, as well as six instances of non-resolved 3SG preterite **-ē̃*. It is probably true, as Fulk argues, that it is easier to suspend two light syllables than to resolve a light-heavy sequence (see §2.4.3), but even so the number of suspended examples is so numerous that the metrical evidence as at best inconclusive (Suzuki 1996a, 286f, n. 19). There is no reason to modify any linguistic conclusions on a metrical basis.

39. There is no comparable direct evidence for the historical quality in *þana*, since the demonstrative loses its second syllable entirely before clitics, e.g. *þan-uh*, *þan-ei*; this is in keeping with the normal synchronic pattern in Gothic (Stiles 1988, 138, n. 12). But it seems likely that the ending of *þana* is etymologically connected with that of *hvana*, *hvanoh*, and was therefore originally *-ō̃*.

40. The regular development of **-ō̃* in Norse is most likely seen in the 1SG weak preterite ending *-a*, the feminine *n*-stem NOM.SG, and the FEM.ACC.SG of adjectives. The *ō̃*-stem ACC.SG is divergent, *-Ø* accompanied by u-umlaut (e.g. *giōf* ‘gift’, not **giāfa*). Note that even though *þann* shows a similar complete loss of the ending, it does not show u-umlaut (**þōnn* or **þunn*), and the two developments cannot be equated (Syrett 1994, 159-66).

41. Huiteson (1995, 88, and n. 67) argues that the behaviour of *þone* has nothing to do with whether its ending is long or short, suggesting that this word would have been less prone to resolution if it remained segmentable as a pronoun plus a particle for some time, i.e. PGmc **þan-ō̃* > early OE **þon-æ*. This is perhaps conceivable, but the only real reason to suppose such an enduring segmentability (granting that the second syllable was even originally a particle) is to explain the word’s behaviour with respect to Kaluza’s law. Against this, the formation of **þanō̃* must be quite old (going back to Proto-Germanic proper, as evidenced by the cognate in Gothic), and the segmentability of the demonstrative would have had to be preserved for a very long time, despite the lack of any surviving independent particle **ō̃*. Furthermore, already before Proto-Germanic the whole pronominal ending *-anō̃* spread, apparently as a unitary suffix spanning the supposed juncture, to adjectives, giving Gothic *-ana*, OE *-ne*. It seems best to simply take *þone* at face value.

2.2.8.2 Old English Foot Structure and Vowel Length

Perhaps the most important tool for establishing the lengths of unstressed vowels in early OE is high vowel deletion – the conditioned loss of pre-OE **i* and **u* – which provides important evidence that the reflexes of both PGmc **-ōⁿ* and **-ē* remained long. I will present this evidence shortly, but it needs to be prefaced by a short account of early OE foot structure, the phonological process which provides the basis for both high vowel deletion and poetic resolution.

In phonology, as in metre, there is a general equivalence of a stressed long syllable and of a short syllable followed by another syllable, which is most readily captured by referring to the phonological entity of the FOOT, a prosodic unit between the syllable and the word relevant for stress patterning (Hayes 1995; Gordon 2006). (This foot is a feature of the phonology, not the metre, and should not be confused with the metrical feet assumed by, e.g., the word-foot theory.) The usefulness of feet in describing high vowel deletion is shown by the following examples (square brackets signify feet; full stops, as usual, mark syllable boundaries):

- (159) **[fa.tu] > fatu* ‘vessels’
- (160) **[wor.]du > word* ‘words’
- (161) **[we.ru.]du > werud* ‘troops’
- (162) **[bo.dun].gu > bodung* ‘message’

In Germanic generally, main feet had to have at least two moras (Riad 1992, 33-5 (§1.2.6)). In (159), the syllable **fa-* is therefore too light to stand as a full foot, and recruits the second syllable, **-tu*, protecting its vowel from high vowel deletion. In (160-162) the final **-u* follows after full feet, and so is left unfooted and prone to apocope. From this patterning, it looks like the Old English foot is the typologically common moraic trochee, creating bimoraic units going from left to right across the word (compare the varying views of Keyser and O’Neil 1985; Hogg (1992) 2011, 220-7; Dresher and Lahiri 1991; Hutton 1998, 188ff.; Bermúdez-Otero and Hogg 2003, 111; Bermúdez-Otero 2005, 8ff. (§7.3)). High vowel deletion is simply the elimination of any unfooted high vowels. The bimoraic foot implied by this process is the phonological basis for metrical resolution in general (see §2.4.1).

The evidence for unstressed vowel length comes from the behaviour of non-initial feet, which can also be determined from the workings of high vowel deletion. The key evidence comes from certain trisyllabic words in which high vowel deletion affects the medial syllable in some case forms but not others (Bermúdez-

Otero 2005, 32-4; Fulk 2010b):⁴²

(163) NOM.-ACC.PL *[hēa][.fu.du] > *hēafudu* 'heads'

DAT.PL *[hēa].fu[.dum] > *hēafdum*

(164) FEM.NOM.SG *[lȳ][.ti.lu] > *lȳtelu* 'little'

MASC.DAT.SG *[lȳ].ti[.lum] > *lȳtlum*

It seems that in non-initial feet, the rule was for feet to be not merely *minimally* bimoraic, but precisely so. Or rather, it is probably more accurate to say that Old English shows the same preference for bimoraic feet that is evident in Germanic generally (Murray and Vennemann 1983, 525f.; Riad 1992, 45-7 (§2.1.3)), but trimoraic feet are tolerated initially in order to ensure that root syllables have sufficient prominence (a permissiveness I call the TRIMORAIC LICENCE of initial syllables); elsewhere in the word, where there are no complicating factors, the bimoraic principle holds strictly. In **-fudu* and **-tilu*, both syllables can be straightforwardly formed into a single bimoraic foot, but in **-fudum* and **-tilum* the final syllable is by itself bimoraic. Since there is no way to fit the medial syllable into any bimoraic foot, it is left stranded and open to high vowel deletion.

Crucially, this pattern is conditioned by historical vowel length, so that the reflex of, e.g., **-ai* > **-āe* counts as a bimoraic syllable, just like **-um* (where the second mora is consonantal):

(165) DAT.SG *[hēa].fu[.dāe] > *hēafde*

(166) MASC.NOM.PL *[lȳ].ti[.lāe] > *lȳtle*

There is no difference between inherited diphthongs (as just shown), originally 'trimoraic' vowels, or the non-high bimoraic vowels **-ōⁿ* and **-ē*: all count as bimoraic at the time of high vowel deletion. Compare the preterites of class I weak verbs:

(167) 1SG **framidōⁿ*, 3SG **framidē* > *[fræ.mi][.dāe] > *fremede*

(168) 1SG **dōmidōⁿ*, 3SG **dōmidē* > *[dōe].mi[.dāe] > *dēmdē*

42. High vowel deletion has been the subject of considerable debate. My analysis here does not follow any previous formulation precisely, though it is indebted above all to Idsardi (1994) and Bermúdez-Otero (2005). Other theories of high vowel deletion include the more traditional view of, e.g., Campbell (1983, 146 (§353)), followed by much of the phonological work of the 80's and 90's, as well as the innovative proposal of Ringe (2002) and Ringe and Taylor (2014, 329-51). None of these formulations can account for the paradigmatic alternation in *Sw* words seen in (163-164); see especially Fulk (2010b). The details of the attested data are complex, and untangling phonological regularity from analogical reworking is an involved task. I refer to Goering (2016) for a fuller discussion.

If PGmc $*\bar{o}^n$ and $*\bar{e}$ had already been shortened to $*\bar{æ}$ at this point, as Fulk suggests, then we would expect OE $*\bar{dēmede} < *[d\bar{œ}][.mi.dæ]$, with the medial $*\bar{i}$ - forming a foot with the short final syllable and so escaping deletion (just like $*[h\bar{e}a][.fu.du]$). This is not the case, which suggests that the ending was long.

In general, the linguistic evidence seems quite uniform, pointing to an early Old English phoneme $*\bar{æ}$ that represents a merger of PGmc $*\bar{o}^n$, $*\bar{e}$, $*ai$, and $*\bar{o}i$, as well as $*\hat{e}$ if it existed, and was not shortened until quite late in the development of the language. This receives support from its behaviour with respect to high vowel deletion, and fits with the most economical view of linguistic shortenings. There is no linguistic evidence suggesting the opposite conclusion, that the reflexes of $*\bar{o}^n$ and $*\bar{e}$ (but not of $*\hat{o}$, $*ai$, or $*\bar{o}i$) were shortened exceptionally early. If the metrical evidence for different shortenings were truly unambiguous, it might constitute some counterevidence, but it can hardly be said that 15 instances of apparent length, against two of apparent shortness, provide anything like clear and compelling evidence for shortness (indeed, they seem to support rather the opposite conclusion). In the discussion below, I will treat these endings as unambiguously long, though I do note where appropriate how the assumption that they were short would affect matters.

2.3 EXCEPTIONS TO KALUZA'S LAW

There are a number of potential ways to characterize rates of adherence to Kaluza's law. Exceptions to the law are relatively easy to count: one simply tallies up the number of instances in which a resolved sequence after a heavy syllable is trimoraic, or in which a suspended one is bimoraic. This gives two kinds of exceptions, UNEXPECTED RESOLUTION and UNEXPECTED SUSPENSION; these do not necessarily have the same metrical significance, and I will distinguish between these sorts of exceptions throughout.

It is a little more difficult to count how often the law regularly applies. Under the classic formulation by Fulk (1992, 159ff. (§176)), the signal contrast is between, on the one hand, type A with a resolved first dip, and type D with a suspended penultimate syllable on the other (with a handful of type E and D* star verses also included as examples of suspension):

- (124) *bānfatu* *bærnan*
 $*bānfatu$ *bærnan*

‘bone-vessels to be burned’ (*Beo* 1116a)

(169) *lēof landfruma*

**lēof landfrumā*

‘dear prince of the land’ (*Beo* 31a)

(126) *mundbora wæs*

**mundborā wæs*

‘was a protector’ (*Beo* 2779b)

These are fundamentally comparisons of phonological word-shape: when the focus is narrowed to this limited set, verses like (124) and (169)/(126) contrast above all in how the sequence *Sšw̃* is treated metrically, either as *Ss^w* or *Ssw*.

The approach taken here puts the emphasis not on word-shapes but on metrical contours. Take:

(126) *mundbora wæs*

**mundborā wæs*

‘was a protector’ (*Beo* 2779b)

(170) *wigheafolan bær*

‘carried the head of war’ (*Beo* 2661b)

These two verses have the same metrical contour, *Ssw/S*, and the contrast is in the linguistic material used to realize the second position: metrical *sw* filled by either *šw̃* or *šw̃w*. Verses like (170) have not been wholly forgotten in discussions of Kaluza’s law (Fulk 1992, 236-42 (§§271-8); Suzuki 1996a, 27, n. 43), but are rarely considered with regard to its core operation (Bliss 1962, 27-31 (§§34-7); Fulk 1992, 159ff. (§176); Suzuki 1996a, *passim*; Hutcheson 2004). This neglect is perhaps in part because neither of the two flagship metrical types show this sort of contrast. Half-lines like (124) cannot have non-resolved counterparts, so it is not possible to give contrasting resolved and suspended variants for a given metrical position. D verses like (169) could in theory have second feet filled with compounds like *wigheafolan*, but no such examples are found in *Bēowulf*. This might partly be due to chance, since words of that shape are very rare in general (see §2.3.12), but it might also be related to the rarity of type D verses of the shape *SSšw* (discussed in the previous chapter, §1.2.5.3), to which *SSs^ww* would, perhaps, be more directly equivalent in terms of stress clash effects than would *SSšw* half-lines. For other types of half-line, however, contrasting pairs like (126) and (170) are very important, and help demonstrate just how widely Kaluza’s law applies.

The following sections are organized by metrical context, giving the data for adherence to Kaluza's law for all environments in which it might conceivably apply according to the formulation at the end of §2.1. The break-down is by metrical *position*, not type: type A2a verses with a resolved second lift are considered together with type A2k, since both concern resolution of the third position in the pattern SsSw. Type A2a half-lines with a resolved second position, Ss^wSw, form a distinct group. Similarly, I discuss two groups of D half-lines, depending on whether the resolved/suspended syllable(s) stand in the second or third position (SŠsw and SS^wsw on the one hand, and SSšw on the other). Exceptions of both types, suspension and resolution, are noted independently alongside overall rates of adherence, and doubtful verses are singled out for special discussion. After a review of the various types, I compile the results in table 2.1, to try to present a full and accurate picture of the adherence to Kaluza's law. I also provide a full list of relevant verses in Appendix A. With this information at our disposal, we will be able to turn to theoretical explanations for and implications of the law.

2.3.1 A2K/A2A: SSŠW AND SSS^wW

A number of scholars have noted that type A2k seems to conform to the law (Fulk 1992, 239, n. 4; Hutcheson 1995, 82-7; 2004, 307-9; Suzuki 1996a, 295f.). The mere fact that we find suspension of resolution in the type justifies examining it, and the relative numbers of long and short endings show a strong tendency to conform to the law:

(135) wordgyd **wreca**
 'to recite a word-song' (*Beo* 3172a)

(171) æþeling **boren**
 'noble one carried' (*Beo* 3135b)

There are 54 verses like (135), where a two-word verse ends with a suspended sequence with an unambiguously long ending. These include twelve like (171), where the suspension of resolution is conditioned solely by an element with 'tertiary stress': a long derivational syllable or the second element of a proper name.⁴³ Against this, there is only one verse showing unexpected suspension:

43. Verses conditioned by tertiary stress are marked by * in the following list: 64b, 67a, 69a, 120a, 252a, 284a, 303b*, 406a, 619b, 629a, 643a, 776a, 786a, 817a, 838b, 973a, 994b, 1015a, 1112b*, 1256a, 1287b*, 1288b, 1310b*, 1432a, 1457b*, 1510b, 1672a, 1682a, 1731b, 1807b*, 1834b, 1896b, 1914b, 1925b, 1964b, 2060b, 2110b, 2158b*, 2191a, 2256b*, 2265b, 2417b, 2457b*, 2460b, 2613b*, 2754b, 2906b*, 2947a, 2972b, 3000a, 2019b, 3135b*, 3172a.

- (172) *hȳðweard* **geara**
 'ready harbour-guard' (*Beo* 1914b)

Here, *geara* apparently stands for **gearu*, the short MASC.NOM.SG ending of a *u*-stem adjective.

There are six further verses ending with *þone*,⁴⁴ for long **þonæ* (§2.2.8):

- (148) *ūhthlem* **þone**
 'that pre-dawn clash' (*Beo* 2007b)

These verses would break the law, if the ending were short, **þonæ*.

Another closely related group of verses has three stressed words. Such verses are somewhat hard to categorize, and could be seen as type A or D:

- (173) *wyrd oft* **nereð**
 'fate often spares' (*Beo* 572b)
- (174) *snotor ceorl* **monig**
 'many a wise man' (*Beo* 908b)
- (175) *ðolode ær* **fela**
 'had before that endured much' (*Beo* 1525b)

While Yakovlev would argue that there is no significant metrical difference between these examples, the word-foot theory finds a significant distinction between (173) and (174), depending on the location of the foot boundary. Based on the syntax, the former would have a foot division after the first word, and be equivalent to S/Ssw, while the latter would have the foot division later, for Ss/Sw. I will discuss the eight verses like (173), where the final words are an adverb followed by a verb, below with type D verses, and include the remaining eight here.⁴⁵ Most of these verses unproblematically conform to the law, whichever group they are placed in.

Only (175) is less certain, though it is far from clearly violating the law. Scansion as an A2k verse involves vowel elision, and it is possible it should scanned as a D* half-line instead (though it would be a relatively unusual specimen of the type). Furthermore, the length of *fela* is uncertain (see §2.2.7 above). This verse is simply ambiguous with regards to Kaluza's law.

I do not count the perhaps five verses or so that show apparently wholly unconditioned suspension of resolution:

44. 2007b, 2334b, 2588a, 2959a, 2969b, 3081b.

45. 90a, 908b, 1287b, 1525b(?), 2174b, 2545b, 2663b, 2956b. On 90a as an A2k verse, see Rus-som (1987, 77f.).

- (176) Hrēðel cyning
 'king Hrēðel' (*Beo* 2430b)

So also, potentially, 845a, 881a, 954a, and 1828b. Many of these are suspect, and the type is probably unmetrical. 881a should perhaps be scanned with the older disyllabic value of *ēam*, 'mother's brother', **ēahām*,⁴⁶ making it type E. Something seems to have gone seriously wrong in the transmission of 954a, which is paired with a defective half-line in 954b. 1828b is probably simply an artefact of dialect variation in Old English, with scribal *dydon* for dialectal **dēdon* (Sievers 1885c, 498; Fulk 1992, 320).⁴⁷ This leaves 845a and 2430b⁴⁸ as the only examples of this phenomenon lacking ready emendations. It has been suggested that lines of this type, with the rhythm SwŠw, are valid, if rare, and there a certain number of further possible examples scattered throughout the wider OE corpus (Schabram 1960, 228-38; Pascual 2013, 56-8).⁴⁹ Whether or not the type is ever valid in Old English more broadly, and if so whether it represents a case of suspended resolution or resolved SwS^w, are questions I cannot fully address here,⁵⁰ but at least within *Bēowulf* their significance is marginal. The examples are very few and often (in this poem) textually or linguistically suspect. Furthermore, they seem to have been actively avoided, as indicated the use of *Denig(e)a* rather than *Dena* to give a long second lift in 155b, 465b, 599a, and 1582a (Fulk 1992, 244 (§279)). Even if such SwŠw verses are accepted, they are clearly exceptional in the extreme, and shed no light on the typical process of suspension of resolution.

All told, there are 68 examples of the pattern SsŠw, with suspension of resolution. Only one of these, (172), clearly shows unexpected suspension, making the rate of violation of Kaluza's law about 1.5% (or 2.9%, if the highly uncertain (175) is taken as a violation). If *þone* were taken as having a short ending, then the rate

46. From WGmc **auhaim* < **awa-haimaz*, cf. OHG *ōheim* (Much 1932).

47. The historical development of the preterite of *dōn* is complex; see Stiles (2010, esp. 347, 353f.).

48. This could, perhaps, be considered to have exceptional secondary stress on the -ðel, on the analogy of true dithematic names. Such a possibility is raised by some, e.g. Suzuki (1996b) and Russom (2001, 62, n. 34), though this verse is widely recognized as unusual, and many have treated it as an anomalous type A verse with no secondary stress (e.g. Fulk 1992, 184f. Hutheson 1995, 69, n. 5). The situation is, at any rate, too contested and uncertain for this half-line to be of much use in evaluating Kaluza's law.

49. My thanks to Patrick Stiles for alerting me to Schabram's important article on this subject.

50. SwŠw verses do occur in Norse, but as I argue in the following chapter (§3.3.1.1), in that metrical system they are most likely the resolved counterparts to short SwS verses, a valid type in fornyrðislag and in lióðaháttir on-verses.

Within Old English, it is curious that most of the better possible examples, such as the repeated formula *drihtne gecoren* (*GenA* 1818a, *Dan* 735b) and the difficult *Beo* 845a, end with a past participle. Half of the examples given by Schabram (1960) are of this sort, though the significance (if any) of this fact is not obvious.

of conformity would be rather poorer, with 7 unexpected suspensions in 68 verses, or a 10.3% failure rate.

These numbers only tell part of the story. To see how well the law holds in this metrical environment, we also need to take into account half-lines that do have resolution (Yakovlev 2008, 76, n. 49):

(137) ealdsweord **eotenisc**

‘giantish ancient sword’ (*Beo* 1558a; cf. 2616a, 2979a)

There are 19 two-word verses with this pattern, SsS^ww (or SsS^{ws}),⁵¹ all of which conform to the law.

There are three ambiguous verses where the final element is the genitive plural of the *i*-stem tribal name *Dene* (which, not being second elements of compounds, are under no suspicion of being unstressed):

(177) dēaðcwealm **Denigea**

‘deadly slaughter of the Danes’ (*Beo* 1670a)

(178) ðrȳþærn **Dena**

‘mighty hall of the Danes’ (*Beo* 657a)

(179) dryhtbearn **Dena**

‘warrior-son of the Danes’ (*Beo* 2035a)

As written in the manuscript, (177) would seem to show expected resolution, and (178-179) expected suspension (the ending of genitive plural being historically long, **Denā*). There are quite a few other examples of *Denigea* (in various spellings) in the poem, but these normally occur only when metrically necessary, to avoid a short lift (as in the examples just mentioned above). Elsewhere the manuscript normally shows the shorter form *Dena* (Fulk 1992, 243f. (§279)). It is not entirely clear whether this distribution already existed in the original poem. (177-179) provide the only examples in which both spelling variants are attested in the same metrical context; it may well be that *Denigea*, the less usual variant, is here a relic which has otherwise been modernized in (178-179).⁵² But even if so, it is not quite

51. 467a, 522a, 784a, 819a, 1047a, 1198a, 1205a, 1267a, 1558a, 1607a, 1802a, 1852a, 2043a, 2072a, 2154a, 2616a, 2979a, 3006a, 2041a.

52. Fulk (1992, 244, n. 4) says that ‘the resolved second lift is certainly preferable’ in (177-179), which seems to imply that *Denigea* was retained by metrical preference in 1670a. However, there does not seem to have actually been any such preference for the resolved lift, since SsS^ww verses (type A2k) are over three times more common than SsS^{ws} verses. *Denigea* here is better explained as an oversight, with *Dena* in (178) and (179) showing expected modernization in an environment where there was no pressure to maintain the archaic *Denigea*.

clear that these should be counted as examples of resolution, since the spelling <ige> may stand for a non-syllabic glide, **Denġā*.⁵³ Whichever view we take, these verses certainly do not break the law; the only question is whether they show expected suspension, expected resolution, or fall outside its scope for having an initial heavy syllable.

Among the two-word members of this group, there are no examples at all of unexpected resolution. This absence is not an accident of language, as such half-lines are perfectly imaginable:

- (180) **cearsīð cyninges*
 ‘the sorrowful journey of the king’

There is, however, one exception in a notoriously problematic three-word verse:

- (181) *æscholt ufan græg*
 ‘ash-forest grey above’ (*Beo* 330a)

For Hutcheson, this verse seems to ‘defy classification’ (1995, 167), though it is usually considered a variety of A2ab, Ss/Ss (Bliss 1962, 72 (§79); Pope 1966, 262). This would make it the only example of the type whose second lift was an independent, resolved word. Whatever alphanumeric codes we would like to apply to this verse, it seems certain that *ufan* is resolved, and that it stands in a Kaluza’s law environment (immediately following the secondarily stressed *-holt*). Its consonantal ending thus makes it an exception to the law, the only one in this position.

If we include (181), we have 20 instances of clear resolution in this metrical context, one of which shows resolution not predicted by the law, a failure rate of 5% (bearing in mind that this percentage could not be any lower without being 0%). If (177-179) are included as examples of resolution, then the failure rate is one in 23, 4.3%.

Together with the A2k verses discussed above, we get a group of 89 verses in which the second lift contains a short syllable. With two reasonably clear exceptions in total, the overall rate of adherence to the law here is 97.8% (or 96.7%, if we take 1525b (175) as a violation).

53. Historical phonology is no help. The fully regular form would be **Dennā* < **danjōn*, but this is never found (Bammesberger 1990, 127 (§5.2.4.2)). It seems reasonable to suppose that the disyllabic ending *-*ijōn* was imported from the heavy *i*-stems, but even if so, it is hard to be sure this was still disyllabic in Old English.

2.3.2 D: S[̃]SW AND SS^wSW

It has been recognized for some time that the second foot of a type D verse may begin with a short syllable, at least in the very oldest Old English verse (Kuhn 1939, 191-5; Fulk 1992, 239-42 (§§275-6)):

- (136) feorh **cyninges**
 'the body/life of the king' (*Beo* 1210b)
- (182) fyll **cyninges**
 'the fall of the king' (*Beo* 2921b)
- (183) secg **betesta**
 'the best warrior' (*Beo* 947a, 1759a; cf. 1871b)⁵⁴

In addition to these five two-word examples, there are ten similar verses where the entire half-line consists of a single compound word:⁵⁵

- (184) þēod**cyninga**
 'of people-kings' (*Beo* 2a)

These verses have been more readily recognized as part of Kaluza's law since the relevant syllables bear what is traditionally regarded as secondary stress. In all 15 of these verses Kaluza's law applies fully regularly.⁵⁶

As with the A2a verses discussed above, these suspended verses contrast with examples showing resolution in the same position:

- (185) heall **heorudrēore**
 'hall (wettened) with sword-gore' (*Beo* 487a)
- (138) feorh **æþelinges**
 'the life of the prince' (*Beo* 2424a)

Fulk (1992, 240, n. 5) implicitly excludes verses like (185) from the scope of Kaluza's law while including (138), but this distinction can only be based on the

54. These three are emended to restore a syncopated medial syllable. To leave the verses alone would make them highly anomalous with only three syllables each, and the extra syllable was certainly once present etymologically (Pope 1966, 319f.; Fulk 1992, 241 (§276); Ringe and Taylor 2014, 278).

55. 2a, 372b, 535b, 1004b, 1039b, 1155b, 2382b, 2503b, 2694b, 2795a. 1187a should probably be emended to belong here as an eleventh example; see §2.3.4.

56. Long recognized as more difficult are two verses consisting entirely of the word *andswarode*, 258b and 340b, where the stress of *-swar-* is uncertain (Bliss 1962, 68 (§75)). The retention of **-æ-* in Middle English 'AB' *ondswerieð* may suggest the foot structure [ond].[swe.ri].əð; contrast *festnin* < OE [fæst].ni.an. See §2.4.1.1 below for discussion.

notion that the law applies only under secondary stress, and that the simplex *æþel-ing* is more suited to have its stress demoted than the compound *heorudrēor* is. Since secondary stress as traditionally understood is certainly not the key conditioning factor for the law, it does not seem warranted to make this distinction (which is unsupported by any positive evidence).

This gives us seven clear resolving two-word verses,⁵⁷ all conforming. There is also one ambiguous verse:

- (186) frōd **felageōmor**
 ‘wise, very sorrowful’ (*Beo* 2950a)

As discussed in §2.2.7, it is hard to know whether we expect the ending of *fela* to have originally been short or long. It is worth considering the possibility that even if we should read the independent form elsewhere as **fe(o)lā*, the combining form may have been **fe(o)lǣ-*, which was the original stem form (and found in compounds in the early glossaries).

There are also five examples consisting of forms of the word *unlifigende*,⁵⁸ as well as one three-word verse:

- (187) gesēon **sunu** Hrædles
 ‘to see the son of Hrēðel’ (*Beo* 1485a)

Several more possible examples have various etymological uncertainties, and may or may not actually contained resolved sequences at all:

- (188) hord **openian**
 *hord opnian
 ‘to open the hoard’ (*Beo* 3056b)
- (189) wlanc **Wedera** lēod
 ‘proud prince of the Weders’ (*Beo* 341a)
- (190) forwāt **Wedra** helm
 ‘the protector of the Weders cut open’ (*Beo* 2705a)
- (191) mæg **Hygelāces**
 ‘the kinsman of Hygelāc’ (*Beo* 813b)
- (192) mæg **Hylāces**
 ‘the kinsman of Hygelāc’ (*Beo* 1530b)

57. Five end with poetic compounds: 487a, 501a, 1847a, 2239a, 2408a. 2424a ends with a simplex, and 2708a ends with a simplex that is also the second element of a whole-verse compound.

58. 468b, 744a, 1308b, 1389b, 2908b.

In (188) and two similar verses (286a and 2758a), the second syllable of the resolved sequence is epenthetic, and it is unclear whether we should assume the newer or older form in *Bēowulf*. We find the same problem of epenthesis⁵⁹ in (189) and in the similar 423a, which contrast with graphically non-parasited forms of the same name in the manuscript, including in the metrically similar (190). Do we follow the manuscript forms in each instance, or choose either resolution or non-parasiting to apply uniformly in all cases? It seems safest to set aside all these examples as too uncertain to be useful. All six verses would conform to Kaluza's law, if any are genuine instances of resolution.

A slightly different problem is present with the name *Hygelāc*, which in *Bēowulf* is found six times after a stressed monosyllable.⁶⁰ Sievers (1885c, 463f.) suggests that the proper form of this name in the poem was **Hyglāc* (perhaps, but not necessarily, indirectly reflected in (192), which could show late contraction of **Hyg- > Hȳ-*), a distinctively Northumbrian form.⁶¹ This question is partly bound up with the dialect of *Bēowulf*, but Sievers also makes every attempt to explain away examples of resolution in this metrical context. Insofar as his motivation for preferring **Hyglāc* is metrical, the examples above would seem to speak against any firm metrical rule that would prohibit *Hygelāc* (**Hygilāc*); see further Fulk (1992, 321f. (§355.6)). Since the dialect of the poem is highly uncertain – Fulk (1992, 390f. (§420)) argues for a Mercian origin – it does not seem reasonable to emend away the manuscript forms to specifically Northumbrian variants, and I take all six examples (including 1530b) as modernized spellings of **Hygilāc*. All six conform to Kaluza's law.

This gives us 19 clear examples of resolution in this environment (with potentially up to six more), all of which seem to behave as expected with regards to the law. If the ambiguous *fela* is taken as having a long ending, we would have one exception, and a failure rate of 5%.

2.3.3 D: SSS^wW AND SSŠW

The half-lift of type D, a clear secondary stress environment, has been well-discussed with regard to Kaluza's law (Bliss 1962, 29f. (§36); Fulk 1992, 161f. (§176); Suzuki 1996a, 287f. Hutcheson 2004, 303f.). Despite this, there is a certain amount

59. Assuming that the ethnonym *Weder* is, in fact, related to the common noun *weder*, ON *veðr*.

60. 737a, 758b, 813b, 914a, 1530b, 2958b.

61. *Hyglac* is found as such in the *Durham Liber Vitae*, 23r, 27v, 30v, 32v (20, 24b, 27b, 29b in Sweet's foliation).

of disagreement about which verses should be included here, and no two researchers work with quite the same data set. The most variation concerns four on-verses ending with 'tertiary stress', which are sometimes treated inconsistently even in one and the same work.⁶² Of these, 1919a probably contains a tertiary stress, so I exclude it (see §2.1.1). The remaining three end with proper names in the genitive plural, and I discuss these with other names separately in §2.3.11.

There is also disagreement over a number of potential examples occurring in the off-verse.⁶³ These have generally been disregarded, with only Suzuki presenting them as adhering to the law (though he misses or discounts verses with *andsaca(n)*, 786b and 1682b). I see no reason for excluding any of these verses, which differ from 'normal' D verses only by having a non-poetic compound.

Past work has also varied in its treatment of three-word phrases:

(193) heard hēr **cumen**
 'hardy, (he has) come here' (*Beo* 376a)

(173) wyrd oft **nereð**
 'fate often spares' (*Beo* 572b)

Fulk and Suzuki include (193), since it occurs in the on-verse, but neither of them count the more numerous similar half-lines like (173) in the off-verse. Hutcheson and Bliss exclude all three-word verses categorically. Again, I can see no reason for discounting these verses, and they ought to be assessed with regards to the law. There are eight such verses, seven of which are found in the off-verse (compare the eight similar verses with a different syntactic structure discussed in §2.3.1).⁶⁴ All of these verses conform to the law.

There are two further verses that ought to be included here, but which have generally been disregarded:

(194) þēod eal**gearo**
 'the people all prepared' (*Beo* 1230b)

(195) beorh eall**gearo**
 'the barrow all prepared' (*Beo* 2241b)

Bliss (1962, 70 (§77)) classifies these as type A2k (followed by Fulk (1992) and, more tentatively, Suzuki (1996a, 287, n. 22)), but this is probably not correct. Even

62. The verses in question are 427a, 609a, 1069a, and 1919a. Bliss originally did not consider any of these examples of the law, while Hutcheson includes all four. Fulk and Suzuki are inconsistent.

63. There are five two-word examples: 394b, 786b, 1311b, 1682b, 2942b.

64. 215b, 281b, 376a, 572b, 1065b, 1869b, 2551b, 3131b. For 90a, see §2.3.1.

if one wishes to print *eal(l)* separately as an adverb rather than as the first element of a compound, the syntactic grouping clearly places the adverb together with the adjective it modifies. I favour the interpretation of the word as a single compound, as did most earlier editors. Since *eal(l)gearo* is clearly not a *poetic* compound, the lack of alliteration is no issue (see §1.2.5.2). Fulk, Bjork, and Niles (2009, 334, n. 1) support Bliss's phrasal analysis, though they also seem to acknowledge that his word division is a solution to a non-problem. Hutcheson (2004, 304, n. 21) does analyse the word as a compound, but, like Bliss, he is concerned about the lack of alliteration and consequently assigns 'tertiary stress' to the second element. There does not seem to be any independent motivation for this, and I take *eal(l)gearo* as a normal non-poetic compound. These two verses both show unexpected suspension.

That the rhythm of *eal(l)gearo* really is Ssw, as suggested by its syntactic constituency, is strongly supported by the appearance of the same word (or phrase) in a type C verse:

- (196) þæt hit wearð ealgearo
 'that it became all ready' (*Beo* 77b)

There is of course no question of *gearo* having a greater prominence than *eal* in this verse, and there does not seem to be any reason that its rhythm should be any different in (194) and (195), as would be the case if they were type A2k.

Beyond these more variably treated verses, there is a solid core of 37 half-lines which are universally agreed to come under the scope of the law.⁶⁵ *Beo* 31a has already been used to demonstrate the workings of the law above:

- (169) lēof landfruma
 'dear prince of the land' (*Beo* 31a)

This group includes a third exception to the law:

- (197) stēap stānhliðo
 'steep stone-cliffs' (*Beo* 1409a)

Taken all together, there are 52 type D verses with suspended penultimate syllables, of which three show unexpected suspension and break Kaluza's law. This

65. 31a, 54a, 160a, 288a, 322a, 551a, 554a, 692a, 742a, 868a, 936a, 1554a, 1622a, 1641a, 1845a, 1895a, 1948a, 1954a, 2025a, 2042a, 2090a, 2112a, 2118a, 2226a, 2271a, 2273a, 2315a, 2368a, 2414a, 2455a, 2476a, 2517a, 2563a, 2642a, 2827a, 3152a. Suzuki would also include 3005b, but this depends on a very dubious emendation that would introduce a non-alliterating poetic compound, and is no longer generally accepted.

failure rate, 5.8%, indicates that this type is actually among those that adhere less well to the law, with only type C verses ending in compounds showing a higher rate of non-conformity (that these two types should be somewhat similar in their behaviour is not unexpected from a theoretical standpoint; see §2.4.3).⁶⁶

There are no good examples of the contrasting type with resolution of the penultimate metrical position, the lone potential example being rather doubtful:

- (198) milts ungyfeðe
 ‘mercy ungranted’ (*Beo* 2921b)

As has long been noted, the prefix *un-* seems to be rather variable with regards to stress, and this verse could as easily be a type A verse as D (Pope 1966, 359; Bliss 1962, 38 (§44), 55 (§61); Kendall 1981, 48).

2.3.4 E: S[̃]WS AND S^wWS

There are four type E verses which clearly have a suspended second syllable, all of which conform to the law:

- (199) bēaghroden cwēn
 ‘woman adorned with rings’ (*Beo* 623b)
- (200) Norð-Denum stōd
 ‘among the North-Danes arose’ (*Beo* 783b)
- (201) Healfdenes sunu
 ‘Healfdene’s son’ (*Beo* 1009b)
- (126) mundbora wæs
 ‘was a protector’ (*Beo* 2779b)

Note that there is no question of *-Denum* and *-denes* being unstressed, since type E verses require clearly differentiated medial syllables.

There is one further probable example:

- (202) wundor[̃]smiþa geweorc
 ‘the work of wondrous smiths’ (*Beo* 1681a)

In principle, *smiþa* (**smiþā*) could be resolved (in defiance of Kaluza’s law) and the verse would still scan as S^wWS. However, it would be a more regular type E pattern

66. If we were to make the same distinction in type D between compound- and phrase-final verses, we would find perfect conformity within the three-word verses (none of the eight examples violating the law), and a 6.8% violation (three of 44) among the two-word verses.

if the first three positions were all supplied by a single word, with the *ge-* being purely extrametrical: Sšw(w)S. Under the word-foot theory this scansion would be significantly preferred, since bracketing mismatches should not be assumed where unnecessary. Methodologically, it is probably best to simply set this verse aside, as evidence neither for nor against the law; there is certainly no reason whatsoever to take it as an example of unexpected resolution.

I also set aside one verse with an *i*-stem genitive plural:

(203) Sūð-Dena folc

‘the people of the South-Danes’ (*Beo* 463b)

The issues are precisely the same as those discussed in §2.3.1 above: does the manuscript form *Dena* represent **Denā*, **Deniā*, or **Deniā*? The word certainly does not violate the law, but neither its relevance nor its categorization are clear.

This type thus adheres perfectly to the law, though the number of examples is very small (only four to six).

These half-lines with suspension also contrast with four verses with a resolved second lift:

(204) hrēðsigora ne gealp

‘did not boast of glorious victories’ (*Beo* 2583b)

(205) glēdegesa grim

‘fierce terror of fire’ ((*Beo* 2650b)

(206) ligegesan wæg

‘bore terror of fire’ (*Beo* 2780b)

(170) wīgheafolan bær

‘bore his head of war (helmet)’ (*Beo* 2661b)

In (204-206) the reality of the second resolved syllable has been denied, and syn-copated variants proposed. There is one example of an apparently syncopated form *egsan* in *Bēowulf*, at 276a, and a further instance of syncope in the derived verb *egs-ode* at 6a, against 11 examples written without syncope. Linguistic considerations suggest that, if anything, the reduced forms should probably be restored to *eges-* rather than the reverse. Etymologically the word was clearly disyllabic in origin, cf. OS *egiso** (derived from the *s*-stem **agiz*, cf. Gothic *agis*), and any further reduction in this word is due to the developments of palatalized **-ġ-* between front vowels.

In the older Mercian texts available to us there is no evidence for such a reduction, with *egisgrīma* found at *CorpGl* 1168 (*egisgrīma* at *ErfGl*, *EpGl* 569), and

some ten examples of forms of *egesful*, none syncopated, occurring in the *Vespasian Psalter*. In Northumbrian texts, we do find early reduced *egs-*, e.g. at line 13 of the *Leiden Riddle* (cf. the discussion of the name *Hygelāc* in §2.3.2). In late Northumbrian the picture is more mixed, with *egsa* occurring in the ‘south Northumbrian’ of *Ru2*, against *egisa* in *Li* (Lk 21:26).⁶⁷ In the absence of compelling evidence that *Bēowulf* belonged specifically to a variety of Northumbrian showing syncope in this context, it seems safer to take the predominant manuscript form *eges-* at face value. Much the same goes for *-sigor-*, except that a variant **sigr-* is unattested in Old English.

The reality of these three apparently disyllabic forms is further supported by the ‘unanfechtbares Beispiel’ of (170) (Sievers 1885c, 463), although Sievers himself clearly would have preferred to see a syncopated form *heafolan* here as well if he could have justified it.

Unless we resort to unjustified emendations, we seem to have four examples of resolution in accordance with Kaluza’s law in the second position of type E verses. In addition, there is one doubtful verse that, as it stands, would show resolution of a trimoraic sequence:

- (207) *umborwesendum ær*
 ‘being a youth (then)’ (*Beo* 1187a)

As Kuhn (1939, 193) has pointed out, the *ær* is semantically unnecessary, and its intrusion is easily explainable as a natural palaeographic error. Moreover, aside from breaking Kaluza’s law, we have parallel verses that are nearly identical except for the lack of a final word:

- (208) *umborwesende*
 ‘being a youth’ (*Beo* 46b)
- (209) *cnihtwesende*
 ‘being a youth’ (*Beo* 372b, 535b)

An emendation here is fundamentally *metri causa*, but it does receive circumstantial support from the syntactic, semantic, and palaeographic plausibility of removing *ær*. If we do so, we would have another example of a D verse with a suspended second lift adhering to Kaluza’s law; if we do not emend, the half-line violates

67. Cotton MS Nero D IV, f.192v. I give a direct citation of the MS (as digitized by the British Library: http://www.bl.uk/manuscripts/FullDisplay.aspx?ref=cotton_ms_nero_d_iv) in light of the criticisms raised by Cuesta (2016) concerning Skeat’s edition as a source for linguistic analysis.

the law with unexpected resolution (which would make the rate of unexpected resolution 20% in this environment).

All in all, there are seven good examples of type E verses falling under the scope of the law, all of which conform. It is likely that (202) should also be included here, though its scansion is less constrained. If the uncertain example (207) is left unemended, we would have one violation in eight or nine examples, a failure rate of 11.1-12.5%.

2.3.5 C^{1w} (COMPOUND-FINAL): WSŠW AND WSS^wW

Insofar as type C verses have been considered with respect to Kaluza's law, they have traditionally been separated into two groups depending on whether or not the final Ssw sequence is filled by a single compound word or by a two-word phrase (Fulk 1992, 157ff. (§§174-5); Suzuki 1996a, 288-91, 293-5; Hutcheson 2004, 309-13). Since a distinction between the two types does seem metrically significant, I maintain this practice, but I also include the information for type C combined in table 2.1 below.

In compound-final type C, there are some 201 verses that seem to come under the scope of the law (setting aside those with clear or possible tertiary stress). Of these, 154 clearly conform to the law:⁶⁸

- (210) *ǣr swyltdæge*
 **ǣr swyltdægǣ*
 'before death-day' (*Beo* 2798a)

- (156) *þæt mægwine*
 **þæt mēgwinī*
 '(my) kin-friends (avenged) that' (*Beo* 2479a)

68. 37a, 68a, 73a, 99a, 117a, 126b, 174a, 175b, 177a, 180a, 187a, 198b, 199b, 249b, 285a, 317a, 349a, 367a, 373a, 382a, 385a, 388b, 458a, 460b, 476b, 479a, 617b, 640b, 664a, 704a, 707a, 710b, 714b, 737b, 738a, 766a, 792a, 793a, 801b, 812a, 840a, 866a, 885a, 945a, 971a, 993b, 1007a, 1012a, 1033b, 1062a, 1070a, 1073b, 1102a, 1138b, 1146a, 1213a, 1258a, 1262a, 1317a, 1320a, 1325a, 1325b, 1330b, 1342a, 1351b, 1353a, 1368a, 1388b, 1403a, 1421a, 1427a, 1433a, 1445a, 1451b, 1480a, 1635a, 1695a, 1704a, 1712a, 1744a, 1754a, 1768a, 1813a, 1823a, 1841a, 1853b, 1862a, 1894a, 1907a, 1928a, 1963b, 1981a, 2012a, 2018b, 2039b, 2065b, 2079b, 2093b, 2130a, 2144a, 2148a, 2176a, 2233a, 2261a, 2278a, 2311a, 2318a, 2321a, 2333a, 2335b, 2341b, 2344a, 2346a, 2437b, 2366a, 2391a, 2407a, 2465a, 2479a, 2502a, 2514b, 2528a, 2579a, 2622b, 2639a, 2561a, 2651b, 2652a, 2677b, 2688a, 2712a, 2718a, 2733b, 2735a, 2747b, 2753a, 2798a, 2830a, 2835a, 2846a, 2873a, 2893b, 2896b, 2900a, 2918a, 2963a, 2970a, 3008a, 3010a, 3036b, 3040b, 3046a, 3100a, 3177a.

Most of these verses have indisputably long endings, like (210). On the inclusion of the *i*-stem NOM.PL in (156) as a clearly long ending etymologically, see §2.2.4.

Three more half-lines show case forms of feminine *ō*-stems:

- (211) *swā ðā mælceare*
 ‘thus he then (seethed with) the sorrow of the time’ (*Beo* 189a)
- (212) *ic ðæs mōdceare*
 ‘I (seethed with) trouble of spirit about that’ (*Beo* 1992b)
- (213) *ic him lifwraðe*
 ‘I (could give him little) protection of life’ (*Beo* 2877a)

As discussed in §2.2.8, in (211) and (212), *-ceare* is dependent on the verb *sēoðan*, and is most likely in the genitive or dative with a long ending. In (213) the ending is certainly accusative, but still most likely a long ending as well (again, see §2.2.8).

One verse contains a more uncertain ending:

- (214) *in fenfreoðo*
 ‘in fen-refuge’ (*Beo* 851a)

The stem class of *freoðo* is unclear. It was originally a masculine *u*-stem (cf. Old Saxon *friðu*; masculine gender confirmed at, e.g., *Heliand* 1954b), but seems to be largely indeclinable in Old English, with *-u/o* forms occurring in all case forms (e.g. *Beo* 188b). In (214) it seems to be fairly certainly dative (though Fulk, Bjork, and Niles (2009, 374) prefer the accusative). If *freoðo* still inflected at the time of *Bēowulf*, the dative would certainly have a long ending. The later, fixed ending was probably short. Given the word’s indeclinability and feminine gender, it seems that **friðu* was shifted to the *-iþō* abstracts,⁶⁹ which had short **-u* (extended from the nominative). Since it seems impossible to say whether *Bēowulf* would originally have had *freoðo* as a *u*- or *iþō*-stem, I classify this verse as ambiguous.

I also set aside one further problematic verse, 3074a, since its interpretation remains far too obscure and problematic to be used with any confidence. The word *goldhwæte* has been analysed as an adverb, a FEM.ACC.SG *ō*-stem noun, a MASC.ACC.PL *a*-stem adjective, and more, and has furthermore frequently been

69. Sievers (1965, 219 (§271)) presents the word as moving into the *īn*-stem inflection, but insofar as the feminine abstracts in **-īn* and **-iþō* are to be distinguished as inflectional classes, it is clear that **friþu* joined the latter. The transfer must have been in part motivated by the similarity of the desinence **(i)þu*, combined with its suitable semantics; and in any case the inflection of the *īn*-stems must itself be significantly analogical to the **-iþō* class (Sievers 1965, 266 (§280); Hogg and Fulk 2011, 54 (§2.88)).

emended to a still different form. Few, if any, of the proposed readings would involve a violation of Kaluza's law, but the verse is far too uncertain to use as evidence. See further the comments in Fulk, Bjork, and Niles (2009, 266f, n. 3074f.) on the passage as, in Bugge's terms, a 'locus desperatus'.

We find the *i*-stem dative singular in 24 verses:⁷⁰

- (215) in þǣm gūð**sele**
 'in that battle-hall' (*Beo* 443a)

As discussed above (§2.2.5), these verses more likely than not have long endings and conform to the law, but since a short ending **-i* (from the instrumental or dative) was probably available, these verses do not provide terribly good evidence for or against the law. Since either ending can be invoked where needed, no instance of this ending can be demonstrated to violate the law. That said, while I set these verses aside, the large number of examples of this sort is very suggestive, and probably indicates that, even if there was some variability in the ending, long forms predominated, as would be expected linguistically (see further §2.4.3).

There are 18 verses that straightforwardly break the law, showing unexpected suspension of resolution:⁷¹

- (216) cwæð hē þone gūð**wine**
 'he said he (considered) the battle-friend (good)' (*Beo* 1810b)
- (196) þæt hit wearð eal**gearo**
 'that it became all ready' (*Beo* 77b)
- (217) under stān**cleofu**
 'underneath stone-cliffs' (*Beo* 2540a)

These exceptional verses are generally very clear grammatically, and often contain elements similar or identical to those elsewhere resolved.

Setting aside the 26 verses whose endings are uncertain or of disputed length, we are left with 175 examples of wSšw verses, of which 18, or 10.3%, show suspension not justified by Kaluza's law.⁷² This makes compound type C among the most interesting verses with regards to the law, since the number of violations is

70. 380b, 443a, 482a, 492a, 647a, 695a, 965a, 976a, 1094a, 1082b, 1326b, 1513a, 1515a, 1639a, 1938a, 2010a, 2030a, 2083a, 2139a, 2515a, 2635a, 2786a, 3053a, 3097a.

71. 77b, 84a, 230a, 486a, 771b, 820b, 1192b, 1253a, 1810a, 2340a, 2410a, 2438a, 2540a, 2840a, 2884a, 2884b, 2946a, 3112b.

72. Making different choices about how to count the ambiguous material makes some difference, but has no really dramatic effect on the results. The failure rate could be as high as 11.3% (20/177 failing), if both of the genuinely ambiguous verses are assumed to have short endings (a very unlikely possibility in the case of 3074a). As discussed above, the *i*-stem datives are excluded not

clearly too high to be accidental, and yet low enough that the law appears to still hold as a tendency (see §2.4.3 below).

There is only one possible example of a resolved position contrasting with the normal suspension in these examples, and it is very doubtful:

- (218) þæt hīo lēod**bealewa**
 ‘that she (did less) of strife among the people’ (*Beo* 1946a)

The *-e-* here is unetymological and clearly a secondary, and probably very late development (Hogg [1992] 2011, 234 (§§6.43-4)). There is no reason to assume this verse originally involved resolution (or its suspension).

2.3.6 C^{2w} (TWO-WORD-FINAL): WS.ŠW AND WS.S^wW

There are quite a few type C verses in which the final three positions are formed by two distinct words (having, in word-foot terminology, a bracketing mismatch). These verses show many more examples of endings whose historical length is disputed than do the previous type C half-lines, largely because this set allows a wider range of parts of speech, in contrast to the nominal compounds that predominate in the non-mismatched verses.

There is only one verse whose reading presents any real textual difficulties:

- (219) ond onsǣl **meoto**
 ‘disclose (your) thoughts’ (*Beo* 489b)

The translation given is that of Fulk, Bjork, and Niles (2009, 147, n. 489^bf.), who take *onsǣl* as an imperative and *meoto* as a FEM.ACC.PL *ō*-stem (which ought to be long, with the length of PGmc **-ōz* preserved by the final, eventually lost consonant). This is, however, not an expected spelling of that ending, and a feminine *meoto* would be a hapax in the Old English corpus (and unsupported by any exact cognates elsewhere in Germanic). The sense, stem class, and grammatical interpretation of this passage are all too uncertain to include it.

Nine verses with adverbial *-e* < **-ai* or **-ê* conform (§2.2.3),⁷³ as do six with a preterite subjunctive, and one with a 2SG strong verb preterite derived from this

because they are genuinely ambiguous, but because they simply cannot be used to disprove the law. If they were counted, the failure rate of Kaluza's law in this type would be around 9%. The rate of 10.3%, which we get from simply discounting all the more ambiguous possibilities, falls right in the middle of this range, and will serve as more than precise enough in the present context.

73. With *fore*: 136b. With *geare*: 2062b, 2656b. With *hraðe*: 224b, 740a, 748b, 1541a, 2117b, 2968b.

(§2.2.2):⁷⁴

- (220) ond nō mearn **fore**
 'and felt no remorse for that' (*Beo* 136b)
- (221) ic wāt **geare**
 'I know readily (certainly)' (*Beo* 2656b)
- (222) ac he gefeng **hraðe**
 'but he quickly seized' (*Beo* 740a)
- (151) ær hē on bed **stige**
 'before he climbed into bed' (*Beo* 676b)
- (152) ymb sund **flite**
 '(you) who should have contended across the sea' (*Beo* 507b)

There are also eight verses with *dyde*, probably with the still-long weak preterite endings from **-ōⁿ* and **-ē* (§2.2.8).⁷⁵

- (223) swā hē oft **dyde**
 'as he often had done' (*Beo* 444b)
- (224) swā ic ær **dyde**
 'as I did before' (*Beo* 1381b)

201 further verses show suspension of resolution of sequences with second syllables generally agreed to be long.⁷⁶

- (225) ne wæs him ecg **bona**
 'he was not killed by the blade' (*Beo* 2506b)

74. Subjunctives: 676b, 966b, 2818b, 2976b, 3073b, 3126b. Strong preterite: 507b.

75. 444b, 671a, 956b, 1144b, 1381b, 1824b, 1891b, 2348b.

76. 11b, 15a, 20a, 23b, 35b, 44b, 48b, 78b, 124b, 146b, 170a, 178b, 190b, 197a, 212a, 214a, 223b, 225b, 252b, 284b, 288b, 290b, 291b, 296b, 319a, 331b, 399b, 400b, 424a, 437a, 439b, 441b, 447b, 452b, 453b, 509b, 539a, 594b, 599b, 683b, 689b, 698b, 763b, 790a, 798b, 806a, 831b, 835b, 844b, 854a, 863b, 865a, 873a, 918b, 920b, 939b, 944b, 948b, 953b, 954b, 974a, 975b, 979a, 996b, 1010a, 1024a, 1034a, 1074b, 1124b, 1151b, 1152b, 1153b, 1174b, 1192a, 1211b, 1218b, 1225b, 1233a, 1238b, 1246b, 1292b, 1306b, 1328b, 1331b, 1339b, 1340a, 1343b, 1361b, 1366b, 1370b, 1374b, 1382b, 1385a, 1392b, 1395b, 1430b, 1439b, 1458a, 1481b, 1485b, 1491b, 1495b, 1536b, 1546b, 1575b, 1592b, 1600a, 1601b, 1610b, 1611b, 1614b, 1647b, 1668b, 1676b, 1678b, 1688b, 1735b, 1738b, 1741b, 1745b, 1749b, 1801a, 1805b, 1808b, 1814b, 1820b, 1846b, 1849b, 1858b, 1885b, 1903b, 1920a, 1921b, 1923b, 1930a, 1935a, 1966b, 1989b, 2027b, 2043b, 2058b, 2069b, 2099b, 2126b, 2152a, 2180b, 2196b, 2208b, 2209b, 2252b, 2263b, 2306b, 2314b, 2343b, 2390b, 2408b, 2446b, 2453b, 2473a, 2499b, 2506b, 2518b, 2536b, 2598b, 2646b, 2702b, 2708b, 2727b, 2737b, 2742b, 2745b, 2762b, 2775a, 2801b, 2858a, 2864b, 2903a, 2913b, 2945b, 2957b, 2962b, 2980b, 2981b, 2982b, 2987b, 3007b, 3014b, 3015b, 3021b, 3028a, 3070b, 3077a, 3106b, 3114b, 3132b, 3134b, 3159b, 3163a, 3167b, 3169a, 3172b.

- (226) þonne wīg **cume**
 ‘when war should come’ (*Beo* 23b)

Beyond these 225 regular verses, there are two sets of ambiguous verses. Eight half-lines end with the subjunctive of a preterite-present verb,⁷⁷ and nine end with the ambiguous *fela*.⁷⁸ See, respectively, §2.2.2 and §2.2.7.

- (153) þēah þīn wit **duge**
 ‘though your wit might suffice’ (*Beo* 589b)
- (227) hwæt þū worn **fela**
 ‘indeed you (have said) many things’ (*Beo* 530a)

There are six verses that unambiguously end with etymologically short vowels:

- (228) wæs on bāel **gearu**
 ‘was ready on the pyre’ (*Beo* 1109b)
- (229) wæs sēo þēod **tilu**
 ‘that was a good people’ (*Beo* 1250b)
- (230) ic lýt **hafo**
 ‘I have few’ (*Beo* 2150b)
- (231) forðon ic mē on **hafu**
 ‘therefore I have upon me’ (*Beo* 2523b)
- (232) ðæs ðe ic [wēn] **hafo**
 ‘of which I have full expectation’ (*Beo* 3000b)
- (233) sīe sīo bār **gearo**
 ‘(when) the bier should be ready’ (*Beo* 3105b)

Setting aside (219) and the ambiguous verses with preterite-present subjunctives or *fela*, there are 231 relevant half-lines, of which 6, or 2.6%, show unexpected suspension of resolution. This is significantly better than the type C verses ending in compounds, though the relatively large number of ambiguous verses make this conformity less secure. If the endings are taken to violate the law in all uncertain cases, the rate of violation could be as high as 9.6%, comparable to the compounded C type (if they all regularly adhere, it could be as low as 2.4%).

There are two verses of this sort that have a resolved penultimate position, both of which seem to be linguistically secure and conform to the law:

77. 589b, 680b, 1179b, 1367b, 2031b, 2530b, 2749b, and 3176b.

78. 530a, 869a, 883a, 1265b, 1783b, 1837b, 2349b, 2738b, 3029b.

- (234) hē on weg **losade**
 'he escaped away' (*Beo* 2096b)
- (235) þe ic hēr on **starie**
 'which I here look upon' (*Beo* 2796b)

Possibly to be added to this are two more verses containing the genitive plural form *Dena*:

- (236) þe on land **Dena**
 'so that into the land of the Danes' (*Beo* 242a)
- (237) on land **Dena**
 'into the land of the Danes' (*Beo* 253a)

On the possibility of scanning these verses with **Deniā*, see §2.3.1.

2.3.7 A2A: Ss^wSW (AND Ss^wSs)

Along with the type D verses discussed in §2.3.3, A2a verses with a resolved second position are generally regarded as one of the most regular pieces of evidence regarding Kaluza's law, and the data has generally been evaluated well (Bliss 1962, 27-9 (§35); Fulk 1992, 160 (§176); Suzuki 1996a, 284f.; Hutcheson 2004, 300f.). It is nonetheless worth reviewing the evidence briefly so as to treat it consistently with the other verses in question.

There are three verses where the length of the ending is potentially in doubt. One of these has the *i*-stem DAT.SG discussed in §2.2.5:

- (238) mund**gripe** mægenes
 'hand-grip of strength' (*Beo* 1534a)

This verse must remain ambiguous. As discussed above, the *i*-stems could in principle have either a long or short ending, making it difficult to regard any one example as violating the law in any metrical context (§2.2.5). Still, so many datives are suspended that the long ending appears much more normal, and this verse stands out as unusual.

As discussed above, textual uncertainties complicate the assessment of one further verse:

- (155) lāð**bite** lices
 '?cruel-bite(s) of the body [or of fire?]' (*Beo* 1122a)

If *lāðbite* is plural, as is often supposed, then it certainly breaks Kaluza's law (**lāðbitī*), but it conforms if it is taken as a nominative singular (**lāðbitī*); see §2.2.4. I personally strongly favour the interpretation of *-bite* as singular, but classify this half-line as uncertain.

Another potentially difficult verse is (158):

- (158) **bordwudu** beorhtan
 'bright shield-woods' (*Beo* 1243a)

As argued in §2.2.6, this half-line is best taken as straightforwardly conforming to the law.

These more debatable examples aside, there are 55 A2a verses that clearly conform to the law.⁷⁹

- (124) **bānfatu** bærnān
 'bone-vessels to be burned' (*Beo* 1116a)

There are two further verses showing resolution of the FEM.ACC.SG *ō*-stem ending from **-ōⁿ*, which seem to clearly violate the law (see §2.2.8).

- (239) **mōdceare** micle
 'great trouble of spirit' (*Beo* 1778a)
- (240) **mōdceare** mændon
 'proclaimed the sorrow of their spirit' (*Beo* 3149a)

These two are the only certain violations of the law in this type.

This makes for 58 clear verses, only two of which violate the law (a rate of 3.4%). If we were to view 1122a and 1534a as breaking the law, the rate of violation would be 6.7%. If we split the difference and regard one as short and one long, we would have three non-conforming verses out of 60, a 5% failure rate.

79. 76a, 136a, 156a, 193a, 208a, 215a, 222a, 226a, 232a, 328a, 430a, 485a, 622a, 640a, 715a, 753a, 767a, 994a, 1079a, 1116a, 1121a, 1147a, 1171a, 1177a, 1239a, 1246a, 1284a, 1317b, 1369b, 1463a, 1476a, 1516a, 1602a, 1619a, 1676a, 1722a, 1738a, 1906b, 1940a, 2046a, 2077a, 2120a, 2250a, 2265a, 2313a, 2320a, 2357a, 2419a, 2429a, 2456a, 2537a, 2584a, 2607a, 2618a, 2742a. 232a also belongs here, showing an initial *Ss^w* foot whether or not it is emended to A2a or left as an anomalous type D* half-line. Verses where the resolved second position follows a resolved lift, namely 236a, 1065a, 1343a, and 2108a, are left aside for the moment. 1343a should perhaps be included here, since the initial lift only became disyllabic through parasiting, and it seems likely that in a formulaic compound the older value would be preserved.

2.3.8 D*/A2B: SwSšw OR SwSs^w

There is one final set of verses to consider, though it is not immediately obvious that most of them can shed any light on the law. These are half-lines with the linguistic pattern SwSšw, which in principle could be scanned as either A2b, with the final syllables resolved, or D*, with suspension.

- (241) mearcað mōr**hopu**
 ‘he will stain his moor-refuge’ (*Beo* 450a)

- (242) mære mearc**stapa**
 ‘a famous walker in borderlands’ (*Beo* 103a)

There are seven verses like (241), with short final syllables,⁸⁰ which we can potentially scan as type A2b, and 36 with long ultimate syllables, like (242),⁸¹ that are presumably D*. In one instance the presence of anacrusis seems to further favour a scansion of D*:

- (243) ālāetan lāend**agas**
 ‘to give up his fleeting days’ (*Beo* 2591a)

It is noteworthy that long endings predominate. With seven with clear short endings, 36 with long ones, and one *i*-stem dative singular that is probably long, only about 16.3% of all the examples have a short ending. This suggests they were disfavoured in this position.

There is no obvious linguistic explanation for why the poet should have avoided resolution in this position. Many A2b verses end with Ss nouns like *wilsīð* and *freoburh*, so it is striking that possible resolved variants like *goldsele* and *frēawine*, common as the first feet of A2a verses, should be so rare in the same position.⁸² Whether these final feet are resolved, Ss^w, or exceptionally suspended, Sšw, their scarcity remains an issue in need of explanation (see §2.4.3).

80. 450a, 596a, 764a, 986a, 1358a, 2047a, 2800a. Also compare 1323b, with a proper name.

81. 103a, 263a, 275a, 606a, 614a, 818a, 839a, 966a, 1162a, 1212a, 1298a, 1231a, 1339a, 1348a, 1426a, 1440a, 1468a, 1568a, 1678a, 1793a, 1969a, 2123a, 2205a, 2496a, 2545a, 2603a, 2649a, 2674a, 2689a, 2719a, 2760a, 2811a, 2825a, 2847a, 3055a. 2462a has the ambiguous DAT.SG *i*-stem ending; it could in principle go in either group, though probability strongly suggests it is long.

82. Specifically, There are some 102 A2b verses ending with Ss or S^ws, against only seven possible examples of Ss^w; the rate of resolution would be 6.4% (Pope 1966, 258-61). By contrast, for initial Ss feet in type A2a, 91 begin with Ss (or S^ws) and 64 with Ss^w (or S^ws^w); about 41.3% have a resolved s position (256-8).

Table 2.1: Rates of Adherence to Kaluza's Law in *Bēowulf*

TYPE	SCAN.	RESOLVED					SUSPENDED				
		CONF.	VIOL.	CONF?	AMB.	PERC. VIOL.	CONF.	VIOL.	CONF?	AMB	PERC. VIOL.
A2k	SsŠw	–	–	–	–	–	66	1	0	1	1.5% (1.5- 2.9)
A2a ²	SsS ^w w	19	1	3	0	5.3% (4.3-5.3)	–	–	–	–	–
D ¹	SSsw	19	0	6	1	0% (0-5)	15	0	0	0	0%
D ²	SSsw	0	0	1	0	0%	49	3	0	0	5.8%
E	SswS	4	0	0	1	0% (0-20)	4	0	2	0	0%
C ^{1w}	wSSw	0	0	1	0	0%	157	18	24	2	10.3% (9-11.3)
C ^{2w}	wS.sw	2	0	2	0	0%	225	6	0	18	2.6% (2.4-9.6)
A2a ¹	Ss ^w Sw	56	2	0	2	3.4% (3.3-6.7)	–	–	–	–	–
D*	SwSSšw	–	–	–	–	–	0	0	36	1	0%
A2b	SwSs ^w	0	0	7	0	0%	–	–	–	–	–
C(tot)	wSSw	2	0	3	0	0%	382	24	24	20	5.9% (5.3-10.3)
TOTAL		100	3	20	4	2.9% (2.4-5.7)	516	28	62	22	5.1% (4.5-8.6)

2.3.9 OVERALL ADHERENCE TO KALUZA'S LAW

Having examined the effects of the law in various contexts, we can now aggregate the results in table 2.1 (additionally, all the relevant verses are reproduced in Appendix A). This is naturally complicated by the etymological and textual uncertainties discussed above, and I have tried to strike a balance between clarity and accuracy. For each metrical environment discussed above, rates are given separately for cases of resolution and instances of its suspension. Since some verse types can only show one or the other (A2k is defined by suspension of resolution, for instance), – indicates the impossibility of examples (as opposed to 0, which indicates that there are no instances of a theoretically possible configuration). Within each category, there are separate columns for certain conformity to the law (CONF.) and clear violations (VIOL.). Lines that, if counted, could only be regular, but which are uncertain for some textual or etymological reason, are given under CONF?. This includes, for example, all instances involving *i*-stem DAT.SG endings. The column AMB. includes verses that could either violate or conform to the law, depending on decisions about textual issues and etymology. The final column gives the percentage of clear verses that do not conform to the law,⁸³ followed by the range of possible violation rates depending on how ambiguous verses are interpreted. The lower end is calculated by taking all AMB. verses as non-violating, and all CONF? verses as genuine, and the higher end by assuming all ambiguous verses violate the law while no CONF? half-lines are valid.⁸⁴

The types are presented in the same order as in the discussion in the preceding sections. The figures for D* and A2b verses are not included in the totals at the bottom, since, as noted above, as analysed they cannot provide evidence against the law. An extra subtotal line is also included for all type C verses together.

If we aggregate a single full total, rolling cases of suspension and resolution together, we find that among the clear instances there are 31 exceptions (almost all cases of unexpected suspension) in 647 verses, with 4.8% of verses failing to conform overall. Looking at the less certain examples, the rate of failure could be as low as 4.2% or as high as 8.2% (with, again, the overwhelming majority of exceptions being cases of unexpected suspension).

83. I.e. VIOL. / (CONF. + VIOL.).

84. That is, the lower rate is calculated as VIOL. / (CONF. + VIOL. + CONF? + AMB.). The upper end is (VIOL. + AMB.) / (CONF. + VIOL. + AMB.). The only verse this mechanical calculation deals with incorrectly is *Beo* 1187a (207), which would change type to become a D verse if emended. This has no significant effect on the percentages.

2.3.10 OTHER POSSIBLE FORMULATIONS OF KALUZA'S LAW

In the discussion so far, I have operated with the most basic definition of 'long' and 'short' endings, namely that an ending counts as 'long' or 'short' for the purposes of the law depending on whether it forms a heavy or light syllable. This has by no means been universally assumed, and it is worth addressing the shortcomings of other possible formulations of length.

When Kaluza (1896, 120-31) first described the phenomenon that would come, nearly a century later, to bear his name, he characterized the special quality of non-resolving second syllables as a secondary accent. Although it is now often said that he saw this accent as a reflex of the Proto-Germanic 'schleifton' (Suzuki 1996a, 281; Cable 2003, 150), Kaluza also included as *tieftonig* originally medial syllables (which he saw as having a secondary accent) and those which carried the accent in Indo-European before the levelling of stress onto root syllables (1896, 110-16, 124f.). This emphasis on accent depends on Kaluza's general view of Germanic metre as having four stresses per line, a theory which has had no adherents for many decades.⁸⁵ More recent theorists – apparently starting with Kaluza himself (1911, 62f. (§52)) – have generally referred to the non-resolving endings as 'long', though without always settling on a clear definition of length.

Bliss (1962, 118-21) too hastily dismisses the notion that the difference could literally be one of length, and entertains two alternative, interrelated possibilities. The first is that the distinction is morphological, with poets viewing as 'short' any syllable undergoing the synchronic form of high vowel deletion. Thus the *i*-stem nominative singular in a word like *wine* (< **wini*) 'friend' would be short, because the same ending is lost after a heavy stem (e.g. in *wyrm* < **wyrmī*). The dative *wine* would have a long ending, because the ending is retained in *wyrme* (< **wyrmē*). Bliss's second proposal, following from the fact that *high vowel* deletion has at its base a phonological distinction, is to see the difference as one of vowel quality: high vowels like *-i* are 'short', other vowels, including *-æ*, are 'long'. This explanation is, obviously, only possible for the period before *-i* and *-æ* merged as *-e*, and Bliss would see it continued only by the force of poetic tradition. This combined phonological/morphological approach is taken up and elaborated by Suzuki (1996a, 285f, 301-5), who oscillates somewhat inconsistently between emphasizing the phonological and morphological aspects of his rule. His primary definition

85. Though it is untenable in its stated form, Kaluza's approach does have many interesting affinities to both the four-position principle and the word-foot theory, and many of Kaluza's particular observations remain highly insightful.

of 'long' and 'short' is purely morphological, but his justification contains a significant phonological component, resting on supposed special qualities of the high vowels as well as the morphological features of (some of) the words involved.

Bliss's particular approach can be easily dismissed as impossible as a synchronic description of the law. He supposes that *Bēowulf* was composed after the merger of unstressed **-æ* and **-i*, which in turn almost certainly postdates the general shortening of unstressed long vowels. By this stage of Old English, however, the morphological system had undergone significant changes, and the distinctions Bliss relies on were no longer recoverable. Bliss, trained in traditional philological method, is used to thinking of words like *wyrm* 'worm, dragon' and *wine* 'friend' both as *i*-stems, and so is happy to propose an enduring morphological rule in which the *-e* is apocopated in the first word but not in the second. This mischaracterizes the synchronic grammar of all but the earliest Old English. After the shortening of unstressed long vowels, deletion of **-i* had become opaque: even before the merger of **-i* and **-æ* there were no clear synchronic indications that *wyrm* had come from **wyrmī*, while there were words like **endi* 'end' (earlier **ændī*) with apparent failure of apocope of now-short **-i*. The results of this in the synchronic grammar seem to have been a significant reanalysis of the declensional system, with **wini* and **endi* falling together as an extended class, and other *i*- and *ja*-stems joining the *a*-stems as an unextended class of 'strong nouns' (e.g. *wyrm*, *secg*, inflectionally now indistinguishable from *wulf*, *dæg*).⁸⁶ The key consequence for Kaluza's law is that, once this shortening happened, there would be no morphological basis on which to single out **wini* as susceptible to high vowel loss. After the merger of **-i* with **-æ* as *-e* – which, again, Bliss assumes predates *Bēowulf* – there would be neither a morphological nor a phonological basis for seeing this *-e* as in any way special with regards to resolution.

Suzuki's definition is in principle more robust, and he rightly recognizes that for his morphophonological definitions to work, he must place them at a time before **-i* and **-ī* fell together (1996a, 306). Suzuki's approach, however, requires him to posit a new morphophonological category of 'short' vowels, which consist only of short high vowels that are synchronically not apocopated after heavy stems. That is, it has a qualitative dimension (contrasting **-i* with **-æ*), a quantitative one (*-i* versus **-ī*), and a purely morphological one (NEUT.NOM.-ACC.PL **-u* versus

86. Assimilation of the *i*-stems to the *a*-stems may have begun even earlier, and even in very archaic texts we find examples of the intrusion of *a*-stem endings like plural *-as* (Dahl 1938, 165f.). On the morphological system of later Old English more generally, see further Keyser and O'Neil (1985, 39-42, 44-45) and Hogg and Fulk (2011, ch. 3 *passim*, esp. 69-72).

1SG *-u).⁸⁷ This alternative type of 'shortness' is awkward, both for its complexity and its lack of motivation. It is unclear why the purely morphological factor of whether or not an ending has been singled out for non-apocope should have anything to do with a syllable's ability to resolve (resolution otherwise being a purely phonological process).

Suzuki's stipulative definition would be more plausible if it had clear empirical advantages. It does not. Suzuki (1996a, 286f, n. 19) claims an advantage in that his analysis classifies the reflexes of *-ōⁿ as long rather than short, but this is only an objection to Fulk's classification of this one ending, not to a quantitative view more generally (see §2.2.8 above). Suzuki's definition does make a better prediction for the three instances of *hafo* (§2.3.6), and is more firm about ambiguous endings such as the eight preterite-present subjunctives (see §2.2.2) and the ten instances of *fela* (§2.2.7). However, these other endings are historically uncertain, so any metrical evidence could just as well be taken to indicate that these endings were phonologically long, not that Suzuki's alternative definition should be favoured. The evidence from *fela* is also mixed, since regarding it as uniformly long would introduce another example of unexpected resolution in 2950a, in a context in which Kaluza's law is otherwise adhered to perfectly (see §2.3.2). Beyond this, his definition fails to predict 17 instances of resolution involving historically non-apocopating vowels.⁸⁸ There is otherwise only one single violation of Kaluza's law in any of these metrical contexts (see §§2.3.1, 2.3.2, and 2.3.6), meaning that Suzuki's definition not only has no numerical advantages, but results in a larger number of violations, and of a more problematic type. Without any real empirical gain, there seems to be no reason to adopt Suzuki's theoretically more complex

87. This morphological dimension is most clearly visible in the subjunctive of the preterite-presents – if these are in fact linguistically short (see §2.2.2) – and the 1SG.PRES ending in *hafo*, which Suzuki (1996a, 291) sees as phonologically short but as 'long' for the purposes of Kaluza's law.

It is worth mentioning that it cannot be strictly demonstrated that ending of *hafo* is resistant to high vowel deletion in *Bēowulf*. Suzuki points to *fullǣstu* as an example of retained *-u, but this is a heavy class I weak verb, and it is likely that the unapocopated -u is entirely regular here, just as it probably is in *ja*-stem NEUT.NOM.-ACC.PL nouns: *lǣstu* < WGmc **laistiju* just as *ricu* < **rikiju* (cf. note 15 above). There are, curiously enough, no clear examples at all of morphologically restored/preserved verbal *-u in *Bēowulf*, though there are examples of restored -u in other early Anglian texts (starting with the *Corpus Glossary*). Assuming it for *Bēowulf* as well is certainly reasonable, but it is worth entertaining the possibility that if *Bēowulf* is early enough, this analogical process of restoring this ending might not have run its full course by the time of its composition. At any rate, it is important to note that the synchronic morphological distinctions Suzuki relies on are not in every case as clear as he indicates.

88. 467a, 468b, 744a, 1047a, 1198a, 1308b, 1389b, 1607a, 1802a, 1852a, 2043a, 2072a, 2096b, 2424a, 2708a, 2796b, 2908b.

(and arbitrary) definition.

This leaves pure quantity as the only plausible factor.⁸⁹ The quantitative approach grounds Kaluza's law in a feature of the natural language – syllable length, determined with reference to vocalic quantity even in unstressed syllables – which is guaranteed on non-metrical grounds to have been present relatively late in the prehistory of Old English. As we will see below, this view also roots Kaluza's law in the phonological foot structure of early Old English (§§2.4.1 and 2.4.2). Suzuki is certainly right to emphasize high vowel deletion as a key linguistic test for the length of high vowels (and further, for Old English foot structure), but he goes too far in taking it as the sole defining criterion of shortness, rather than as a useful indicator.

2.3.11 KALUZA'S LAW AND PROPER NAMES

As noted above (§2.1.1), the above figures systematically exclude the second elements of proper names from consideration, except in the few examples where they unambiguously have stress on their second element (§2.3.4). When occurring verse-finally, they provide no evidence for unexpected suspension: when names like *Healfdene* fill three metrical positions, this can be attributed to the normal treatment of Sww sequences rather than suspension.

The only verse that *needs* to be scanned with an Sww name is 57a:

(150) hēah Healf**dene**
 'high Healfdene' (*Beo* 57a)

There are 36 further verse-final names, such as *Ōththeres* in 2380b, which could just as well have secondary stress on the deuteriotheme, and would still scan as three positions (Ssw) by Kaluza's law (Russom 2001, 50).⁹⁰ There is one further verse (2122b) with an *i*-stem DAT.SG ending, and eight with genitive plurals.⁹¹ If all names were counted as as having full secondary stress, the rate of violation would be at most 2.7%.

This apparently exceptionally high rate of adherence might be partly coincidental. Of the 36 verses that may adhere to the law, twelve are tribal names that

89. Other less plausible attempts to explain the law on a formulaic or partly semantic basis are addressed below (§2.4.3 and note 102).

90. 116b, 189b, 268a, 344b, 383a, 469a, 601a, 645a, 828b, 1020b, 1040b, 1064a, 1066a, 1145a, 1279b, 1420b, 1474b, 1578b, 1652b, 1699a, 1856b, 1867a, 1996a, 2011b, 2022a, 2143b, 2147a, 2363a, 2380b, 2394b, 2494b, 2604a, 2612a, 2916a, 2928b, 2932b.

91. 1a, 392a, 427a, 609a, 616a, 1044b, 1069a, 1769a.

always occur in the plural, for which all available endings are heavy. 18 more occur in kinship formulas, where the name is in the GEN.SG, always a long ending (see the attestations of *Healfdene*, *Ōthhere*, and *Ælfhere* in Fulk, Bjork, and Niles 2009, s.vv.). That leaves only six verses⁹² with singular names with a potentially freer choice of case where the law appears to hold, against one (57a) where it fails. This subset has the rather high violation rate of 14.3%, and if we include the difficult 1329b as a violation, it would be 25%.

What is more interesting is that there are no examples of verses like the following:

- (244) *Healfdenes mæge
 ‘for Healfdene’s kinsman’ (cf. *Beo* 1009b)
- (245) *Sūð-Dene swæfon
 *Sūð-Denī swēbun
 ‘South-Danes slept’ (cf. *Beo* 1279b-1280a)

In principle, if proper names could be treated as having unstressed second elements freely, it would be possible to produce verses like this where the scansion was not Ss^wSw (which would violate Kaluza’s law), but SwwSw (cf. §2.1.1, esp. exx. 141-142). That we find no such verses is probably an indication that proper names do generally maintain stress on their second elements, and can only lose it when verse-final. This principle of verse-final subordination may have a wider applicability in explaining exceptions to Kaluza’s law more generally; see §2.4.3. It is hard to say whether the second elements of proper names are so reduced in verse-final position more than other nouns or not – the seven or so examples where we might fairly test the law do not really provide a firm basis for making conclusions one way or another.

2.3.12 KALUZA’S LAW AFTER RESOLVED SEQUENCES

In §2.1 I left the question open of whether Kaluza’s law applies after a resolved sequence. On the one hand, there are three verses in which resolution seems to be suspended after a S^w lift (the resolved lift is underlined, the suspended in bold):

- (246) worold**cyn**inga
 ‘of world-kings’ (*Beo* 1684b)
 S^w**Š**sw

92. 1020b, 1064a, 1066a, 1420b, 2022a, 2932b.

(247) wyruldcyning[a]
 'of world-kings' (*Beo* 3180b)
 S^wšSw

(248) mōdges merefaran
 'of the famous sea-farer' (*Beo* 502a)
 SwS^wšw

Few as these examples are, they do conform with the expectations of the law, having long second syllables in the suspended elements.⁹³ There are also some 40 half-lines that show two resolved sequences in a row, most of which adhere to the law as well.⁹⁴ Examples can be found from a wide range of half-line types:

(249) goldwine **gumena**
 'gold-friend of men' (*Beo* 1171a, 1476a, 1602a)
 Ss^wS^ww

(250) hroden **ealowæge**
 'decorated ale-cup' (*Beo* 495a)
 S^wS^wsw

(251) fæderæþelum onfōn
 'take up paternal nobility' (*Beo* 911a)
 S^ws^ww(w)S

(252) se þe wæteregesan
 'who (must inhabit) the terror of water' (*Beo* 1260a)
 wwS^ws^ww

(253) mægenwudu mundum
 'power-wood in his hand' (*Beo* 236a)
 S^ws^wSw

93. Terasawa (1994, 19, 24 n. 22) argues *worold-* may have a syncopated second syllable, but this seems unlikely for an early poem, and a disyllabic pronunciation is required at 1738b.

94. Of type A2a with a resolved second lift are 215a, 328a, 715a, 767a, 994a, 1171a, 1239a, 1317b, 1476a, 1534a, 1602a, and 1906b (along with 2607a). Type D with a resolved second lift: 495b, 1109a (assuming **betost* for *betst*, as we must elsewhere), 1870b, 1879a, 2062a (restored), 2161a, 2206b, 2386b, and 2769a. Type C with a final compound: 1260a and 2917b. Type C with a final phrase: 28b, 73b, 164a, 350b, 1154b, 1158b, 1603b, 1703a, 2309b, and 3128b. And type A2a with a resolved second position: 236a, 1065a, 1343a, and 2108a.

Terasawa (1994, 12-19) generally tries to explain away all examples that involve S^ws^w within a compound, but this requires a number of incorrect etymologies (such as deriving *wæter* from monosyllable **watr*), and ad hoc syncopes (e.g. scanning *-æþelum* as **-æþelum*, which is unsupported by any phonological or orthographic evidence). Terasawa does not distinguish carefully between resolved S^ws^w and suspended S^wšw; he provides evidence that the latter was avoided, but overgeneralizes and attempts to explain away the former as well.

Three of these 40 half-lines show resolution prohibited by Kaluza's law:

- (254) gladum **sun**a Frōdan
 *gladum **sun**ā Frōdan
 'to the glad son of Frōda' (*Beo* 2025b)
 S^wS^wsw
- (255) wæs se fruma **egeslic**
 'that beginning was terrible' (*Beo* 2309b)
 wwS^ws^ww
- (256) wicstede **weligne**
 'prosperous dwelling-place' (*Beo* 2607a)
 Ss^wS^ww

This would make for a rate of unexpected resolution of 7.5%; exceptions form a small minority of the total, but the rate is still rather higher than after long monosyllables.

Despite the three examples of (246-248), it has traditionally been held that suspension after a resolved sequence is not a typical part of Old English metrical practice (Sievers 1885b, 248).⁹⁵ One important consideration is the retention of the long form *Deniga* in (257):

- (257) ic þæs wine **Deniga**
 'I (will ask) the friend of the Danes about that' (*Beo* 350b)

This form is evidently preserved (or adopted) to avoid a problematic pattern S^wšw (Fulk 1992, 243f. (§279)). The irregularity of this pattern is further supported by the nearly complete absence of compounds of the shape S^wšw, e.g. *heretoga*, from the Old English poetic lexicon (*merefara* being a very rare exception; Terasawa 1992, 37-42; 1994, 60-2). The prohibition against such words suggests that there is a meaningful difference between them and the many compounds like *hildfruma* that are regularly found in verse: S^w is not in all ways the exact equivalent of Š. The implication is that suspension of resolution after S^w is not typical, which is to say that Kaluza's law (a principle governing the suspension of resolution) does not apply in that position. It is not clear to me what the phonological basis is for this distinct behaviour after S^w (see §2.4.1).

95. The scansion of verse-final words like *glitinian* as S^www is of course irrelevant (cf. *Beo* 2758a, 3056b, and potentially any verse ending in *maþelode*, if this word is not given its etymological value of *maþelode*). The final two syllables are unstressed, and, not being eligible for resolution in the first place, can hardly be said to be 'suspended'.

If suspension of resolution is not allowed in this environment, we might expect that the second of two adjacent resolved sequences should be freely trimoraic, with verses like (254-256) being perfectly normal. In practice, such half-lines are still fairly rare, but this is not really surprising. Most of the patterns in which two sets of resolved syllables occur in a row are fairly formulaic, interchanging with variants that have a normal monosyllable in place of the first resolved sequence. This is especially the case for poetic compounds, where, for example, *wæteregeſa* occurs alongside *ligegeſa* (though both types of compound are rare), and *mægenwudu* interchanges with *þrymwudu*. This will naturally favour the use of second elements like *-egeſa*, *-wudu*, *-ſele*, etc., which can be used after either type of initial morpheme.

Formulaic effects are also significant in other positions in verse-types built around poetic compounds. Words like *gumena* and *geatolic* often occur as the second feet of A2a verses, typically after compounds with the shape Ss, but also after Ss^w. So even though a word like *cyninges* might theoretically be able to fill a Sw position after a word like *cwealmbealu*, it could not follow words like *cearsīð*, and would not be very useful after Ss feet generally. A formula like ‘X of the king’, where X is a poetic compound, would have a harder time becoming entrenched in the poetic repertoire, since it would only be metrical after a very small number of such compounds (namely those of the shape Ss^w). Similarly, compounds beginning with elements like *mere-* and *beadu-*, which can stand after S feet as well as S^w, should be (and are) more common than those in *metod-* or *fetel-*. It is notable that the three examples of overlong resolution in this environment are among those verses where such formulaic tendencies least apply: *welig-* occurs in an A2a verse, but the word is found just once in *Bēowulf* (rather than being a typical second element in SsSw verses), while *egeslic* and *ſuna Frōdan* occur in more freely composed half-lines with bracketing mismatches.

2.4 THEORETICAL IMPLICATIONS OF KALUZA’S LAW

The goal of a ‘theory’ of Kaluza’s law is straightforward: to explain the distributions of resolution and its suspension. Put more precisely, a good theory of the law ought to define when it applies, describe its effects, and account for any other factors that interact with it. The clear starting point is the process of resolution in general, whose basis in Old English phonology gives the phenomenon a natural linguistic underpinning. As we will see, the phonological foot structure of Old English

helps explain the law's regularity, but as the empirical review in the previous section has shown, the operation of the law is not uniform in scope or effect. Though these irregularities have sometimes proven troublesome, they also serve as a starting point for a fuller understanding of the interaction of metre and resolution in *Bēowulf*.

2.4.1 FOOT STRUCTURE AND RESOLUTION

2.4.1.1 *The Phonological Basis for Resolution*

In the discussion of high vowel loss above (§2.2.8.2), I presented an outline of early Old English foot structure. In addition to its phonological interest and usefulness in determining the early lengths of unstressed vowels, this foot structure provides the basis for metrical resolution, and can also give us a principled explanation of Kaluza's law. The key points from §2.2.8.2 are that Old English formed feet, prosodic units standing between the syllable and the word, and that these feet were optimally bimoraic. Monomoraic syllables are too light, and need to combine with another syllable to create a foot of sufficient weight. Sometimes this creates a perfect bimoraic foot, e.g. [fa.tu], but a root syllable needs to be footed and so initial feet may exceed the normal bimoraic limit, e.g. [cy.ning] (initial feet are licensed to be trimoraic). As has long been recognized, these phonological feet are the basis for metrical resolution: a lift is filled by a single phonological foot.

This connection between phonology and metre has sometimes been doubted. Minkova and Stockwell (1994) argue for a total separation in historically attested English, though few of their arguments ultimately carry much weight. They grant, for example, that a monosyllable like *scip* must count as heavy in verse to fill independent lifts, and they also provide a reasonable analysis showing that the conventional characterization of words like *scip* as 'light-stems' is a morphological classification, not a phonological comment on the weight of the unsuffixed root. Their conclusion from this is nonetheless that '#VC# monosyllables in Old English *verse* provide *no* evidence for the relevance of weight in the prosody of the language' (1994, 41f; their italics). Yet they themselves later acknowledge that stressed feet in Germanic have a requirement to be minimally bimoraic, as observed by Kuryłowicz (1949, 38; 1970, 8f.), a fact they then discount in light of there being 'no metrical or phonological evidence in Old English that monosyllables are light or heavy outside their morphosyntactic properties' (Minkova and Stockwell 1994, 51). This is to ignore the metrical evidence by fiat, and then use

that as the basis for dismissing further evidence. I would instead stress that phonology and metre agree in regarding *scip* as heavy, and that there is no evidence from any quarter to suggest otherwise. Similarly, language and poetry agree that resolved *scipu* is also heavy. All these facts are simply explained by the assumption of a bimoraic foot: [scip], [sci.pu].

Minkova and Stockwell do imply that poetic resolution and phonological foot structure may have some prehistoric association, but they emphasize that by the historical period these were purely conventional morphological or metrical processes with no synchronic relationship. They are correct in noting that in most recorded texts high vowel deletion shows some morphological conditioning (Goering 2016), but it does not follow that the bimoraic foot was abandoned immediately thereafter, nor that these morphological factors were insensitive to phonological weight.

In support of their claim that resolution was a distant phonological process, Minkova and Stockwell (1994, 47) assert that phonological resolution ‘had disappeared before Middle English times’. This does not appear to be true: the Middle English evidence strongly points the other way, suggesting that phonological resolution remained active for many centuries after high vowel loss. As Tolkien (1929) observes, the ‘AB’ dialect shows a distinction in the development of class II weak verbs, with ‘heavy’ stems such as OE *fæstnian* ‘to secure’ simplifying the stem to -i- (as in AB *festnin*), while light stems such as *þolian* ‘to endure, suffer’ merely reduced the final *a* to schwa (<e>), as in *þolien*. This in itself shows continued sensitivity to syllable weight (Keyser and O’Neil 1985, 89-99), with the development of *-ia- conditioned by whether both vowels were unfooted (e.g. [fæst].i.an), or if the former was part of an initial foot (e.g. [þo.li].an). This process also provides direct evidence for phonological resolution, though this has not received much attention in the literature on resolution or foot structure: light disyllables behave like heavy stems; e.g. OE *swutelian* ‘to become clear’ > AB *sutelin*, implying [swu.te].li.an (d’Ardenne 1961, 237; cf. 15, 29). This distinction may reflect a somewhat earlier sound change, but it is maintained extremely carefully in the attested thirteenth-century texts, without the confusions or analogies that would suggest its prosodic basis had been lost long before. This phonological evidence is supported by Yakovlev’s recent argument that resolution is also found in the early Middle English poem *Brut* (2008, 212-21), and perhaps by Fulk’s analysis of resolution in the *Poema Morale*.⁹⁶

96. Minkova (2016) challenges the philological basis of Fulk’s argument, so the status of resolution

2.4.1.2 *Bimoraism and Kaluza's Law*

The evidence of high vowel loss and Kaluza's law point to a further point of congruence between phonology and metre. The patterns of syncope discussed in §2.2.8.2 suggest that the bimoraic condition applies much more strictly in non-initial feet, which lack the trimoraic licence:

(165) DAT.SG *[hēa].fu[.dǣ] > *hēafde*

(166) MASC.NOM.PL *[lȳ].ti[.lǣ] > *lȳtle*

The medial vowels of these words cannot be accommodated within any precisely bimoraic feet, so they are simply left entirely unfooted (and so open to deletion).

There is a clear general affinity between this increased strictness in the bimoraic requirement in the foot structure, and the prohibition against trimoraic sequences after a stressed syllable under Kaluza's law. Taken together, the phonological and metrical evidence support each other, pointing to a general principle that permits trimoraic sequences in some circumstances but insists on precise bimoraism elsewhere. Given this congruity, and the general phonological basis for resolution, it seems safe to assume that Kaluza's law is closely grounded in the linguistic foot structure, perhaps with some specifically metrical elaborations or conditions.

In a number of cases, Kaluza's law can probably be regarded as a direct reflection of foot structure, with no adjustment. The law often affects the second elements of compounds. There is not much direct phonological evidence for how these were footed, but the behaviour of Kaluza's law is in keeping with what we might expect. When resolution occurs, as in [bān][.fa.tu], the two metrical positions correspond precisely to the two feet (the second precisely bimoraic) produced by the foot structure.

A word like *mundbora* is somewhat more complicated, and its scansion as Ssw suggests a phonological foot structure of *[mund][.bo].rā, with the medial vowel footed despite not fitting into a bimoraic grouping. This is apparently the result of interacting preferences. Precise bimoraism is impossible, leaving three options: leaving the syllable unfooted; creating an overlong, trimoraic foot from both the final two syllables; or creating a degenerate, monomoraic foot. The first option is disfavoured because there is a strong preference to foot lexical roots, but as the second element of a compound the root is not prominent enough for the trimoraic licence to apply. Only the last option remains, as a compromise position: forming

in the *Poema Morale* is contested. Yakovlev's claims, however, have so far gone undisputed, and appear to be sound.

a degenerate, light foot. The evidence for the foot structure of compounds like *mundborā* is purely metrical, but it fits neatly into the phonological framework.

A difficult complication concerns the *heretoga* constraint, under which suspension of resolution seems to be disfavoured immediately after a resolved sequence (§2.3.12). This seems to indicate that, for whatever reason, a degenerate, monomoraic foot was allowed only after a monosyllabic foot: *[folc][.to].gā is acceptable, but **heritogā*, however footed, was not. Such words always existed in prose (Terasawa 1992, 37-42; 1994, 60-2),⁹⁷ where they must have had a foot structure of some sort, so their exclusion from verse must have an essentially metrical cause. Terasawa (1994, 62-5) suggests that S^wšw (and S^ws^ww) sequences were ‘not suited’ to certain verse types, but this merely restates the problem. Very speculatively, I might suggest that the quotidian foot structure was *[he.ri][to.gā], with the trimoraic licence extended to both of the adjacent resolved sequences, but that in the more rigid context of poetry strict bimoraism was applied to the second foot, *[he.ri][.to].gā (cf. the suspension of 246-248). Such a mismatch between phonological and metrical expectations might explain why such words were usually simply avoided.

2.4.1.3 *Phonological Final Defooting*

The rules of foot structure just outlined are not quite sufficient to account for Old English prosody, and we need one further phonological principle with significant metrical effects: FINAL DEFOOTING. It seems clear from metrical evidence and from phonological reductions that the final syllables of words like *hēafdum*, *lȳtle*, *ellen*, etc. are fully unstressed. Final feet are phonologically real, and can protect syllables from high vowel deletion, but play no role in stress assignment. This rule has direct metrical consequences. Not only does a word like *ellen* have no secondary stress, final defooting also explains why words like *eorlscipe* are always scanned as Sww. The initial footing would be *[eorl][.sci.pi], with two feet, but the second is defooted by regular rule to *[eorl].sci.pi, metrically Sww.

There are two important exceptions to this defooting principle. Firstly, the second elements of compounds do not seem to have normally been affected, and lexical marking ensures that a word like *[bān][.fa.tu] usually remains dipodal (on metrically conditioned exceptions, see §2.4.3). The second set of exceptions is related to words with an extrametrical final consonant. As we saw in §2.1 (cf.

97. E.g. *sadulbogo* at *ErfGl* 283 (cf. ON *sǫðulbogi*).

ex. 139), words like *riðend* can, at least in *Bēowulf*, behave as Ss, with some degree of stress on the second syllable. This implies that suffixes like *-end* became and remained footed.⁹⁸ We might expect that *-dend*, being trimoraic, would be too heavy to form a non-initial foot, and it seems that the final consonant is counted as extrametrical to allow the creation of a bimoraic foot: *[rɪ][.den]d. This apparently blocked the process of final defooting, either because the foot was no longer technically word-final, or because the phonologically marked feature of extrametricality took precedence over the defooting rule.

2.4.2 THE ENVIRONMENT FOR KALUZA'S LAW

The arguments of the preceding section amount to the claim that the core operation of resolution and suspension (and therefore of Kaluza's law) are simply reflections of phonological foot structure in the metrical system. This certainly seems to hold well enough within single words, including compounds, but where suspension of resolution in one word seems triggered by a preceding word, things are more complicated and probably involve some strictly metrical factors.

A comparison of different verse-types affected by Kaluza's law indicates that the exact placement of word-boundaries (and the accompanying distribution of primary and secondary stresses) is more or less irrelevant to the law:

98. See esp. 1112b, 2256b, 2457b, 3135b. There are a few potential counterexamples, where such endings occur in places that true secondary stresses usually do not: for *-end*, see 1154a and 3099a; for *-ing* see 2443a, 2667a, and 2715b. The first four all occur in the first dip of a D* verse, and the last is found in the second dip of a type B half-line. These metrical positions are suggestive of lack of stress, but there is perhaps room for doubt, especially in the D* verses (in none of these is the second element a poetic compound, which may make the lack of clear parallels with a full secondary stress in the dip less relevant). Note that the suffix *-līc* is notoriously variable (Fulk 1992, 197-201 (§§221-5)), and that the superlative suffix always behaves as light/unstressed/unfooted.

There is little evidence for stress on these elements outside of *Bēowulf*. The only really good evidence for stress on a word-final heavy derivational suffix is *And* 787a, in which *-end* conditions suspension of resolution in a type A2k verse. The same poem also has an unambiguous example of a fully unstressed *-end* (1053b), and three verses that would scan better with the suffix being light (31a, 604a, and 855a). In other poems, such suffixes seem to exclusively occur in environments where a lack of stress is preferred or required (*Genesis A*, for instance, has eleven examples of *-end* suggestive of non-stress: 49b, 1043b, 1294b, 1314b, 1356b, 1864a, 1924b, 2506a, 2578b, 2635a, 2862b). It is worth noting that while *Exodus* has no examples pointing to clear stress on these elements, there is no evidence that they were unstressed either (180b and 328b may be taken as type A*). For a fuller review of the evidence, see Russom (2001, 55ff.).

I assume that, like Kaluza's law and the system of foot structure proposed here, this particular process of consonant extrametricality (and the consequent exemption of these syllables from final defooting) should be associated with a very early stage of Old English. The later language operated with a simpler and more general process of defooting, which led to word-final non-root affixes to be much more regularly treated as unstressed (though the older pattern is occasionally visible in formulas).

- (139) *rīdend swefað*
 'riders sleep' (*Beo* 2457b)
- (169) *lēof landfruma*
 'dear prince of the land' (*Beo* 31a)
- (173) *wyrd oft nereð*
 'fate often spares' (*Beo* 572b)
- (174) *snotor ceorl monig*
 'many a wise man' (*Beo* 908b)

Despite their various arrangements of words and relative stresses, these four half-lines have similar foot structures, which we might notate as $\bar{F}\bar{F}\bar{F}\sigma$, using F to symbolize the foot and σ an unfooted syllable (cf. Yakovlev 2008, 76, n. 49). From a word-based approach, we might expect all word-initial syllables to be exempt from Kaluza's law (with the trimoraic licence applying to any word-initial root), but this is simply not the case: in verse, a foot appears to be treated as non-initial whenever it immediately follows a heavy syllable in the same half-line, regardless of whether they belong to the same word or not.

This suggests that Germanic verses show a degree of prosodic COHERENCE, in the sense of Kuryłowicz (1970, 7): the close association of words within a metrical unit, so that the effects of word boundaries is weakened. In many older Indo-European metres, which were often more purely quantitative, the coherence of a line shows itself in syllabification across word boundaries. This can be illustrated with a line from the *R̥gveda*:⁹⁹

- (258) *īndrasya nú vīrīyāṇi prā vōcam*
 'I will now speak the virile deeds of Indra' (*RV* 1.32.1.1)

In this metre, *triṣṭubh*, lines have eleven syllables, the last four of which form a trochaic cadence: long-short-long-anceps (here marked in bold; Macdonell 1916, 440f.). This requires the sequence *-ṇi prā* to be scanned as long-short, which is accomplished through the syllabification *.ṇip.rā*, across the word boundary (1905, 6). A similar metrical coherence is found in Homer and in skaldic verse (West 1982, 4, 8f.; 1997, 219f.; cf. below §3.2.1, note 17).

Old English poetry shows no signs of such resyllabification, but the treatment of feet may be explained as a comparable form of prosodic coherence, with the half-line being treated as a prosodic domain similar to the word. When two (or

99. Cited from van Nooten and Holland (1994).

more) feet occur in direct sequence, they are treated as if they belonged to the same (compound) word: the first has the licence of word-initial feet to exceed the preference for precise bimoraism, while the rest are strictly governed by Kaluza's law.¹⁰⁰

This explanation implies that Kaluza's law is essentially a phonological phenomenon, dependent on the foot structure of the normal language, but that the phonological conditions are influenced by the metrical factor of prosodic cohesion. If this is correct, then Kaluza's law should, strictly speaking, be given a rather different formulation from the working statement (140) at the end of §2.1. A more precise, if less concise and practically useful, statement of the law would consist of a list of the relevant phonological and metrical processes (cf. Goering 2016, 180, 184):

- (259) a. Feet are formed from left to right across a word, grouping syllables into bimoraic units.
- b. The first syllable must be footed, even if this creates an overheavy foot of more than two moras (this is the trimoraic licence).
- c. Otherwise feet are strictly bimoraic.
- d. Non-initial lexical heads that cannot be accommodated within this process form degenerate, light feet.
- e. If a syllable has not otherwise been footed, a final consonant may optionally count as extrametrical, if necessary to allow the creation of a bimoraic final foot.
- f. Any remaining syllables are left unfooted.
- (260) a. Within a half-line, adjacent prosodic feet are treated as if they belonged to a single word.

The only specifically metrical component to Kaluza's law is (260a); all the other components belong to the normal phonology of early Old English.

100. When feet are not directly adjacent to each other, resolution is not regulated. Bliss (1962, 34f. (§40)) has shown clearly that the final elements of type B verses are not governed by Kaluza's law. A word like *cyning* can be resolved in *Beo* 2356a, *Gēatā cyning* (269 below): the defooted inflectional syllable *-tā* separates [Gēa] and [cy.ning], with the latter resolving into a trimoraic unit. It is unclear to what extent this reflects the natural phonology of compound words with medially unstressed syllables (for which we lack good data either way), or the disruption of metrical cohesion by fully defooted syllables. Compare the observations of Cable (1994, 4-6; 2003, 151-3), who emphasizes that Kaluza's law does not seem to apply at all to syllables immediately following unstressed (i.e. unfooted) material.

The notion that the half-line depends on the phonology of the compound word is not a new one (Smirnitskaya 1994, 118ff.). In his word foot theory, Russom formalizes this similarity using the concept of METRICAL COMPOUNDING, whereby the bonding of word-feet into half-lines is directly based on the linguistic combination of words into compounds (1987, 71ff. 1998a, 65-9; 2002a, 311-4). Half-lines do not, of course, literally behave like compound words in all respects, but the notion that, say, *riðend* and *swefað* in (139) are joined in a compound-like structure helps explain why the second word might behave as if its first foot is not word-initial (Russom 1987, 56, 115).

Metrical compounding may have a usefulness beyond just providing a motivation for the prosodic cohesion of the half-line (which perhaps needs no special explanation). Russom invokes it to account for patterns of alliteration, and it may also help explain the relative frequencies of some verse types (§5.2.2). More immediately, it may prove a useful tool in explaining the verse-final exceptions to Kaluza's law, the subject of the next section.

2.4.3 METRICAL COMPOUNDING AND FINAL DEFOOTING

As we saw above, there is a striking imbalance between different types of violations of Kaluza's law. Positive resolution in Kaluza's law environments is extraordinarily strictly regulated, with only three clear resolved overlong sequences¹⁰¹ in 120 examples. Fulk (2007a, 319) has emphasized the importance of A2a verses with a resolved second position for Kaluza's law, noting that its 'absolute conformity' provides the best evidence for the law's regular operation in *Bēowulf*. This is essentially correct, though its conformity is not quite 'absolute', and the high degree of regularity extends to *all* instances of resolution in Kaluza's law environments, not just type A2a.

In contrast with positive instances of resolution, suspension seems to be only partly governed by the law. Almost 95% of suspended sequences do show the expected heavy endings, but the number of exceptions is high enough to demand an explanation. There are two broad types of explanation, both of which need to be considered. One is the possibility that Kaluza's law was strictly active only at an early stage of the Old English poetic tradition, its (apparent) operation in *Bēowulf* being due only to the effects of tradition, which has allowed a certain number of exceptions to creep in over time (Hutcheson 1995, 91-4). The other is that some

101. *Beo* 330a (181), 1778a (239), and 3149a (240).

metrical environments are more prone to suspension than others.

The possibility that Kaluza's law is a formulaic legacy needs to be considered seriously. Linguistic archaisms are known to have been preserved in various metrical traditions. Within Old English itself, the disyllabic pronunciation of words contracted across a lost **h* and the non-syllabic value of 'parasite' vowels provide ready examples of such preservation, and other poetic traditions show similar features (e.g. laryngeal hiatus in Old Avestan and the Homeric digamma). Such archaisms tend to show particular distributional characteristics, particularly, as Kümmel (2014a, 25) puts it, 'lexical or "phrasal" condition[ing]': the traces of an older linguistic situation survive because particular words or phrases are licensed by tradition to appear in contexts not warranted by their synchronic structure. This tends to lead to a mixture of older and younger forms, as well as mistakes and inauthentic 'archaisms'.

There is little evidence that Kaluza's law is a traditional feature of a comparable sort. Such a formulaic explanation might appear to get some initial support from the fact that certain lexemes recur in the examples of unexpected suspension. For instance, **hliðu* 'slopes' is found twice clearly violating the law, once in an ambiguous context, and never in a position where it is clearly resolved:

- (261) under fenhleoðu
 'under fen-slopes' (*Beo* 820b)
- (197) stēap stānhliðo
 'steep stone-cliffs' (*Beo* 1409a)
- (262) warigeað wulfhleoþu
 'they inhabit wolf-slopes' (*Beo* 1358a)

Patterns such as this are perhaps suggestive, but the number of examples involved are, in all cases, very few. Furthermore, it is easy to find examples of elements, and even entire compounds that show variable behaviour, sometimes adhering to the law and other times violating it: *bencþelu*, *ecghete*, *frēawine*, *goldsele*, *holtwudu*, and *wīnsele* all occur both resolved and unresolved in cases with short endings. Twelve of the 18 type C verses ending in compounds that violate Kaluza's law have final elements that elsewhere conform. The hypothesis that suspendability is a matter of lexical associations in the poetic tradition fails more often than it succeeds.¹⁰²

102. A recent variant of the preservation-through-tradition hypothesis is the proposal of Weiskott (2012) that words' behaviour with respect to Kaluza's law has a mixed semantic and phonological basis. As stated this proposal seems relatively unlikely, since there is no evident reason why words for 'objects or abstractions' should be more prone to resolution than terms for 'humans or

It is also significant that this regularity of resolution extends even to the avoidance of particular case forms. As discussed above (§2.2.5), the DAT.SG and NOM.-ACC.PL of *i*-stems are almost never resolved, with at best one example in each case.¹⁰³ The primary conditioning is neither lexical nor phrasal, but suffixal. This would be a truly remarkable feat of traditional memory, if the poet were really wholly unaware of the law as a phonological process, particularly since preserving such distinctions would be a significant burden, not an aid, to the poet.

The idea of Kaluza's law as a relic of tradition also looks more plausible if one focuses primarily on cases of *suspension* of resolution, as Hutcheson (1995, 78-94; 2004) does in his discussions. The 5% (or so) failure rate might seem about right for an early or particularly traditional poem, with a conservative poetic system managing to preserve the law as a tendency while also showing a degree of attrition. However, this ignores the remarkable adherence to the law in positive instances of resolution, where the three non-conforming verses give little justification for seeing any sort of comparable attrition of tradition.

This imbalance between types of violations suggests a synchronic metrical explanation. This impression is further supported by the fact that unexpected suspension of resolution is confined, without exception, to the verse-final position. Verse-internal suspension occurs (see §§2.3.2, 2.3.4), but only in accordance with the law, and there are no hypothetical verses like:

(263) *feorh hǣleðes

‘the life of the hero’ (cf. *Beo* 1210b)

monsters’. The semantic trends Weiskott picks up on are not wholly illusory, but are nonetheless probably secondary, reflecting tendencies in Germanic word-formation. It is not uncommon to find *n*-stem agent nouns in Germanic, with *-a* < **-ō* in the NOM.SG, resulting in a fairly large number of animate nouns with long endings throughout the paradigm (Krahe and Meid 1967, 91ff. (§91, 91.3)). Similarly, *i*-stems are often verbal abstracts and would have more case forms available for resolution in a Kaluza's law context, though (historical) agent nouns like *wine* are also found in this class (1967, 65f. (§70.1)). Whether stated in semantic or morphological terms, this account involves a large number of exceptions (especially if we take into account the full range of Kaluza's law verses covered above; Weiskott, like many others, limits his survey to the very narrow context of A2a and D verses), some of which Weiskott explains by an appeal to syllable weight in consonant-final endings. Since a phonological dimension is necessary, and since explaining the vocalic endings on semantic or morphological dimension basis explains the data less well than a straightforward phonological approach, this theory is strictly less useful. Some of the general objections to any lexically based model also apply, such as its inability to explain varying behaviour of different *i*-stem endings. For a fuller, though polemical, critique of this and similar approaches, see Neidorf and Pascual (2014, 660-5, 670f.).

103. Fulk both ignores the rarity of both these case-forms among our resolved examples and greatly weakens his arguments for the sensitivity of Kaluza's law to inflections by arguing (on purely metrical grounds) that both these endings should be etymologically short.

- (264) *sibbæðeling
'kin-noble' (cf. *Beo* 2708a)
- (265) *frēawine wæs
'was a prince' (cf. *Beo* 2779b)

Similarly, the rarity of the 'A2b' verses with a resolved final element (§2.3.8) also suggests that there is something special about resolution in verse-final position.

These facts can be used to motivate a metrical licence whereby some verse-final syllables may correspond to metrical positions on a one-for-one basis, even in violation of Kaluza's law. Although this is somewhat reminiscent of the rule of the coda, and more generally of the (quasi-)universal principle of closure, these are probably not sufficient to account for any non-application of Kaluza's law verse-finally on their own. If anything, the principle of closure ought to encourage a word like **goldseli* to be rendered more strictly as Ss, if its phonological structure is *[gold][.se.li]: matching rules should be tighter, not looser, at the close of a verse. It is also notable that Kaluza's law does generally apply as a strong tendency verse-finally, and that type A2k conforms to the law exceptionally well, despite showing verse-final suspension. A general appeal to the principle of closure can explain none of these things.

It seems that we need a different, or additional, principle to explain verse-final exceptions to the law. I suggest that metrical compounding, introduced in the previous section as a potential means of explaining the operation of Kaluza's law across word-boundaries, can fully explain this pattern of exceptions. In all the contexts with a notably high rate of non-conformity (more than 5%), namely at the end of compound C and D verses, the syllables in question are, under the word-foot theory, doubly subordinated in compound-like structures. They are the second elements of actual compound words of the shape Ssw, which are themselves the second elements within the compound-like structure of the half-line. Normally lexical heads are protected from final defooting (§2.4.1), but this consideration may be overridden in these doubly-compounded, and so doubly-subordinated, contexts. If the second element of a word like *stānhliðo* lost its exemption from final defooting, it should behave identically to a word like *eorlscipe*:

- (266) stēap stānhliðo
*[stēap] [stān][.hli.ðu] → *[stēap] [stān].hli.ðu
S/Sww
'steep stone-cliffs' (*Beo* 1409a)

Being unfooted, each of the final syllables corresponds to a distinct metrical position in a Sww sequence (§2.1.1).

This view of the exceptions to Kaluza's law has several advantages. Most obviously, it explains the rather specific patterning of violations: the fact that unexpected suspension occurs so much more readily than unexpected resolution; that such suspension is limited to verse-final position; and, perhaps most significantly, that type A2k verses seem to strictly adhere to the law. A2k is the only verse type in which potentially suspendable sequences are verse-final but not doubly subordinated.¹⁰⁴ Type C verses with an independent final word also adhere to the law quite well, presumably because their final element has not undergone the same double compounding. Their final words are subordinated as the second elements of second word-feet, but they remain linguistically uncompounded, which seems to have made final defooting much less optimal. It should be said that the number of historically ambiguous endings in this type means that there is some uncertainty about whether they pattern more closely with A2k or compounded type C (§2.3.6).

Invoking the process of final defooting as a metrical extension of a linguistic process also accounts for why apparent violations of Kaluza's law are at once acceptable in certain contexts, yet still rather rare even when licit. Compare the phonological and metrical structures of verse with and without a final long vowel:

(266) stēap stānhliðo

*[stēap] [stān][.hli.ðu] → *[stēap] [stān].hli.ðu

S/Sww

'steep stone-cliffs' (*Beo* 1409a)

(267) lēof landfruma

*[lēof.] [land][.fru].mā > *[lēof.] [land][.fru].mā

S/Ssw

'dear prince of the land' (*Beo* 31a)

The process of metrical final defooting naturally does not affect *fru-* in (267), since the foot is not final. Only the final syllable *-mā* is defooted, leaving *fru-* to stand as a secondary stress. This is optimal, with final defooting occurring as it should by the normal phonological rules, while leaving a degree of stress on the lexical head *fru-*. By contrast, in (266), the entire bimoraic element *hliðo* stands as a doubly subordinated final foot, subject to metrical defooting and subsequent treatment as

104. This theoretical consideration would take away any possible justification for privileging A2a verses with regards to the metrical evidence for the length of the Old English reflex of **-ō*" (see §§2.2.8, 2.3.1, 2.3.7).

two unstressed syllables. This defooting comes at the cost of destressing the lexical head *hli-*. It is not surprising that verses like this were generally avoided, and words like *landfruma* – where final defooting of subordinated elements did not interfere with the stressing of any lexical roots – were strongly favoured in types C and D.

Aside from describing a range of metrical facts, this explanation also has theoretical advantages. It roots the ‘exceptions’ to the law in the same phonological process – foot structure – that underlies resolution and Kaluza’s law in general. The only special process that we need to invoke is metrical compounding, or a similar type of subordination of verse-final compounds. Metrical compounding as such is of course part of the word-foot theory (where it is an essential component), but theorists like Suzuki (1996b, 14ff.) have found a general decrease in prominence across the half-line even within the four-position framework, and the metrical principles used here are sufficiently general as to probably work under most Sieversian approaches.

If an explanation along these lines is accepted – and I would emphasize that the pattern of exceptions to Kaluza’s law in verse-final second elements of compounds is a significant empirical fact, whether or not one accepts all the details of my theoretical explanation – then there are very few true exceptions to Kaluza’s law. Most of the apparent exceptions in types C and D do not, strictly speaking, actually violate the law: they simply fall outside its scope. Or more accurately, the same foot structure rules that produce the law in the first place result, when interacting with subordination through metrical compounding, in these sequences being defooted rather than resolved. The only true violations would be the three or so examples of unexpected resolution, the single suspended short sequence in type A2k, and probably the six exceptions in type C ending in two-word phrases (though these last may fall under the scope of final defooting). Some 653 verses would then clearly fall under the scope of the law, having syllables in a Kaluza’s law environment that remain footed; with perhaps four to ten exceptions, the rate of adherence is 98-9% across *Bēowulf* as a whole.

2.4.4 FINAL DEFOOTING AND TERASAWA’S LAW

Metrical extension of final defooting may also account for the metrical phenomenon of Terasawa’s law, discussed in §1.2.2 (Terasawa 1994, 8-15). This constraint holds that compounds of the shape *Sws^w*, such as **hilde-fruma* or **hilde-sele* are prohibited in Old English verse. This restriction is very interesting, and has proven useful to

editors, but so far lacks a compelling motivation. Similar patterns may occur in phrases:

- (268) wē þurh holdne **hige**
 'we, with firm intent' (*Beo* 267a)
- (269) syððan Gēata **cyning**
 'after the king of the Geats' (*Beo* 2356a)

But the same rhythms are prohibited within compounds:

- (270) *siþðan hilde-**sele**
 'afterwards the battle-hall' (cf. *Beo* 1253a)

In explaining this pattern, the first thing to note is that Sws words could only occur verse-finally. There are no type E verses with the pattern Sws/S, so the only types that can hold a Sws sequence are B and Db, where it occurs as a verse-final word-foot (Terasawa 1994, 62ff. (§4.4)). If either of these verse types were to end with a compound like **hilde-sele*, -*sele* would be both linguistically and metrically subordinated, the second element of a compound serving as the second word-foot of a half-line.

This is the same context in which metrical final defooting occurs, and we would expect that rule to also apply to such compounds. Thus *[se.li] (s^w) would be defooted to *se.li (ww), giving the whole compound the metrically unusable sequence Sw-ww. Since there is no other metrical context in which Sws^w compounds could be employed, Old English poets simply avoided them altogether. As with type C verses, this extended application of defooting to a lexical element seems to rely on it being both linguistically and metrically compounded; there is no problem when type B verses end with independent words, like (268) and (269).

2.4.5 DATING

Since Kaluza's law has attracted interest as a potential means of further narrowing the date when *Bēowulf* was composed – a question which has further been, often inappropriately, used as a stand-in for contentious issues of literary interpretation – this wider issue is worth briefly addressing.¹⁰⁵ The arguments of this chapter appear to generally reinforce the well-known conclusions of Fulk (1992, 390) that

105. The literature on placing *Bēowulf* chronologically is vast. Important overviews, from various perspectives, include Chase (1981), Bjork and Obermeier (1997), Fulk, Bjork, and Niles (2009, clxiii-clxxx), and Neidorf (2014).

Bēowulf existed in more or less the shape we know it at a relatively early date in the Anglo-Saxon period. In particular, the view that the poem was largely composed by someone who still retained the distinction between long and short unstressed vowels is supported by the near-absence of true exceptions to the law, of the sort we would expect a later poet feigning archaism to produce, and the explanation of Kaluza's law as a fully synchronic process not limited by metrical type (§2.4.3).

In terms of absolute chronology, as discussed in §2.2, unstressed vowel length could plausibly have survived as late as the ninth century in certain dialects. On cultural grounds, the poem could be placed any time after perhaps 650 (depending on the region), with the production of the manuscript shortly after 1000 providing a sharp later boundary. The evidence discussed here suggests that most of the material of *Bēowulf* was composed during the overlap of these ranges: generously, c. 650-850.¹⁰⁶

Any discussion of the 'date' should be qualified by a discussion of what exactly it is that is being dated. The single early eleventh-century manuscript of *Bēowulf* can hardly be a perfect reflection of the poem as it existed in any earlier period. Aside from the superficial application of West Saxon forms and the intrusion of mechanical copying errors, there are various points where some alteration of the content over the course of the poem's history seems likely enough: the addition of *þāra* in line 9b is a probable example detectable largely through its metrical effects (Pascual 2015 discusses further examples where the scribes may have consciously tampered with their text for metrical reasons). Liuzza (2000, 290-5) has emphasized the problematic nature of reworkings of this sort for recovering earlier forms of the poem, while Fulk (2003, 17-25) downplays their significance.¹⁰⁷ The arguments of this chapter have a bearing on this debate insofar as they suggest that whatever larger adjustments, reworkings, or recombinations (of word order, vocabulary, grammar, etc.) took place in the history of *Bēowulf*, they were restrained enough not to cause any significant disturbance of Kaluza's law.

106. Fulk (1982) offers a wider range of cultural and linguistic arguments in support of a 'pre-Viking' *Bēowulf*. Any further narrowing of the date range involves a consideration of the poem's place of origin, which the metrical and phonological arguments in this have no direct bearing on.

107. A helpful example is given by Mitchell and Robinson (2006, 12, n. 10), who suggest that an earlier form of *Bēowulf* may have borne a relationship to the extant manuscript similar to that of the early ninth-century Northumbrian *Leiden Riddle* to its close analogue *Riddle* 35 of the Exeter Book (in late tenth-century West Saxon). The two texts have a large number of superficial dialectal and orthographic differences, but only in a few instances are there more substantive divergences of vocabulary (as in *LRid scelfath* 'shake' against *Rid* 35 *scriþeð* 'moves' at 7b) or word order (such as the inversion of *aam sceal* to *sceal ām* in 8b).

2.5 CONCLUSIONS

In the first sections of this chapter, I proposed some empirical reassessments of Kaluza's law. Building on the insightful and foundational work of Bliss, Fulk, Suzuki, Hutcheson, and others, I have analysed the data in light of a slight reformulation of the context for the law (to remove any lingering focus on 'secondary stress' as a relevant factor), and a thorough etymological review of the reconstructed lengths of various vocalic endings. The results of all this, summarized in table 2.1, confirm that Kaluza's law is very regular, and suggest more clearly that apparent exceptions are of a systematic and patterned sort: nearly entirely confined to the second elements of verse-final compounds.

In the later sections, I offered a theoretical explanation for this pattern, arguing that Kaluza's law is the interaction of phonological and metrical factors. The basic operation of resolution is found in the phonological foot structure of early Old English: two light syllables always resolve to form a precisely bimoraic foot, regardless of context. A light syllable can only resolve with a following heavy syllable, to form an overheavy foot, by the trimoraic licence granted to initial syllables. Within the tightly cohesive context of the metrical half-line, the trimoraic licence is more limited, and it does not apply immediately after a heavy syllable (such sequences are treated as if they were word-internal, inside a compound). Where the trimoraic licence applies, resolution is automatic, regardless of the weight of the second potentially resolved syllable; where it does not apply, resolution applies only if the second syllable is also light so that the total sequence would be precisely bimoraic, and otherwise suspension occurs.

The larger number of exceptions to Kaluza's law in the second constituents of verse-final compounds is also due to the metrical elaboration of a phonological pattern, in this case the process of final defooting. This is an important part of early Old English phonology, keeping word-final bimoraic feet from bearing stress. Such defooting would normally not apply to the second elements of compounds, since lexical heads usually ought to be footed and at least partly stressed. However, in the doubly subordinated metrical context of a verse-final compound even lexical heads are defooted. This leads to apparent exceptions to Kaluza's law, since a doubly-subordinated bimoraic sequence, like *-hliðo* in (266), is treated as a set of two unstressed syllables rather than a resolved foot. All of these factors may be summarized by a restatement and expansion of the phonological rules of (259) and their metrical extension under (260):

- (271)
- a. Feet are formed from left to right across a word, grouping syllables into bimoraic units.
 - b. The first syllable must be footed, even if this creates an overheavy foot of more than two moras (this is the trimoraic licence).
 - c. Otherwise feet are strictly bimoraic.
 - d. Non-initial lexical heads that cannot be accommodated within this process form degenerate, light feet.
 - e. If a syllable has not otherwise been footed, a final consonant may optionally count as extrametrical, if necessary to allow the creation of a bimoraic final foot.
 - f. Any remaining syllables are left unfooted.
 - g. Unless followed by an extrametrical consonant, final feet are destressed (unless the foot contains a lexical head).
- (272)
- a. Within a half-line, adjacent prosodic feet are treated as if they belonged to a single word.
 - b. The second element of a verse-final compound is strongly subordinated, and comes under the scope of the defooting rule (271g), even if it contains a lexical head.

If these arguments are accepted, then Kaluza's law emerges as a very regular and linguistically coherent set of processes. It is deeply rooted in the phonology of early Old English, both in the system of unstressed long and short vowels, and in the prosodic foot structure (independently discernible through the workings of high vowel loss). Its metrical regularity is very great, and the apparent exceptions are primarily of a systematic sort, explainable through the influence of further metrical-phonological factors.

The process may be described under either the word-foot or positional theories of alliterative verse, because it is not purely metrical: it is a linguistic process which interacts with metrical principles to produce the patterns and distributions we find in *Bēowulf*. The law is an excellent example of how important aspects of poetic language can be regulated by phonological factors which are only limitedly part of 'the metre'.

Chapter 3

Syllables and Resolution in Fornyrðislag

3.1 INTRODUCTION

Sievers' system of four-syllable verses arranged in five types was not originally designed to account for the body of Old English poetry discussed in the previous chapters, but rather was developed with reference to related Norse metres. His first formulation of Eddic metre (1879, 297ff.) grew out of an extended investigation of skaldic verse (Sievers 1878, 1879; though the five-types terminology only emerges in Sievers 1885a). It is interesting to note that, although a fundamentally syllabic interpretation of Old English metre goes back only to Cable (1991), Sievers described Norse metre as a 'viersilbler' right from the start. Indeed, he begins his discussion of Eddic verse with the statement, printed in emphatic Sperrsatz: 'Auch die sogenannte volkstümliche dichtung der Eddalieder beruht zum grössten teile auf dem princip der silbenzählung' (1879, 298). When he later extends his theory of scansion to Old English, he immediately begins to refer to a 'gliedrig' system (1885b, 211-218, 220; 1885a, 4f.); this difference in perspective seems to have persisted in the respective research traditions (cf. also Heusler 1925, 125f. (§166-7)).

Despite framing his system slightly differently for English and for Norse, Sievers was committed to a comparative perspective of Germanic, both metrically and linguistically, considering nearly the full range of old Germanic alliterative verse from a unified theoretical perspective in his magnum opus, *Altgermanische Metrik*

(1893, 2).¹ Theoretical work in the second half of the twentieth century has generally been much narrower in focus: discussions have often been limited not merely to Old English, but solely to *Bēowulf* (see chapter 1). Norse metrics have not been neglected either, but the skaldic metres, and above all dróttkvætt, have received the lion's share of attention (Kuhn 1983; Kristján Árnason 1991; Gade 1995). In recent years there has been something of a renewal of interest in the comparative study of Eddic verse, which promises to sharpen our understanding both of Germanic metrical systems proper and of the impact of prosodic differences on the organization of language in verse (Russom 1998a, 2009b; Simms 2003; Hartman 2011; Suzuki 2014). This chapter continues this comparative project by focusing on the linguistic constituents of fornyrðislag: the syllable, highlighted so prominently by Sievers, and the possible implications of resolution for our understanding of Norse foot structure.

As I have just implied, Norse poetry is far less metrically homogeneous than Old English. Norse verse is usually roughly divided into two broad categories: skaldic (largely occasional and encomiastic poetry, often by named composers), and Eddic (also spelled Eddaic; anonymous traditional poetry on mostly legendary and mythological themes). The former category encompasses poems in a wide range of metres, the most famous of which is the intricate DRÓTTKVÆTT. To maintain a reasonable focus of inquiry in this thesis, I limit myself to the other main category, Eddic verse, which is composed predominately using two metrical forms, FORNYRÐISLAG, 'old story metre', and LIÓÐAHÁTTR 'song-style'. A third metre, MÁLAHÁTTR, 'speech-style', is also employed for the single poem *Atlamál*, and several further poems (most obviously *Atlakviða* and most of *Hamðismál* and *Hárbarzlióð*, along with *The Battle of the Goths and the Huns* and shorter passages within other poems) resist easy metrical categorization (cf. §5.1.4). Of these, fornyrðislag is the most similar to Old English metre, to the point that a very large number of lines would fit equally well in either body of verse. It is even possible to find virtually identical lines in the two:

- (273) a. mækis² eggium
 'with sword's edges' (Sg 47.8)
 b. mēces ecgum
 'with sword's edges' (*Beo* 2614a, 2939b; cf. 1812a)

This metrical form has, unsurprisingly, stood front-and-centre in comparative Ger-

1. Building on Sievers (1885b, 1885c, 1887).

2. In literary Norse, <æ> always stands for a long vowel, /æ:/.

manic metrics (Sievers 1893, §40; Russom 1998a, 8; 2009b, 69; Suzuki 2014, 797). The close metrical similarity is particularly useful in highlighting points of difference, including important features of the phonology.

3.1.1 METRICAL THEORIES AND OLD NORSE

The theoretical background for fornyrðislag is essentially the same as for Old English: both a syllabic version of the four-position theory and Russom's word-foot theory stand as competing frameworks for understanding Germanic metrical forms. The important recent revisions to the Sieversian model by Cable and Yakovlev have not been systematically applied to any Old Norse metre; indeed, though a number of older works remain useful,³ the only substantial recent discussions of Norse from a positional perspective are by Suzuki (2008, 2009, 2010a, 2010b, 2011, 2014). Suzuki's approach, which is presented in its fullest form in his sizeable 2014 book *The Meters of Old Norse Eddic Poetry*, is useful for noting a number of features relevant to assessing the role of avoiding stress-clash and accounting for five-position verses in general, and is, despite requiring some caution,⁴ my first point of reference for the Sieversian approach in Norse.

For the word-foot theory, Russom himself has analysed a good deal of the Norse corpus according to his framework (Russom 1998a for a portion of the fornyrðislag corpus; Russom 2009b for preliminary investigations of lióðahátt and málahátt). However, a number of important old poems remain unexamined from a word-foot

3. Especially Sievers (1885a, 1893), Gering (1902, 1924, 1926), and Pipping (1903, 1933, 1937).

4. Suzuki's work is often engaging, but his textual basis is problematic. He relies very heavily on the text as edited by Hans Kuhn, and takes no account of issues such as contraction which are not noted in this edition. This leads him, for instance, to identify a type 'C-', with the pattern w(w...)Ss, e.g. *ok um sáz* 'and looked around' (*Vkv* 4.6), with alliterating *um* as the first lift. In arguing that this is not simply a variant of type A3, Suzuki notes that this C- type occurs much more frequently in the off-verse than A3 normally does: 23 of 77 'C-' verses are off (29.9%), against 37 of 592 (6.3%) of those verses he identifies as A3 (Suzuki 2014, 105f.). However, an examination of these 23 off-verse examples shows that 18 end with forms that were historically disyllabic, and are under strong suspicion of having been at least metrically disyllabic in the verses in question, if not actually normally so in the language of the poets who composed these verses. Suzuki's example verse, for instance, is printed in Neckel's unrevised edition as 'ok um sáz', a standard, non-catalectic type C verse. Of the five verses without contraction, two are metrically uncertain in other ways: *Ghv* 17.2 assumes resolution of the name *Sigurðr* (see §3.3.1.3), and *Grp* 39.8 shows abnormal alliteration. Only *Vkv* 17.2, *Sg* 28.2, and *Rþ* 28.2 are unproblematic off-verse 'C-'. This leaves us with three (at best five) w(w...)Ss half-lines in the off-verse against 54 in the on-verse (5.2-8.5% off), almost the same as the 6.3% of A3 verses in Suzuki's tabulation (2014, 59). This body of evidence cannot support a distinct 'C-' type: most are simply normal type C, and the remainder are effectively a variant of type A3. The more general point is that Suzuki's editorial basis is not always secure, and this has ramifications for his arguments.

perspective, and in these cases I have had to extrapolate from the principles of the theory. Furthermore, for some poems – especially for *lióðaháttir*, which will be explored in the next chapter – I argue that there are very different and better ways to analyse the corpus from a word-foot perspective than those suggested by Russom in his preliminary investigations. For *fornyrðislag*, however, Russom’s arguments generally extend unproblematically to the remainder of the corpus.

Other reconsiderations of the theoretical bases of Eddic poetry are relatively few, but hardly non-existent. However, none offers a sufficient means of accounting for the rhythmic details of Norse poetry. Kristján Árnason (2006, 158-60), for instance, has presented a relatively brief proposal emphasizing the importance of a long line of *fornyrðislag* as having four word-stresses, with the weak metrical positions being relatively unimportant: ‘there is indeed no need to indicate the weak positions in the scansion’ (2006, 159f.). While the attention to the role of words in the metre is laudable, this analysis falls short for the same reason similar proposals for Old English do: for lacking any means of explaining the constraints on unstressed syllables, which are clearly strictly regulated by the metre (as opposed to the language). The most obvious excluded rhythm is **wSwSw*. In fact, one can say of *fornyrðislag* even more easily than of *Bēowulf* that ‘the avoidance of that pattern is a basic part of the poet’s craft’ (Cable 1974, 32). Such patterns occur easily and freely in prose, as can be shown with examples from the prefaces and interludes that intersperse the poems of the Edda:

- (274) a. *er hann vissi vænsta* (w.w.Sw.Sw)
 ‘Whom he knew [to be] most beautiful’ (Prose to *HHv*)
 b. *með sverði til hiarta* (w.Sw.w.Sw)
 ‘With sword to the heart’ (Prose to *Fm*)
 c. *hét annarr Agnarr* (w.Sw.Sw)
 ‘the one was called Agnarr’ (Prose to *Grm*)

They are also found in certain metrically variant poems, such as *Atlakviða*, but are extremely rare in the *fornyrðislag* corpus (Haukur Þorgeirsson 2012). There must be a metrical principle at work to account for this constraint (and its relaxation in some poems), which Kristján’s framework does not readily allow us to account for (indeed, his method of scansion does not even let us notate the difference between a verse with and without anacrusis). Much of Kristján’s metrical work remains invaluable and deeply insightful (on syntax and on stanzaic structure, for instance), but his specific model of scanning half-lines will not be a major focus in the fol-

lowing discussion.

3.1.2 A SKETCH OF FORNYRÐISLAG

Sievers identified 21 poems composed either entirely or in significant portion in fornyrðislag, along with a small amount in two further poems. Along with the fornyrðislag poems of the *Codex Regius* (R), this count includes four poems attested only in other manuscripts (Sievers 1893, §41, cf. the discussion in Suzuki 2014, 1-8). More poems could potentially be added to this list, the most obvious of which is the *Hervǫrlied/The Waking of Angantýr*.⁵

It is not necessarily clear that we should take all of these poems as a single corpus. The concern that the poems of ‘south Germanic content’ represent a different metrical tradition, raised by Kuhn (1939), was pressing enough to lead Russom (1998a, 8) to only consider ‘native’ poetry in his sample of Old Norse verse, and various other, perhaps more important, differences may divide the corpus along less obviously thematic lines. But the poems as a whole clearly operate using generally similar metrical principles, and the individual poems are generally too short to establish any really secure internal variations. I approach them as a group, but

5. From R: *Vǫluspá* (Vsp), *Hymiskviða* (Hym), *Þrymskviða* (Þrk), *Vǫlundarkviða* (Vkv), *Helgakviða Hundingsbana I* (HH), *Helgakviða Hiǫrvarzsonar* (HHv), *Helgakviða Hundingsbana II* (HH II), *Grípisspá* (Grp), *Brot af Sigurðarkviðu* (Br), *Guðrúnarkviður I-III* (Gðr I-III), *Sigurðarkviða in skamma* (Sg), *Helreið Brynhildar* (Hlr), *Oddrúnargrátr* (Od), and *Guðrúnarhvot* (Ghv), and small portions of *Fáfnismál* (Fm) and *Reginismál* (Rm). Some of these poems are also found in other manuscripts, the most important variants being the *Hauksbók* text of *Vǫluspá* (Vsp H) and the verses of the same poem quoted by Snorri (Vsp SNE). Both contain some unique content, which I include in my overall corpus. Poems attested only in other MSS: *Baldrs draumar* (or *Vegtamskviða*) (Bdr), *Rígsþula* (Rp), *Hyndlolióð* (Hdl), *Grottasǫngr* (Grt), *Hervǫrlied* (Her), and the Sigurðr verses from the *Vǫlsungasaga* (Vol).

I mostly follow the stanza and line numbering established by Bugge (1867) for the *Codex Regius* proper, and that of Jónas Kristjánsson and Vésteinn Ólason (2014a, 2014b) for materials from other Eddic manuscripts. For the *Vǫlsungasaga* I use the verse numbers in the standard editions of Ranisch (1908) and Finch (1965). For *Her*, I give the stanza and line numbers after Heusler and Ranisch ([1903] 1974) where possible. I also include the five stanzas of Hervǫr’s conversation with Iarl Biartmarr as a prelude, and cite these under the label (HerPr), with the line and stanza numbering of selection XVII in Heusler and Ranisch ([1903] 1974, 88f.). For those lines which Heusler and Ranisch relegate to footnotes (chiefly because they report action rather than speech), I cite the stanza as the number where the note is given followed by *n*. So the line *hitt hefir mæz ung* is cited as *Her* 1n.1 (cf. 13).

I have avoided taking Neckel and Kuhn (1983) as a standard text, instead preferring the more editorially informative Neckel (1936); cf. note 4 above. I have also made regular reference to Dronke (1969, 1997, 2011), Jónas Kristjánsson and Vésteinn Ólason (2014a, 2014b), and Wimmer and Jónsson (1891). For *Vol*, I have relied on Ranisch (1908) and Finch (1965); for *Her* Heusler and Ranisch ([1903] 1974), Tolkien ([1960] 2010), and Jón Helgason (1924).

As a minor note, I print <ø> instead of <œ>, since the latter is too similar to <æ>, especially in italics (œ, æ).

this heterogeneity will prove important to bear in mind.

The familiar patterns identified by Sievers, arranged into on- and off-verses connected by the familiar patterns of alliteration, are very common in fornyrðislag:

- (275) A. grǫfnum geiri
 ‘with engraved spear’ (*Her* 19.5)
- B. þótt óskabyrr
 ‘though wished-for wind’ (*HH II* 32.3)
- C. en eitrdropom
 ‘and with drops of venom’ (*Br* 19.7)
- D. fugl fróðhugaðr
 ‘wise-minded bird’ (*HHv* 2.3)
- E. ginnheilög goð
 ‘most-holy gods’ (*Vsp* 6.3, 9.3, 23.3, 25.3)

As in Old English, at least some lifts may be realized not by a single heavy syllable, but by a resolved disyllabic sequence starting with a light syllable:

- (276) **konungr** inn húnski
 ‘the Hunnish king’ (*Sg* 8.9)
- (277) né **svalar** unnir
 ‘nor cold waves’ (*Vsp* 3.4)
- (278) **syni** Sigmundar
 ‘son of Sigmundr’ (*HH II* 15.3)

All of these example verses appear equally amenable to analysis as being composed under a compositional principle of four syllable-equivalents or of two word-feet. Perhaps the greater brevity of verses lends some support to a syllabic-positional view, but there are also some initial considerations that might favour the word-foot theory. For instance, the basic type A pattern – the most frequent in this metre as in *Bēowulf*, constituting around 35% of the fornyrðislag corpus – strongly favours the two word pattern Sw.Sw (Suzuki 2014, 26f., 206; Russom 1987, 29; 1998a, 38). Suzuki (2014, 28) has recently observed that when there is a bracketing mismatch, with the initial Sw contour filled by two distinct words (cf. Russom 1987, 15-19; 1998a, 21-23), double alliteration is much more common:

- (279) ár var alda (S.w/Sw)
 ‘it was ancient in time’ (*Vsp* 3.1, *HH* 1.1)

In the paradigmatic Sw.Sw type, Suzuki finds double alliteration in only around 26.7% of on-verses, compared to around 62.7% of mismatched verses (leaving aside verses with expanded dips). This difference seems to be in keeping with Russom's proposal that mismatched verses are considerably more likely have double alliteration because of the increased complexity of realizing a single foot as a phrase (Russom 1987, 83f.).

Verses with 'expanded dips' also have a relatively high rate of double alliteration in the on-verse, around 53%. Most, though not all, of these verses include either a bracketing mismatch, an extrametrical syllable, or both,⁶ which would explain, at least under the word-foot theory, why they have double alliteration twice as often as plain Sw.Sw verses:

(280) ísa ok iðkla (Sw/(w)Sw)
 'ice floes and glaciers' (Sg 8.3)

(281) fiqlð veit hon fróða (S.w/(w)Sw)
 'much she knew of lore' (Vsp 49.5)

These rates of double alliteration are, across the board, still considerably lower than in Old English. 93% of type A on-verses in *Bēowulf* have double alliteration if they feature either an extra-metrical syllable or a bracketing mismatch (Bliss 1962, 37; Russom 1987, 83f.). Double alliteration is generally less common in Norse in any context. Russom (1998a, 69-72) suggests this is due to a stronger subordination of the second foot: since alliteration marks out prominences in the line, such subordination makes second feet less preferred alliterators overall. If we accept this explanation, then the use of double alliteration to mark out complex verse types would be fighting against this general dispreference for alliteration on the second foot. The relative rates between variants, and the dramatic increase in the rate of double alliteration in more complex verses, would be more relevant than the absolute percentages of doubly alliterating verses.

These distributions are interesting, and strongly suggest that, whatever the underlying metrical principles may be, verses like the following fill out a half-line more naturally than (279), (280), or (281), and that deviations from this are marked (and so are more prone to double alliteration):

(282) grónom lauki
 'with green leek' (Vsp 4.8)

6. Verses like *hnipnaði Gunnarr* (*Gðr II* 7.1) have an 'expanded drop' from a syllabic perspective, but would be scanned with two simple word-feet: Sww/Sw. Such verses are not very numerous.

Aside from the rates of double alliteration, it is also noteworthy that bracketing mismatches strongly favour the first foot in a verse. Out of the some 2266 verses with variations on the SwSw rhythm scanned by Suzuki (2014, 31f. and n. 9),⁷ approximately 739 (32.6%) have a bracketing mismatch in the first foot, while only 37 (1.6%) have the second foot filled by two words:

(283) bindo vér **Þór þá**

‘let us wrap Thor’ (*Þrk* 15.5, cf. 19.1)

(284) greyr nú **Garmr miðk**

‘now Garm howls greatly’ (*Vsp* 49.1, 58.1)⁸

(285) varðar, at **viti svá**

‘it is important that one should know this’ (*Hdl* 17.7, 18.9)

And of these mismatched final trochees, 20 (many repetitions or variations of each other) are found in a single poem, *Hyndlolióð*, occurring in about 11.8% of its type A verses (Suzuki 2014, 32),⁹ which leaves just 17 examples in the rest of the corpus (a rate of 0.7%).¹⁰ *Hyndlolióð* has a number of further metrical peculiarities, and we will return to it below when discussing resolution. Its distinctiveness highlights just how restricted second-foot mismatching is in fornyrðislag generally, suggesting that there is some metrical constraint present, which is tighter in most poems and looser in this one. Such a parameter is straightforwardly describable under the word-foot theory: second feet are predicted to show less variation because of the principle of closure, strongly disfavours the sort of complexity caused by bracketing mismatches (Russom 1998a, 39). The *Hyndlolióð* poet has stretched this principle to some extent, though they have still limited such mismatches to the on-verse.¹¹

7. This includes all his verses of type A1 and A2b. I have not included verses of type A2a, since Russom regards these as ‘reversed’, and therefore as occupying a very different place in the metrical system.

8. Cf. *Vsp* 44.1 *gregr Garmr miðk*, which is clearly a scribal corruption of the same formula, found correctly at *Vsp H* 36.1.

9. *Hdl* 13.1, 13.7, 16.9, 17.5, 17.7, 18.3, 18.9, 20.1, 20.9, 21.7, 23.7, 24.9, 26.7, 27.9, 28.11, 29.9, 31.3, 34.3, 36.3, 39.3.

10. *Vsp* 20.3, 31.7, 44.1, 49.1, 58.1; *Vsp H* 36.1; *Þrk* 15.3, 15.5, 19.1; *Vkv* 31.6; *Br* 7.5, 14.5; *Sg* 66.3; *Gðr II* 33.5; *Od* 12.1; *Her* 12.1, 13.1. The scansion of *Vsp* 20.3, *þriár, ór þeim sal*, is uncertain, and is only a variant of this type if the demonstrative *þeim* is stressed. In context, this seems plausible, but not necessary, and the proper scansion of the verse may be Sww/S (A1-).

11. In the entire corpus, there seems to be only one example of a mismatched verse-final -Sw foot in an off-verse, *Vkv* 31.6. This strong preference for the on-verse is not surprising: the same principle of closure which constrains the second feet of verses in general also tolerates more metrical variation in the first part of the long line, while limiting the second half-line more strictly.

I do not mean to imply that these considerations alone prove that the word-foot theory is superior for fornyrðislag, and to increase the accessibility of my arguments I adopt a relatively theory-neutral approach (within a general Sieversian framework) in this chapter. No specific metrical theory is necessary to discuss syllables and resolution. This is particularly important to bear in mind for the relationship between syllabification, resolution, and three-position verses: resolution is not infrequently described as mutually dependent with the four-position principle (Hoover 1985, 134ff. Yakovlev 2008, 62f. Pascual 2014, 812), but can, as we will see, be motivated as operating even in three-position half-lines. More generally, syllables clearly play an important role, and the metrical evidence for syllable structure and resolution is linguistically important, whether syllables are directly represented as metrical units (as per Sievers' theory) or metrically relevant more indirectly as constituents of word-feet. That said, the general plausibility of the word-foot theory outlined in this section is important, since there are a number of points where this approach appears to be more useful in motivating the patterns of resolution and its avoidance in fornyrðislag (and compare the arguments for the word-foot theory in the following chapter).

3.1.3 OUTLINE OF THE CHAPTER

The first part of this chapter will concentrate on the syllable itself, a necessary preliminary to the discussion of resolution. I argue that despite a tradition of alternative syllabification in the scholarship, in Norse syllables were divided according to rules very similar to those found in Old English (§3.2.1). A particular problem is whether *muta cum liquida* clusters were treated differently from other consonant groups. There is evidence that dialects varied in this respect, but all the metrical evidence, and most of the independent phonological evidence for the earlier stages of each branch of Germanic, tends to indicate that all word-internal consonant clusters were treated the same (§3.2.2).

The remainder of the chapter focuses on the metrical and phonological behaviour of light syllables, particularly the circumstances in which they do and do not combine into larger units through resolution. I begin by arguing against the common proposal that resolution was not allowed in the second lift of type A verses, and that a light syllable could serve as a full lift in this position with no further phonological conditioning (§3.3.1.1). On the contrary, verses of the shape SwŠw do show resolution, and are equivalent to the most common type of short verse

in fornyrðislag, SwS. Much more common, however, are verses of the shape SsŠw, which are to be scanned with suspension of resolution conditioned by the heavy second syllable (i.e. as type A2k, also found in Old English).

Verses of the shape SwS^ww are nonetheless very rare, and an examination of why shows some interesting constraints on word shapes in fornyrðislag, explored in §3.3.1.2. When S^ww (or S^ws) sequences are found, they almost always involve a word break after the resolved element: a typical S^ww metrical foot is realized as *faðir ok*, while single-word examples like *riðoðo* are very rare. With this in mind, the scarcity of resolution in verse-final Sw sequences can be seen to be due to a more general constraint against using ‘mismatched’ S.w feet verse-finally. In the one poem that does allow final S.w (and S.s) more readily, *Hyndlolióð*, we also find a significantly higher incidence of second-lift resolution. This implies that the supposed constraint on resolution in the second lifts of type A verses is an epiphenomenon, stemming from the interaction of the dispreference for unitary S^ww words with the avoidance of word breaks between the final two positions of type A half-lines.

Some type C verses do appear to genuinely allow unconditioned suspension of resolution in their initial lifts (§3.3.1.3). This suspension appears to be limited entirely to verses ending in words like *konungom*, where the light initial syllable is followed by a long medial syllable. This phenomenon has been used as the basis for conclusions about the dialectal history of certain poems, but most likely reflects a general phonological constraint whereby the first two syllables of a Šw word do not combine into a foot (as such words never resolve in any context: *konungom* is never to be scanned as S^ww).

This behaviour is very different from Old English – where words like *cýningum* can be scanned as S^ww, and indeed must be scanned so outside of suspension environments – and indicates that the underlying foot structure of Norse has changed (§3.3.2). Specifically, degenerate, light feet have become more acceptable, so that in words like *konungom* the foot structure [ko][.nun].gom has become the least costly solution to the prosodic constraints of the language. This greater tolerance for degenerate feet is also found in the absence of any variations like those described by Kaluza’s law: after a heavy syllable, resolution is always suspended, even when the resolved sequence would have been bimoraic. Taken together, Norse prosody appears to show a number of inherited constraints and preferences of the sort also found in Old English, but also an innovative tolerance for light feet which has a number of phonological and metrical effects.

3.2 HEAVY AND LIGHT SYLLABLES IN OLD NORSE

As far as syllabification is concerned, the central point of theoretical interest in Norse poetry, and the foundation for the process of resolution, is the apparent distinction between two sorts of syllables: ‘heavy’/‘long’ and ‘light’/‘short’.¹² With Old English, making this distinction was relatively simple, since the rules for syllabification and weight are, barring only the treatment of *muta cum liquida* clusters (see §3.2.2), well-understood and about as uncontroversial as any aspect of phonology in a ‘dead’ language is liable to be.¹³ Matters stand differently with Old Norse, where two distinct views of syllabification and syllable weight have a long history in the literature (for general discussions from different viewpoints, both with references, see Kristján Árnason 1991, 65-71, 111-18; Grønvik 1998, 40-2). A decision between them is not only a prerequisite for the further discussion of resolution, but itself revealing about the process of metrical description, and the value of metrical arguments for phonology.

3.2.1 DEFINING ‘HEAVY’ SYLLABLES

The first question is whether a monosyllable like *gras* ‘grass’, which has a short vowel and ends with a single consonant, should be classified as light or heavy. The choice leads to very different conclusions about Old Norse phonology in general. In grammatical literature, where the focus is as much morphological as phonological, such words are often traditionally called ‘light’, a point of terminology that has caused a great deal of confusion (Kristján Árnason 1991, 67). A phonological interpretation of this terminology implies that any syllable with two moras is ‘light’, and only those with three (or more) are properly ‘heavy’. This has led to one view of syllabification in which codas are maximized and onsets minimized: any consonants between syllables belong to the first syllable. Under this approach, the initial syllables of both *gras* and an inflected form like *gras.i* are bimoraic = short, and those of *land* and *land.i* are trimoraic = long. This view, which I call the CODA-MAXIMIZATION MODEL, is followed by several prominent metricists, most notably Pipping (1903, 1f.) and Gade (1995, 30-2; 2002, 859).¹⁴

12. I set aside more general questions of defining what a ‘syllable’ means as an abstract linguistic category (e.g., Fudge 1969; Selkirk 1982; Goldsmith 2011), and focus on the specific issue of Old Norse syllabification.

13. Though cf. Minkova and Stockwell (1994, 38, 41f.).

14. A somewhat similar syllabification is proposed for Germanic generally by Liberman (1990). This proposal is highly problematic. Liberman’s notion of ‘syllable’ does not correspond to the

The alternative view, which I strongly favour, is to suppose that Old Norse follows essentially the same metrical phonological system we find in Old English. These rules, outlined in note 1 in chapter 2, require little adaptation to work for Norse (Sievers 1893, 58 (§37.3); Heusler 1890, 119-22; 1925, 62 (§73); Kristján Árnason 1991, 117f.; Russom 1998a, 15):

- (286) a. A short vowel contributes one mora to a syllable or phonological foot, a long vowel or diphthong two. Short diphthongs (insofar as they are regarded as diphthongs, and not sequences of a glide plus a vowel) are also monomoraic. Every consonant in the coda contributes a mora, but consonants in a syllable onset are irrelevant for weight.
- b. A monomoraic syllable is light, one with two moras is heavy, and anything heavier is overheavy.
- c. This definition of weight depends on the following syllabification: a single intervocalic consonant belongs to the onset of the following syllable; in clusters following a short vowel, at least one consonant stands in the coda of the preceding syllable (closing the syllable).

While (286a) applies equally to both approaches, (286b) and (286c) lead to important differences in the judgement of syllable weight: *gras* is still bimoraic, but counts as *heavy*, while the dative *gra.si* consists of two monomoraic = light syllables (which together may form a bimoraic unit through resolution). A heavier noun like *land* is trimoraic = overheavy, while its dative, *lan.di* has a bimoraic = heavy initial followed by a monomoraic = light ending.

Deciding between these views is partly a matter of general principle and plausibility, and partly a question of which seems to describe the facts of Norse phonology and metre better. The choice of which to favour has not always been obvious

usual definitions, and instead represents a rather ill-defined unit more closely approximating a foot. Using Gothic evidence, he argues that a word like *pata* (comparable in shape to Norse *grasi*) must be divided *pat-a*, because **pa* on its own is too small to serve as a viable phonotactic unit, as evidenced by the lack of C $\check{V}$ content words in Germanic (1990, 4). He explicitly asserts that the same ‘syllabification’ would hold in the other Germanic languages (6), implying Norse *gras-i*. This phonotactic constraint, however, is usually recognized as applying to feet rather than syllables, and a foot structure of [pa.ta] allows both the recognition of traditional syllabification and the description of the phonotactic constraint for content words to be bimoraic (i.e. have at least one bimoraic foot). Liberman’s view is inconsistent, in any case, since his parsing still leaves a stray element, the final *-a* of *pata*, unaccounted for, clearly a separate element but too small to qualify as a ‘syllable’ by this definition (Salmons 1990, 142f.). Moreover, Liberman himself acknowledges the possibility of analysing pre-Norse **tali-ðō* with first two (traditional) syllables forming a single ‘unit’ – this is the view of more well-developed theories of foot structure, and such a possibility returns us to the proper footing of [pa.ta], [gra.si].

(cf. the noncommittal approach of Ryan 2011, 428ff.), but a closer review shows that both linguistic and metrical considerations strongly favour the second of these views, that Old Norse rules of weight and syllabification are like those of Old English.

Evidence from three quarters has been invoked to support the alternative, coda-maximization idea that bimoraic sequences are ‘light’. Firstly, there are special constraints on overheavy nouns like *land* in *dróttkvætt*, collectively known as Craigie’s law, which makes the distinction between words with two and three moras appear particularly important to those who concentrate on the study of skaldic verse (on the law in general, see Craigie 1900; Gade 1995, 29ff.; Kristján Árnason 2009). Secondly, there is a metrical-phonological argument that might suggest that bimoraic sequences are light in the form of a well-known rule discovered by Bugge (1879), whereby a hiatus sequence like *búa*, with a bimoraic initial syllable, appears to behave metrically like *grasi*: words like *búa* resolve and cannot stand as the trochaic final element in a *dróttkvætt* line. And thirdly, in modern Icelandic words like *gras* have undergone lengthening, as if they were underweight.

None of these points are compelling. Craigie’s law is a restriction prohibiting nouns like *land* in certain subordinated metrical positions. This appears to be a restriction *against* a particular word type, specifically overheavy nouns – verbs and other parts of speech are allowed in the same position, even when trimoraic (Craigie 1900, 345). Like Kaluza’s law in Old English, this suggests only that the category of overheavy syllables was specially marked and subject to extra restrictions. This behaviour is what we expect from the general preference for precise bimoraism throughout Germanic (Murray and Vennemann 1983, 525f.; Riad 1992, 45-7 (§2.1.3); Kristján Árnason 2011, 8-10, 15-17).

The evidence of words like *búa* is more interesting, but far from conclusive. For one thing, the (metrical?) shortening of a long vowel in hiatus is reminiscent of Greek epic correption (Clapp 1906; West 1982, 11f.) and the similar *vocalis ante vocalem* shortening found in Vedic (Macdonell 1916, 437; Arnold 1905, 134ff.; Malzahn 2001, 160-4; Gunkel and Ryan 2011, 55f.). Norse is more consistent than Homeric or Vedic in treating long vowels in hiatus as light, but in none of these cases does correption have to imply that a long vowel in other contexts counts as ‘light’; in Greek and Sanskrit, this is very clearly not the case. Kristján Árnason (1991, 111-18) satisfactorily explains this behaviour in Norse as the transference of one mora from the first syllable to the second to fill the missing onset, an explanation in keeping with the general importance of onsets in Germanic (compare

Riad 1992, 24, 45-7 and §3.2.2).

The final type of evidence, the phonological lengthening of short vowels in words like *gras*, is simply not relevant. Such lengthening occurred as part of the late Icelandic quantity shift, which by definition involved a drastic rearrangement of Icelandic metrical phonology (see further §3.2.2). In any case, the usual interpretation of these words is that the final consonant came to be counted as extrametrical: [gra]s would be underweight because it has *one* mora, not because it is bimoraic (Kristján Árnason 2011, 18, 59). When such final consonants became extrametrical is another question, and in principle this could have pre-dated the quantity shift by some time. This would allow *CVC* words, like *gras*, to count as light while in other respects maintaining rules for weight and syllabification like those of Old English. Such earlier extrametricality would, however, have to be established on the basis of positive evidence, which is lacking; without this, there are no grounds for projecting general consonant extrametricality into earlier Old Icelandic and Old Norse.

Beyond lacking much positive support, the coda-maximization model faces a number of serious objections. The first is general typological plausibility, since the Pipping-Gade approach goes against the cross-linguistic principle of onset maximization: the typical syllable tends to have an overt onset of at least one consonant (Pulgram 1970, 47; Clements and Keyser 1983, 37f.; Prince and Smolensky [1993] 2003, 31ff.). A word like *grasi* ought to be syllabified as [gra.si], to give the second syllable an overt onset. Onset maximization appears to be a universal tendency, and certainly holds in the other Germanic languages (Riad 1992, ch. 2, *passim*). Typological considerations do not, of course, decide the matter, but we should bear in mind that, all other things being equal, the coda-maximization model is much less plausible than allowing stray syllables to join the following onset.

The more immediate evidence of Norse metre also speaks strongly against the coda-maximization approach. It is clear that in both Eddic and skaldic poetry, words like *gras* – so ambiguously termed ‘light’ by grammars – can occupy a main lift:

- (287) en **gras** hvergi
‘and grass nowhere’ (*Vsp* 3.8)
- (288) **glǫð** á gólfi
‘glad on the floor’ (*Sg* 31.5)
- (289) **hiqr** gellanda bella

‘screaming blades hit’ (*Gisl* 33.4)

The most straightforward interpretation is that *gras*, *gløð*, and *hiqr* (as in Old English, short diphthongs are monomoraic) are of normal and sufficient weight to occupy a lift. Gade (1995, 30ff.) does recognize that words like *hiqr* can normally stand as metrical lifts, and do so very frequently in Eddic poetry, but dismisses the evidence of Eddic poetry on the grounds that ‘light’ syllables can stand as lifts on their own. This, however, significantly misrepresents the Eddic evidence, since normally lifts may be light only when resolution has been suspended. Verses like (287) and (288), whose lifts are only ‘light’ under the coda-maximization model, are far more frequent than verses like the following:

(290) *faðir Móða*

‘the father of Móði’ (*Hym* 34.1)

Verses of this sort, whose initial syllables are light under any model, are exceedingly rare, with perhaps six examples in the whole *fornyrðislag* corpus.¹⁵ The Pipping-Gade approach has no way of explaining why verses like (290) are so much rarer than those like (288), since the structures of the two would be the same, respectively *gløð .á* and *fað.ir*. The onset maximization model allows us to describe a real difference between normal, heavy *gløð .á* and disfavoured, light *fa.ðir*.

Furthermore, verses like (290) most likely do not actually begin with a light lift. Rather, assuming they are not to be dismissed as chance corruptions, they have an initial resolved position, S^wSw, and are equivalent to the three-position type $\bar{S}$ Sw. Unlike in Old English, this type seems to actually exist in *fornyrðislag*, though it is uncommon.¹⁶

(291) *glaðr Eggþér*

‘happy Eggþér’ (*Vsp* 42.4)

If verses like (290) are taken as resolved counterparts to the three-position type of (291), their scarcity is readily explained: neither pattern is common, but the type with a resolved lift is even rarer than that with a long monosyllable. On the other hand, if (290) were taken as equivalent to verses like (288), there would be no way to explain why those beginning with a single word like *faðir* would be so rare.

15. Along with *Hym* 34.1, we find *Vkv* 5.10, *HH* II 3.7, *Bdr* 4.4, and *Hdl* 10.2. *Vsp* 16.8 has, highly exceptionally, two short disyllables in a row.

16. *Vsp* 42.4, *HH* 21.5, 25.1, *Gðr* I 24.9, *Gðr* II 24.3, *Ghv* 5.7, 11.3, *Hdl* 10.2, and 29.7.

This argument for resolution, it should be noted, in no way depends on four-position analysis – indeed, it goes against the generalization that we should try to find four positions in every verse – nor on any specific metrical theory (though the terms are of course generally Sieversian). This speaks against the assertion that the principle of resolution is fundamentally dependent on the four-position approach (Hoover 1985, 134ff.; Yakovlev 2008, 62f. Pascual 2014, 812). Rather, the methodology is to look for patterns of favoured, possible, marginal, and prohibited verses, and to propose more direct relationships between patterns (here, the assumption of near-equivalence) that are consistent with the more general principles (here, that three-position verses are a real but minor variant, and that in any given type monosyllables are more common than their resolved equivalents).

This metrical argument speaks strongly against the Pipping-Gade syllabification. Initial lifts in fornyrðislag cannot be light. The only way to explain the frequency of verses like (288) is to suppose that bimoraic words like *glǫð* are of normative weight, perfectly qualified to serve as a lift, and that words like *faðir* cannot freely form trochees because they are syllabified as [fa.ðir] with a truly light first syllable.¹⁷

Beyond this metrical argument, there is the further theoretical objection that the principle of resolution in general is difficult to explain under the coda-maximization approach. Metrically speaking, *gras* and *grasi* usually have the same behaviour (outside of suspension environments), and appear to be generally ‘equivalent’. Under the coda-maximization view, the former has two moras, [gras], and the latter three, [gras.i], with the addition of the extra mora being effectively irrelevant. In heavier words, an extra syllable counts as a real syllable, not just an extra mora added to the root: *land.i* has (under this view of syllabification) the same number of moras as *nótt*, and fewer than *bólstr*, but it counts as trochaic while the others occupy a single metrical position. Within this framework, the only possible view of resolution is that it is an arbitrary artistic licence – which is precisely what Gade suggests (1995, 64-6).¹⁸

17. Bimoraic words do show a somewhat more restricted distribution in *dróttkvætt*, even aside from their limited employment under Craigie’s law, and are generally avoided before words beginning with vowels (Kristján Árnason 1991, 169-70; 2011, 14f.). This seems to be because skaldic verse, unlike Eddic poetry but like classical and Indic metres, allows for resyllabification across word boundaries (Kurylowicz 1970, 7). Example (288) provides evidence that such resyllabification does not occur in Eddic poetry.

18. Gade specifically suggests that resolution developed to accommodate disyllabic verbs in certain contexts in *dróttkvætt*. Given that skaldic metres in general seem to be historically secondary relative to forms like *fornyrðislag* and Old English verse, and that resolution is a central feature of the latter two, this specific account seems implausible.

If we take the onset maximization approach, as given in (286), resolution becomes natural and well-motivated: the two case forms of [gras] and [gra.si] are equivalent simply because they both form bimoraic feet. The *s* falls in the syllable coda in the nominative, providing it with its second mora, but before a vocalic ending it is resyllabified to stand in the onset of the second syllable. The first syllable, *gra-*, now only has one mora, and must resolve with the second syllable, *-si* (in which the *s* is now in the onset, and so does not contribute to the weight of the word), in order to create the (minimally) bimoraic unit so favoured in Germanic.

The arguments of typology, metre, and the phonology of resolution all hang together, and support the Sieversian view: that Old Norse syllabification produced overt onsets in non-initial syllables, and that a bimoraic unit counted as ‘heavy’. This is the view that I adopt, and follow without comment hereafter.

3.2.2 THE SYLLABIFICATION OF INTERVOCALIC CLUSTERS

Even granting that the weight definitions and syllabification rules in (286) are correct in outline, the details of (286c), concerning the syllabification of intervocalic clusters, is potentially controversial, not just for Norse but for all the early Germanic languages. As stated, it implies that *all* examples of *-VCCV-* are syllabified between the consonants: *-V̥C.CV-* (with HETEROSYLLABIFICATION). An alternative conclusion is reached by Pierce (2013a) in a recent review of the Norse evidence: that in cases where the second consonant has a greater sonority¹⁹ than the first, both consonants ‘largely’ belong to the onset of the second syllable: *-V̥C.CRV-* (with TAUTOSYLLABIFICATION). Compare also Dresher and Lahiri (1991, 265f.) and Kim (2001, 122f.).²⁰ He bases this view largely on the orthographic evidence of medieval manuscripts, and on the scope of open syllable lengthening in later Icelandic and Faroese.

Before discussing the specific evidence, it is important to consider what the theoretical stakes are. The foundational analyses of Germanic syllabification, such as Murray and Vennemann (1983) and Riad (1992, ch. 2, *passim*), have identified three potentially competing principles in assigning intervocalic consonants to syllables:

19. On sonority hierarchies, see Murray and Vennemann (1983, 519), Calabrese (1994, 160), and Pierce (2006, 285).

20. It should be noted that when Pierce (2013a, 63) comments on maximized codas, he is referring to the syllabification *-VC.CV-* or *-VC.V-*, not *-VCC.V-*, a possibility which he does not seriously entertain.

- (292) a. A syllable should have an overt onset (the ONSET PRINCIPLE); or in a stronger form, stray consonants should be assigned to an onset whenever possible.
- b. A stressed syllable should be bimoraic ('Prokosch's law'; the BIMORAIC PRINCIPLE).
- c. Syllables tend to begin before the point of lowest sonority (the SONORITY PRINCIPLE).

The order I have listed these principles is the order of their apparent importance in most older Germanic languages (cf. Riad 2004b, 189 for a particularly clear ranking). The first two principles generate the syllabification outlined in the preceding section: in *gra.si* the *s* must belong to the second syllable to provide it with an onset (overriding any preference for making the first syllable bimoraic); in a word like *sun.nan* the cluster (or long consonant) will be divided in the middle, satisfying both (292a) and (292b). Pierce's concern is the relative prominence of (292b) and (292c) in Norse: does the bimoraic principle hold in words like *fletiom* and *iðrar* so that the cluster is heterosyllabified, or does the rising sonority within their medial clusters cause them to be treated as unitary onsets? Is the syllabification *flet.iom*, *ið.rar* or *fle.tiom*, *i.ðrar*?

Stating this theoretical background more explicitly has consequences for the relevance of the data cited by Pierce. The evidence of orthography, for instance, does show that sonority sequencing plays a role in syllabification. This comes from word-divisions across lines in medieval manuscripts, which are generally thought to often fall on syllable boundaries (though morphological and palaeographic considerations are very significant factors as well). To take a relatively early literary Norse example, sonority sequencing appears to be satisfied in word divisions in the early thirteenth-century Norwegian Homily Book, e.g. *gó|ðra*, where | represents a line break in the manuscript (Fix 1995, 24). This evidence is, however, irrelevant: the bimoraic principle is already satisfied by the long vowel in the root syllable, so we learn nothing about the relative priority of (292b) and (292c). As Fix reports, in words beginning with a short vowel, the line breaks do in fact tend to show the influence of the bimoraic principle: *ið|re*.

This situation does not hold for all varieties of Norse, and Fix, working with Birkmann, finds that some later, Icelandic manuscripts, starting at least with the *Uppsala Edda* (c. 1300), show different tendencies, and even after short vowels favour tautosyllabifications like *fio|trar* and *vi|lia* (Fix and Birkmann 1998, 26-9). The obvious interpretation of these facts is that either Norwegian or Icelandic (or,

less probably, both) has innovated, with the other preserving the older pattern of syllabification. Fix and Birkmann (1998, 29) take the Norwegian situation as primary and the Icelandic as secondary, in my opinion correctly; Pierce sees the Icelandic syllabification as older, though he does not explicitly give his reasons for discounting the Norwegian manuscript evidence.

Pierce's other core area of evidence is phonological, from open syllable lengthening in Modern Icelandic and Faroese. In these two languages, historically short vowels in open syllables became bimoraic, presumably to allow words like /ε:ta/ 'to eat' to satisfy both the onset principle and the bimoraic principle at the same time without complex, resolved feet (Kristján Árnason 2011, 9f.). The interesting fact is that *some* consonant clusters with rising sonority appear to have tautosyllabified before this lengthening took place: thus we find Modern Icelandic /vε:trar/ < *ve.trar*, which patterns not like /bɔrða/ < *bor.ða*, but rather with /ε:ta/ < *e.ta* with its single intervocalic consonant (Vennemann 1972, 3-9; Pierce 2013a; Kristján Árnason 2011, 18). Much the same occurs in Faroese – **ve.trar* > /vε:trar/ – except that here lengthening occurred before a larger set of clusters. In Icelandic, clusters of consonant + **l* were heterosyllabified, preventing lengthening: /εpli/, /miklir/, /atla/ < *ep.li*, *mik.lir*, and *At.la*. But in Faroese the clusters *pl* and *kl* (but not *tl*) tautosyllabified,²¹ giving lengthened /ε:pli/, /mi:klir/, as if from *e.pli*, *mi.klir* (Pierce 2013a; 2008, 229-30; Kristján Árnason 2011, 153). This difference should caution us against taking these tautosyllabifications as particularly old: *muta cum liquida* tautosyllabification is dialectally variable, and potentially late (cf. the more sceptical earlier position of Pierce 2004, 93f.).

The impression that the treatment of rising sonority clusters is variable and dialectal is reinforced if we consider another body of evidence not discussed by Pierce. Grønvik (1998, 45-47) reports an interesting weight-based development in Norwegian dialects, where after heavy syllables, *-*a* is reduced to -*ə*. This regularly gives contrasts between light and heavy infinitives: *koma* 'to come' versus *drøymə* 'to dream'. In most East Norwegian dialects, verbs like *velja* 'to choose' remain unreduced, patterning with the light stems and so suggesting a syllabification [ve.lja] (Grønvik 1998, 46; Iversen 1973, 8). This contrasts with the dialect

21. Vennemann (1972, 12) points out that the exclusion of *tl* from the set of tautosyllabifiable clusters is probably related to the exclusion of this cluster word-initially. I understand this to mean that when Faroese went further than Icelandic, allowing even tautosyllabification before *l*, the 'law of initials' proved a strong enough factor to block the change of **tl* > **tl*. By contrast, since initial *pl*- and *kl*- are allowed (cf. *plógv* 'jointer plane, plow', *klúgva* 'to cleave'), this licensed the potential tautosyllabification of these clusters medially.

of West Telemark, which has *veljə*, [vel].jə, the reduction indicating heterosyllabification. Much like the orthographic evidence, this points to a situation where the older Norse system of syllabification – whether more similar to East Norwegian or to the Telemark dialects – has been conserved or changed on a dialectal basis throughout the former Norse area.

Granting that at least some post-Norse dialects must have innovated, the question is in which direction. Pierce favours older tautosyllabification, but this is doubtful. The evidence is far from clearly in his favour, and there is an important consideration of general principle. The two possible directions of change are not equal: if tautosyllabification were actually old, the change of $-\check{V}.CjV- > -\check{V}C.jV-$ would imply a shift away from the sonority sequence and onset maximization principles. On the other hand, a change in the other direction, from $-\check{V}C.jV- > -\check{V}.CjV-$, would be well motivated, of a cross-linguistically understandable sort easily repeatable in East Norwegian, Icelandic, and Faroese (the last two probably representing only partly independent cases).

While the phonological and orthographic evidence is inconsistent or varied, metre – one of the oldest and largest bodies of data available – potentially presents a much clearer picture. Pierce (2013a, 67) dismisses the evidence of metre as ‘inconclusive’, implying that its supposedly contradictory testimony renders it less relevant in determining syllabification. The situation is, in fact, not nearly so ambiguous as Pierce implies. Pierce’s metrical evidence of supposedly deviant syllabification consists solely of type A2k verses such as:

(293) *harðráðr Hymir*
 ‘hardcore Hymir’ (*Hym* 10.3)

He claims that the requirement for a bimoraic lift indicates that the last word is syllabified *Hym.ir*. This does not involve consonant clusters of any sort, so Pierce apparently intends this as general evidence that poetic syllabification need not have linguistic relevance. However, the traditional analysis of A2k verses involves no resyllabification, but the suspension of resolution, a view which will be supported at length in §3.3.1.1. Furthermore, the same arguments presented in the previous section against coda-maximization apply here as well: if Pierce’s syllabification were really a normal possibility in verse, we would expect to find words like *Hymir* or *faðir* used as the equivalents of $\bar{S}w$ much more frequently.

As it happens, the patterns of syllabification required for fornyrðislag are highly consistent, and point to universal heterosyllabification after short vowels. Some of this evidence is positive, with verses falling into normal patterns of scansion only

if the sonority hierarchy is not given priority (Hermann 1923, 280f.; Murray and Vennemann 1983, 516f.):

- (294) a. Buð.la dóttir
‘Buðli’s daughter’ (*Br* 8.2, 14.2; *Gðr I* 23.2, 25.2, 27.4; *Sg* 30.2; *Hlr* 4.2)
- b. At.la gáfo
‘they gave to Atli’ (*Ghv* 11.7)
- c. fag.ra bauga
‘beautiful rings’ (*Her* 4.7)
- d. ið.rar blótnar
‘sacrificed entrails’ (*Gðr II* 23.6)
- e. ak.rar vaxa
‘fields grow’ (*Vsp* 62.2)
- f. heim um rek.nir
‘driven home’ (*Þrm* 21.2)
- g. tys.var hróra
‘twice to move (it)’ (*Hym* 33.6)
- h. mið.ian festo
‘fastened in the middle’ (*HH* 3.8)
- i. flet.iom stýrði
‘ruled over hall-floors’ (*Hlr* 11.4)
- j. nornir vek.ia
‘Norns wake (me)’ (*Gðr II* 38.2)

These examples indicate that heterosyllabification in Eddic poetry is very general, regardless of the nature of the second consonant (be it /r/, /l/, /n/, <v> = /w/, or <i> = /j/), the difference in sonority between the two consonants, or the acceptability of the sequences as initial clusters.

Equally telling is the negative evidence, with clusters of this sort failing categorically to resolve. No potential type C verses like the following occur in fornyrðislag:

- (295) *þá i.ðrar blótnar
‘then sacrificed entrails’
- (296) *ok fa.gra bauga
‘and beautiful rings’

The suggestion by Barrack (2010, 267) that heterosyllabification might be a property of the slow recitation of poetry fails to convince. Barrack has to assume a

considerable mismatch between ‘real’ and poetic speech maintained throughout the corpus. This would be very interesting if supported by any clear evidence, but it is not: Barrack relies primarily on orthographic evidence, which is by no means clearly at odds with the metrical situation. We also know nothing about the speed at which Norse poetry was recited.

Taken together, the Norse evidence points strongly towards old heterosyllabification. The two oldest pieces of evidence, verse and the Norwegian Homily book, agree in splitting *muta cum liquida* clusters after short vowels, and are supported by the later phonology of Telemark Norwegian. The later Icelandic orthographic evidence and open syllable lengthening do clearly indicate that some clusters were tautosyllabified in late medieval Icelandic, but the discrepancies between Icelandic and Faroese as to which clusters were involved gives an internal indication that this situation represents a relatively late innovation. Furthermore, as noted earlier, open syllable lengthening itself can serve as evidence of the instability of Icelandic prosody in this period. The East Norwegian dialects would then appear to show an independent instance of a typologically understandable change (compare the similar shift in Latin from heterosyllabification to tautosyllabification noted by Sen 2006, 158f.).

That heterosyllabification is in fact old is further supported by the comparative Germanic evidence, which matches the testimony of fornyrðislag, the Norwegian Homily Book, and the Telemark dialects. For one thing, Sievers’ law, perhaps discounted too readily by Pierce, supports heterosyllabification under the most convincing analyses (Murray and Vennemann 1983, 518; Riad 1992, 65-67; Kiparsky 1998), though this is certainly debated (see further §5.2.3.2). Line breaks in the Gothic manuscripts also provide some evidence for Gothic syllabification, and on the whole support a view of heterosyllabification in the oldest literary Germanic language (though there are numerous ambiguities in the data).²²

22. Riad (2004b) provides an excellent overview of both the usefulness and limitations of this data for syllabification in general, along with references to the older research. For more recent work, see, along with Riad, especially Pierce (2004, 2006; 2013b, 218-24) and Barrack (1998, 2010).

For our immediate purposes, it is worth noting that in words where a short root vowel is followed by a consonant-glide cluster, the break usually occurs between the consonants: Bologna *[n]as|jands* (1r, 24/25; Finazzi and Tornaghi 2013, 116; Falluomini 2014, 300). This may be influenced by morphological boundaries, but it is a nicely consistent pattern which is most readily taken as evidence for general heterosyllabification.

The picture with *muta cum liquida* clusters is much less clear: relevant examples are very few, and their testimony is evenly split. Setting aside the loaned *Paitrus*, there are five examples in the Gothic corpus of a line break between a short root vowel and a *muta cum liquida* cluster (abbreviations after Magnús Snædal 1998, xxxi): *sti|kla* (Mt 10:42), *fa|dreinai* (Lk 2:4), *gi|blin* (Lk 4:9), *fa|dreina* (2KA 12:14), and *fa|dreinam* (2TA 1:3). We also find five examples of heterosyllabification in the same

Even if we set the evidence of Sievers' law and Gothic aside, there is concrete metrical and phonological evidence for old heterosyllabification in Old English. From poetry, it is easy to compile a list of forms comparable to (294):

- (297) a. ofstum myc.lum
 'with greatest haste' (*El* 44b)
- b. forstes fet.re
 'with frost's fetter' (*Max I* 75a)
- c. þonne bið on hreþ.re
 'then he will be (struck) in the breast' (*Beo* 1745a)
- d. fæð.me weorðen
 '(that you) should ([come] from) the hold (of enemies)' (*Ex* 294b)
- e. mōde gefrec.nod
 'emboldened in spirit' (*Dan* 184b)
- f. torhte gefræt.wed
 'brightly decorated' (*And* 715b)
- g. her.ges wīsa
 'leader of the host' (*Ex* 13b)

Again, heterosyllabification appears to be the rule, no matter what consonant clusters are involved. And again, this picture is reinforced by the absence of such clusters between resolved syllables.

Very significantly, strong phonological support for heterosyllabification in early Old English comes from high vowel deletion (§2.2.8.2). The word *feðer*, for instance, comes from earlier **feþru*, with the ending apocopated by high vowel deletion (with later syllabification of the resonant). This implies that the initial syllable was closed through heterosyllabification, forming a full bimoraic foot and leaving the ending unfooted: **[feþ].ru*. With tautosyllabification, both syllables would

context: *id|reigondane* (2KA 12:21), *ag|laitei* (GIB 5:19), *ag|lom* (EfB 3:13), *ak|ran* (FlB 1:22), and *ag|lono* (KIB 1:24). There is no significant evidence to be added from the Bologna Fragments, which only add one further example of tautosyllabification in the Greek name *Pai|tru* on folio 1v, line 21/22 (Finazzi and Tornaghi 2013, 117). One tentative conclusion one might draw is that clusters with *r* were uniquely prone to tautosyllabification, but on the whole this data set is so small and inconsistent that it must count only weakly in any more general arguments about syllabification. The only safe conclusion, which is drawn by Riad (2004b), is that there is evidence for both the bimoraic and sonority principles as potential factors, and in some clusters they may have been in competition in sixth-century Gothic.

Note that the two instances of *para|kletu(s)* (Jh 14:16, 16:7) are doubly irrelevant: the word is a loan from Greek, and in any case should have an initial bimoraic foot [pa.ra], meaning that there is no clear potential for conflict between any of our principles.

have been footed, *[fe.þru], giving **feðru* (compare *scipu* < *[sci.pu]). Other *ō*- and *u*-stems showing this development include *bebr* ‘beaver’, *lifer* ‘liver’, *sweger* ‘mother-in-law’, *swicn* ‘acquittal’, and *weðer* ‘wether’.²³ This provides perhaps the least ambiguous direct phonological evidence for heterosyllabification in early Germanic.

Given that the wider Germanic evidence is consistent with old heterosyllabification – with Old English providing particularly clear and relatively early evidence – I take the consistent syllabification seen in fornyrðislag as a direct reflection of an inherited linguistic system. This is in no way at odds with the Icelandic orthographic evidence cited by Fix and Birkmann (1998), which comes from manuscripts later than the *Codex Regius*, itself evidently a copy of an early thirteenth-century written exemplar. The poems themselves are almost certainly older, perhaps much older, than even this hypothesized earlier manuscript, and so appear to significantly predate the evidence for resyllabifications in late medieval Icelandic – and many of the poems, furthermore, may not even be originally Icelandic.²⁴

The rules presented in (297) seem, therefore, to work without further modification for the Old Norse poetic syllable. The internal poetic evidence is remarkably consistent in supporting this syllabification, and it fits into a general picture of the early Germanic syllable which, though not undisputed, appears to be supported by the testimonies of Gothic and Old English. There remains some potential uncertainty in the syllabification of consonant clusters after long vowels, or of large clusters of three or more consonants. These are interesting issues which could potentially affect the relative numbers of heavy versus overheavy syllables in the language, but since the Eddic metres are generally insensitive to overheaviness, I leave this issue aside as going beyond the interface of metre and phonology.

3.3 RESOLUTION IN FORNYRÐISLAG

In many ways, resolution in fornyrðislag appears similar to Old English, with the general caveat that the process is less common across the board. This is, as has often

23. This is reasonably consistent with the orthographic evidence cited by (Lutz 1986, 203), though relevant forms are not common, and (as in Gothic) somewhat inconsistent.

24. I began this section by responding to Pierce (2013a), who argued (cautiously) for tautosyllabification in Norse. It is important to emphasize that Pierce (2004, 2013b) himself has ably defended heterosyllabification as an old Germanic feature, and presumably regards his proposed Norse tautosyllabification as in some way innovative. My disagreement with Pierce may therefore be largely chronological: I would characterize Norse as generally heterosyllabifying, with various dialects innovating in the relatively late Middle Ages.

been remarked, at least partly due to linguistic change. The Old English process of high vowel deletion may, from a comparative perspective, be better termed high vowel preservation, since many instances of **i* and **u* are there preserved when footed, but lost much more generally in Norse: *heoru* versus *hiqr*, *sele* versus *salr* (cf. §5.1.1). What is more interesting than the frequency of resolution, however, is its patterning. As in Old English, the main questions are where resolution must occur, and where it is suspended.

On the whole, resolution does not appear to be too different in Norse when compared with Old English: resolution is possible on at least some main lifts, and suspension is, at least in large part, limited to the position immediately following a heavy or stressed syllable. There are, however complications, especially concerning the suspension of resolution. These have both empirical and theoretical dimensions. There is some doubt about whether or not suspension occurs in some verses, which makes it more difficult to describe and motivate the conditions for suspension.

There are a variety of relevant contexts for resolution and suspension in Norse (see generally Sievers 1878, 456; 1879, 303; 1893, 27 (§9), 58f. (§37)), but in fornyrðislag several verse patterns stand out as being of particular interest. I begin with Type A verses with apparently short second lifts, since in them it is possible to examine a range of possible conditions for the suspension of resolution. Also important is the classic problem of the scansion of words like *konungi* in type C verses, which appear to provide evidence for distinctive features of Norse foot structure.

These patterns must be established on a purely metrical basis, as discussed in §3.2.1. Unlike Gothic, with Sievers' law, or Old English, with high vowel deletion, there are no comparatively recent phonological processes or active morphophonemic alternations to confirm the phonological basis of resolution. Three-position verses in particular continue to play a central role, justifying resolution in some cases and suggesting suspension in others.

3.3.1 SUSPENSION OF RESOLUTION

Before turning to the specifics of different verse types, I should point out a very significant general difference from the patterns found in *Bēowulf*, discussed in the previous chapter: there is no trace of the weight-sensitive variability to resolution described by Kaluza's law. If suspension is possible, it is mandatory, regardless of

the weight of the second syllable:

- (298) brúnhvít **bera**
‘white of brow to carry’ (*Hym* 8.7)
- (299) herbaldur **lifir**
‘warrior lives’ (*Sg* 18.6)
- (300) Hunding **vegin**
‘Hundingr killed’ (*HH* 10.6)
- (301) Hundingr **konungr**
‘king Hundingr’ (*HH II* 1.8)

After a heavy syllable, suspension always takes place. I can find only three potential counterexamples:

- (302) ek var einn **faðir** þeira
‘I alone was their father’ (*HH* 39.4; vocalic alliteration)
- (303) gnýr allr **íqtunheimr**
‘All Íqtunheim groans’ (*Vsp* 48.3)
- (304) mál ǫll **meginlig**
‘all mighty pledges’ (*Vsp* 26.7, *Vsp H* 22.7)

The first example is textually very uncertain. Taken at face value, the verse would be type D with anacrusis, (ww)S.S^w.sw. Anacrusis in fornyrðislag is rare, possibly even unmetrical (Haukur Þorgeirsson 2012),²⁵ and it is striking that two extremely unusual features should co-occur here. Neckel omits *þeira*, which eliminates both metrical anomalies and still leaves the verse with perfectly good sense. It is interesting to note that the manuscript point, which usually marks out every *helmingr* (half-stanza), occurs here between *faðir* and *þeira* (Wimmer and Jónsson 1891, 41f.):

ec var ein faðir. þeira

There are a number of possible explanations for this scribal fact, but in light of the double peculiarity of the verse metrically, and the lack of disturbance caused by the removal of *þeira*, the correct one may be that the pronoun was added by a scribe who had finished copying out the line and decided to add a word to make the sense of the passage more precise. There is, to my mind at any rate, far too much doubt

25. The only other potential example of type D with anacrusis would be *Hdl* 23.6 *ok tveir Haddingar*.

surrounding this verse to take it very seriously as evidence of resolution after a stress.

The second, (303), seems textually secure, but its scansion is debatable. Suzuki (2014, 239f.) takes it as type C, with *allr* as the first lift, and *iqtun-* as a resolved second lift. But *allr* may be unstressed, and its alliteration here simply accidental. As Sievers (1885a, 13) observed, this is probably properly taken as a variety of A3 verse, with the rhythmic contour w.w.S^ws (ww/Ss).

A similar explanation may also apply to (304), though, being displaced, we might expect *qll* to be stressed. Even if this is so, this would appear to be an isolated example in fornyrðislag, and the evidence of one lone verse is probably not very significant. Even *Bēowulf* has the very occasional outright exception to Kaluza's law, whether because of undetected scribal corruption or as a metrical slip (cf. *Beo* 330a). This verse, of course, would violate Kaluza's law as well, if it were a principle that applied to Norse. However we take this lone half-line, the generalization otherwise appears to hold strictly: in an environment where suspension is possible, it is obligatory.

The suspension of bimoraic sequences, as in (298), would be anomalous in *Bēowulf*, since such a word would form an excellent bimoraic foot, and suspension would not normally be possible without some further effect from metrical subordination. As we have seen, only around 1.4% of type A2k verses in *Bēowulf* show a monomoraic final syllable. In Norse, suspension is not only obligatory in such forms, but also very common: the comparable figure for fornyrðislag is 45.5%.

This suggests some major difference of phonology, and perhaps also of metre, between *Bēowulf* and fornyrðislag. Specifically, the suspension of resolution in (298) and the many verses like it appears to suggest that Norse has a greater preference for ISOSYLLABISM – direct equivalence of syllables with higher-order phonological or metrical entities – relative to the bimoraic principle than Old English does, and a greater tolerance for degenerate, light feet. Resolution of fully initial syllables may behave much the same, but in other contexts isosyllabism prevails even at the expense of creating a bimoraic unit. These are important aspects of Norse metrical phonology, but further discussion of foot structure will have to wait until §3.3.2, after we have reviewed more of the metrical facts.

3.3.1.1 Unconditioned Suspension in Type A

In general, the absence of Kaluza's law from Norse ought to give the appearance of a more transparently regular rule: either resolution is possible, or it is not and

suspension takes place. There is, however, some debate about whether suspension of resolution can occur even without the traditional conditioning of a preceding heavy syllable, particularly in non-initial lifts. Under one view, verses like the following are scanned as SwŠw:

(305) fló þá Loki

‘Then flew Loki’ (*Þrk* 5.1, 9.1)

In his recent book on Eddic metres, Seiichi Suzuki labels such verses as ‘A1s’ (meaning, type A1 with a short second lift), and his judgement (if not his label) appears to reflect standard scansion. The self-evident existence of these verses has even given rise to considerable theoretical discussion. It has been claimed that they cast doubt on the very notion of resolution (Kristján Árnason 1991, 56-64, 152), that they show that resolution is in Norse a metrical licence to be freely manipulated by poets (Suzuki 2014, 40), or that they provide evidence for deep subordination of the later elements of the verse (Russom 1998a, 103-5; 2002a, 314). Some of these theoretical conclusions are more plausible than others, but they all take as their point of departure the premise that unconditioned suspension is a genuine and conspicuous part of Norse metrical practice (cf. Sievers 1893, 65 (§43.2b)).

This premise is, however, very doubtful if we recognize the full range of possibilities allowed by Norse metre: fornyrðislag has, like Old English, a type A2k, SsŠw, where suspension is conditioned by the ‘heavy dip’, and it also has short, three-position verses of the pattern SwS. A review of the evidence suggests strongly that there is no independent ‘A1s’ category distinct from these: most supposed examples are type A2k, and the relatively few remaining verses are best taken as SwS^w, with resolution of the second lift. (All the relevant verses are reproduced in Appendix B, in addition to being enumerated in the notes below.)

Heavy syllables significantly predominate in the first dip of ‘A1s’ verses – an inexplicable preference if such lifts could truly be suspended freely – generally of a sort directly comparable to Old English A2k verses (Suzuki 2014, 36ff.; Sievers 1893, 27, 33). There are some 120 verses in which the light lift follows the second element of a compound word:²⁶

26. *Vsp* 32.8, 37.7, 42.7, 43.7, 45.6, 52.5; (*Vsp H* 30.2); *Hym* 4.7, 5.3, 8.7, 10.3, 19.3, 20.3, 22.7, 23.7, 25.1, 30.3, 30.7, 35.7; *Þrk* 3.6*, 6.4, 18.6, 20.4, 26.2, 28.2; *Vkv* 4.2, 8.6; *HH* 7.8, 8.7, 11.7, 12.4*, 21.2, 25.5, 26.6*, 30.7, 36.12, 37.3, 38.7, 43.2, 50.12, 52.8*, 53.10, 54.2, 54.6; *HHv* 10.2, 33.3; *HH II* 12.8, 16.8, 26.2, 39.3, 40.8, 41.8, 43.8*, 44.8, 45.4, 46.6, 48.2, 49.4, 49.6, 49.8; *Grp* 4.4, 14.3, 21.6, 23.7, 28.8, 42.7, 48.6, 49.4; *Rm* 16.5, 17.7; *Fm* 35.3, 43.2, 43.7; *Sd* 5.2; *Br* 11.7, 12.4, 19.3; *Gðr I* 4.6, 12.6, 14.7, 26.4; *Sg* 18.6, 22.7*, 31.4, 34.7*, 37.8, 41.2, 44.8, 51.2, 56.6, 59.4, 64.4, 65.8*, 68.3*; *Hlr* 2.3, 6.2; *Gðr II* 12.2, 23.5, 29.7, 29.8, 30.7, 31.11, 41.7; *Od* 13.2,

- (306) víglið konungs
 ‘war-host of the king’ (*HH* 25.5)

In some 44 more instances, the conditioning syllable is the deuterotheme of a proper name:²⁷

- (307) Granmars synir
 ‘sons of Granmarr’ (*HH II* 24.2)

About as many, 49 verses, have an independently stressed word:²⁸

- (308) øxn tvá Hymis
 ‘two of Hymir’s oxen’ (*Hym* 15.8)

This gives some 229 examples where it can hardly be doubted that the preceding syllable could bear some appreciable degree of stress.

Beyond this, there are a further 29 verses where the dip is filled with a long derivational syllable:²⁹

21.7, 29.9; *Ghv* 8.5; *Bdr* 4.6, 9.2, 11.4; *Rþ* 38.2; *Hdl* 5.6, 9.7, 15.8, 30.9, 41.4, 49.4; *Grt* 19.3; *Her* 3.8, 15.6. Cf. Suzuki (2014, 33, n. 10). The nine verses marked with an asterisk involve contracted forms, which I have generally scanned as having their older, disyllabic forms. If they are seen as monosyllables, then they belong with short verses of the form SsS.

27. *Vsp* 11.4, 12.2, 13.7, 15.4, 15.6, 55.3, 66.7; *Vsp H* 11.6 (note further that 11.4, 11.8, 13.11, 15.4, and 15.6 are closely paralleled in *Vsp* and hardly constitute additional examples; 11.6 is repeated within the *H* text as 13.6); *HH* 1.7, 18.4, 18.6, 30.2, 46.2; *HHv* 1.6, 5.6, 38.2, 43.6; *HH II* 24.2, 25.3, 25.8, 27.2, 27.4, 36.8; *Sg* 55.5, 63.2; *Gðr II* 7.7, 19.1, 19.3, 19.7, 25.6; *Ghv* 1.8; *Hdl* 21.2, 24.3, 28.8, 32.4, 40.8, 46.8, 47.8; *Grt* 1.6; *Her* 9.2, 17.3, 20.8, 21.2, 27.4. Cf. Suzuki (2014, 34, n. 12).

28. *Vsp* 1.7, 50.2, 59.6, 66.3; *Hym* 2.3, 15.8, 16.8, 24.4, 33.8; *Þrk* 21.6, 24.10; *Vkv* 2.3; *HH* 6.3, 7.4 (em.), 16.7, 29.2, 42.6; *HHv* 9.8, 40.4; *HH II* 2.6, 7.8, 9.4; *Grp* 9.4, 10.6, 41.8; *Rm* 11.8; *Fm* 33.6; *Sg* 2.6, 65.4; *Hlr* 2.8; *Gðr II* 9.7, 13.2, 22.2, 23.2, 23.7, 25.3*, 35.2, 35.6, 35.10; *Gðr III* 8.6; *Od* 19.6; *Ghv* 1.3; *Rþ* 6.2, 20.2, 33.6; *Hdl* 48.4, 50.8; *Grt* 7.6, 23.6. Cf. Suzuki (2014, 35, n. 13). These verses, of course, face the familiar problem that some could just as well be taken as type D. I generally follow the syntactic approach of Suzuki (2014, 116-9), though I have not followed his judgement in every specific instance. I accept every verse he identifies as ‘A1s’ as A2k, but also add *Þrk* 21.6 and *HHv* 9.8, which seem to clearly have a displaced object and a subject in closer constituency with the verb. I also include *Vsp* 50.2, 59.6, *HH II* 2.6, and *Grt* 23.6, which all involve a displaced ‘intransitive preposition’ which seems to leave a verbal argument (subject or direct object) in closer constituency with the verb (cf. Faarlund (2004, 109, 147f.)). The scansion of these verses is, however, not entirely certain, and it is possible that *Hdl* 42.3, *líðr lōnd yfir*, where the double alliteration suggests a scansion of type D (S/Ssw), should point the other way. I have assumed that in this last case *lōnd* is a prepositional object directly dependent on *yfir*, and so distinct from the other verses in question where the preposition is an objectless adverbial ‘particle’. The exclusion of the few verses where my scansion differs from Suzuki’s would not change the overall picture in any significant way. One should also bear in mind that if Yakovlev’s suggestions about Old English metre can be applied to Old Norse, the distinction between A2 and Da may not really be meaningful.

29. *Hym* 5.6, 8.4, 21.2; *HH* 7.2, 10.6, 11.4, 14.6, 20.2, 27.7, 53.6; *HH II* 1.8, 3.2, 10.3, 11.6, 14.2; *Grp* 9.6, 21.3, 23.4; *Rm* 15.2; *Sg* 13.14; *Hlr* 11.7; *Gðr II* 17.2, 34.4, 42.7; *Bdr* 14.8; *Rþ* 6.6, 20.6, 33.10; *Her* 24.6. Cf. Suzuki (2014, 36, n. 14).

- (309) hildings synir
 ‘sons of the warrior’ (*HH II* 11.6)

Such endings seem to count as ‘heavy’, and so capable of suspending resolution in *Bēowulf*, though their status in the rest of Old English poetry is more doubtful (see note 98 in §2.4.1.3, and further Russom 2001, 56-63). On the Norse evidence alone, there seems to be no compelling reason to assume that these syllables – derivational *-ug/-ig* and *-ing/-ung*, the superlative formant *-ast*, the participial formant *-endr* – were defooted, *pace* Suzuki (2014, 36). To what extent the rules are the same as in *Bēowulf* is harder to say. At least in Norse, derivational and inflectional syllables seem to behave differently: inflectional syllables, even when heavy, do not condition suspension, cf. the verbal middle ending *-sk* (Sievers 1885a, 8). Conversely, while the Old English equivalents of *-ig/-ug* are clearly light, they do seem to act as heavy in Norse. It may simply be that in Norse, inflectional endings are defooted, while derivational ones are not.

In addition to the half-lines discussed so far, there are a number of examples where the first dip is filled by a distinct function word, which are more difficult to assess in an objective manner. Eight of these have a displaced pronoun, article, or adverb, and two more have a non-displaced possessive pronoun, all of which might reasonably be scanned as heavy feet:³⁰

- (310) ferð mín heðan
 ‘my company hence’ (*Sg* 69.6)
- (311) mól míns fǫður
 ‘my father’s (daughter) ground’ (*Grt* 21.1)

Two more verses highlight the difficulties of working with such a limited manuscript tradition. The first comes from *Vǫluspá*:

- (312) a. Baldr mun koma
 ‘Baldr will come’ (*Vsp* 62.4)
- b. man Baldr koma
 ‘Baldr will come’ (*Vsp H* 54.4)

If we did not have the *Hauksbók* version of *Vǫluspá*, this would seem to be a straightforward example of a SwŠw pattern, but variation of this half-line between texts

30. Displaced are *Hym* 34.2, 38.8; *Prk* 30.3; *Grp* 4.8, 23.8, 46.2; *Sg* 69.6; *HerPr* 2.4. Non-displaced pronouns are found in similar phrases in *Hdl* 20.4 and *Grt* 21.1; on these compare, e.g., *HH II* 16.7, where the undisplaced pronoun *míns* alliterates without obviously bearing any special rhetorical emphasis.

makes it rather doubtful as evidence. If anything, the Norwegianism *man* in the *H* text may speak to that being the older reading in this instance (in which case the scansion would be as type C).

A much more problematic line comes from *The Waking of Angantýr* where the manuscripts disagree sharply (Jón Helgason 1924, 21, 106):

- (313) a. *H*: skulum við talaz
 b. *R*: rædumz fleira uid
 c. *U*: og rædum fleira

It is very hard to be certain of what the original reading here was, or which (if any) of the attested variants is actually metrical. But the only reading which could involve suspension of resolution is that of *H*, and it is possibly telling that *R* and *U* agree against it in having the verb *róðask*. See Tolkien ([1960] 2010, xxxi) for a summary of the textual situation; he notes that agreement of *R* and *U* should usually give a good indication of the original reading of the saga, though he also comments that the poetic sections in *H* sometimes seem better, even when isolated. The variation here, at any rate, should warn us not to read too much into the metrical status of *talaz* in (313a). Both of these textual problems serve as a reminder of the narrow manuscript basis available to work from for most poems.

The material discussed so far accounts for the vast majority of potential ‘A1s’ verses, but there are a handful where the dip does not seem to contain any syllable that would normally condition suspension of resolution. Only three verses have the most basic potential pattern, with no bracketing mismatches:

- (314) kröpturligan
 ‘mightily’ (*Hym* 28.7)
 (315) sáttir saman
 ‘reconciled ones together’ (*HH II* 21.3)
 (316) kropnir knúar
 ‘gnarled knuckles’ (*Rþ* 8.5)

The second of these is suspect, fitting the sense of the passage poorly (Jónas Kristjánsson and Vésteinn Ólason 2014b, 276f.). How it might be emended is not clear, but it may be better to regard this as a corrupt half-line, anomalous in metre as well as sense. The other examples seem to be free from textual suspicion, and constitute genuine examples of SwŠw patterns.

There are eleven more verses in which the drop seems to consist of a single monosyllabic, unstressed word. Four of these occur in the *Dvergatal*, and their assessment is somewhat complicated:

- (317) Nýi ok Niði
‘Nýi and Niði’ (*Vsp* 11.1, *VspSn* 5.1)
- (318) Þekkr ok Þorinn
‘Þekkr and Þorinn’ (*Vsp* 12.3)
- (319) Nár ok Náinn
‘Nár and Náinn’ (*Vsp H* 11.5, 13.5)
- (320) Þrár ok Þráinn
‘Þrár and Þráinn’ (*Vsp H* 12.5)

The variants of this catalogue passage recombine elements, and not infrequently the linking *ok* is omitted, or names are otherwise combined, so that the same names may occur in very different types of half-line:

- (321) Nár, Náinn
‘Nár, Náinn’ (*VspSn* 5.5)
- (322) Þrór, Þróinn
‘Þrór, Þróinn’ (*VspSn* 6.5)
- (323) Vindálfr, Þráinn
‘Vindálfr, Þráinn’ (*Vsp* 12.2)
- (324) Nýi, Niði
‘Nýi, Niði’ (*Vsp H* 11.1)

The range of these variations makes it hard to judge these verses metrically. To what extent are the variants due to scribal divergences, such as the accidental insertion or omission of *ok*? Should all the variants be taken as metrically valid? If not, which are unmetrical, and which acceptable? This problem of variation aside, extended catalogue passages of this sort, where the content largely consists of proper names, should be approached with caution, since metrical considerations may not have been the most significant factor governing composition or, especially, transmission (Gering 1924, 2).

The remaining seven examples of possible A1s verses may simply be listed:

- (305) fló þá Loki
‘Then flew Loki’ (*Þrk* 5.1, 9.1)

- (325) leið at huga
‘bring to mind’ (*Grp* 12.5, 18.5)
- (326) sat þar kona
‘a woman sat there’ (*Rþ* 16.1)
- (327) Ióð ok Aðal
‘Ióð and Aðal’ (*Rþ* 41.3)
- (328) Álfr um getinn
‘Álfr born’ (*Hdl* 19.8)

In (305), whose validity is supported by its repetition, one might just about be able to argue that *þá* could be taken as stressed, though it is difficult to find clear parallels. In the rest, there seems to be no possibility at all of assuming stress on the medial element.

This small residue of potential ‘A1s’ verses can be supplemented by five more half-lines that have polysyllabic dips:

- (329) vígið okkr saman
‘bless us together’ (*Þrk* 30.7)
- (330) nú³¹ er því lokit
‘now is it finished with that’ (*Grp* 18.1)
- (331) sǫðlaði Grana
‘saddled Grani’ (*Gðr I* 22.4)
- (332) ríða vit skolom
‘we should ride’ (*Hdl* 1.6)
- (333) sitia vit skolom
‘we should sit’ (*Hdl* 8.2)

In these expanded verses, we can hardly assign any metrically relevant prominence to words like *okkr* or *vit*, since this would result in unmetrical verse patterns with five positions or unusual reversed feet. Gering (1924, 192) doubts the metrical validity of these, but they may be provisionally added to the still-tiny body of potential evidence for a type ‘A1s’.

The number of apparent type ‘A1s’ is small enough that chance corruption cannot entirely be ruled out, but it seems likely enough that we are, at least in some cases, dealing with real metrical patterns. The repetition of some verses, e.g. (305), (336), reinforces this impression.

31. Emended from non-alliterating *þá*.

However, accepting that some or all of these verses are authentic by no means straightforwardly leads to the conclusion that they involved unconditioned suspension of resolution. As noted above, these verses cannot be evaluated with direct reference to a supposed four-position ideal, but must be compared to the set of verses actually occurring in fornyrðislag, which includes a number of three-position SwS verses. There are at least 79 verses of this sort, scattered (not necessarily evenly) across the corpus (see Appendix B):

- (334) aptan dags
 ‘evening of the day’ (Sg 6.2)

These are rather more frequent than verses like (316) and (305), and would seem to license their scansion as SwS^w.

Similarly, I can see no problem with scanning the verses like (329) as Sww/S or Sw/(w)S, with the same pattern as:³²

- (335) mótti hann Þór
 ‘he met Thor’ (Þrk 9.7)

The same goes for a further small set of verses, variants of the light type A3, which might be interpreted as showing unconditioned suspension. There are seven single-lift verses which end with a Šw word:³³

- (336) þá kvað þat Loki
 ‘then Loki said this’ (Þrk 18.1, 20.1)
- (337) nú em ek svá fegin
 ‘now I am so eager’ (HH II 43.1)
- (338) þar liggr Reginn
 ‘there lies Reginn’ (Fm 33.1)
- (339) né hann kono
 ‘nor (did he kiss) the woman’ (Sg 4.5)

32. Suzuki (2014, 78f, table 2.30) finds around 187 verses of the pattern Sww(w...)S, 143 of which of two syllables in the dip. His classifications are often doubtful here, but two to three dozen remain even after those with a significant medial stress are set aside (see Appendix B). This makes for a rate of around 12-18% of Sww...S verses with a resolved final lift, entirely in keeping with the rate for typical type A half-lines.

33. Compare Suzuki (2014, 73, and n. 50), who counts 27 such A3 verses. However, 15 of his examples involve the names *Völundr* (twice) or *Sigurðr* (13 times), whose initial syllables are problematic with regards to quantity (§3.3.1.3). Several more of his examples have issues of one sort or another: Sg 12.1 is not A3, but type C with transverse alliteration; Sg 69.8 and Hdl 41.5 could be A2k and C with irregular alliteration, and are at any rate rhythmically problematic. Ghv 2.1 is suspiciously short, and may be pushing the bounds of metricality whatever our view of resolution.

(340) hvárt ek skylda vega
 ‘whether I should fight’ (*Sg* 37.3)

(341) hverr er þat saát
 ‘who has not seen that’ (*Gðr III* 11.2)

These verses can probably also be scanned with resolution as ww(w...)/S^w, i.e. as Suzuki’s type ‘A3-’.³⁴ They would then have the same pattern as:

(342) þat skal gull
 ‘shall that gold’ (*Rm* 5.1)

Suzuki gives three arguments in favour of scanning verses like (336) with short lifts instead of resolution, but these do not seem particularly persuasive once we set aside his dubious examples with *Völundr* and *Sigurðr* (see §3.3.1.3). First, Suzuki (2014, 74) argues that type A1s verses like (305) justify the unconditioned suspension of resolution here. In the current context, this point would of course be circular, since it is precisely the possibility of unconditioned suspension that is at issue (and could easily be turned on its head: if unconditioned suspension is found to be impossible elsewhere, it is unlikely that it should occur in this type alone). Suzuki further notes that verses of the type A3- tend to have slightly longer dips than normal A3 verses, 3-4 syllables on average as opposed to 2-3, and argues that these ambiguous verses, like (336), have shorter dips, like A3. This argument, however, does not hold if we set aside the many dubious verses Suzuki includes. Of the more secure verses, three have a trisyllabic initial dip, while there are two examples each of dips with two and four syllables: this average of three unstressed syllables in the first part of the verse is compatible with Suzuki’s findings for both A3 and A3-. We simply do not have a clear enough picture from the limited data to come to any conclusions using this line of attack. Suzuki’s third argument is that the second syllable of these Šw sequences tends to be overheavy, with three or more moras, encouraging suspension of resolution (74-5). Suzuki’s findings, however, are heavily influenced by his inclusion of the names *Sigurðr* and *Völundr*. Aside from these names, there is only one example, *Fm* 33.2 with an overheavy final syllable. Against this, four verses have a monomoraic final syllable. All in all, I can see little positive reason to think that resolution was suspended in any of these seven verses.

34. Suzuki finds 28 verses like this that end in a plain monosyllable (2014, 82, n. 58). A few of these are somewhat doubtful – Neckel, for instance, prints *Fm* 42.1 and *Gðr I* 26.1 with a restored ending to make them full A3 verses – but on the whole the type seems about as well established as any similar marginal pattern.

Altogether, there is no solid evidence that unconditioned suspension of resolution was a generally available licence in Eddic poetry. Kristján Árnason (1991, 60) criticizes Sievers' theory of resolution for failing to account for 'so many occurrences of light syllables in ictus position', but 'so many' turns out to be a very small number. There are no examples in which the assumption of resolution would result in an unparalleled type, or (just as importantly) result in a suspiciously large increase of any marginal pattern. All told, there are perhaps 23 verses which could potentially be 'A1s' or 'A3s'. There are some 142 Sw/S, Sww/S, or ww/S verses, which provide an ample model for taking the ambiguous verses as Sw/S^w, Sww/S^w, or ww/S^w.³⁵ This would make the rate of resolution about 13.9%, comparable to the 14.7% of resolved initial lifts in type A.

The notion that these verses do have light, suspended lifts may originally stem largely from the notion that the four-position principle applies overtly in every verse, and that three-position verses should be regarded with the same suspicion as in Old English. Since this is clearly not empirically true of Eddic poetry, and since the proportion of three-position verses with resolution is comparable to the general rate of resolution in fornyrðislag, there would seem to be no justification for positing unconditioned suspension in these verses.

3.3.1.2 Resolution in the Second Lift of Type A

The scansion of verses like *Þrk* 5.1 (305) as having a resolved second lift goes against the assertion that resolution is impossible in the second arsis of a half-line (Russom 1998a, 103-5; 2002a, 314). It is true that on a descriptive level, resolution seems relatively rare in second feet (Sievers 1879, 307), but a closer look at the distribution of word-types in the metrical system suggests that, at least in type A, this is due to lexical biases, not to any constraints directly affecting resolution in a non-initial ictus.

We can get an initial sense of what resolvable sequences were available to Norse poets by looking at the *first* foot of type A verses, where we find some 116 examples of resolved initial lifts. Interestingly, the vast majority – 109 – of these have a word break immediately after the resolved sequence, Šw.w = S^w.w.³⁶ That is, they have

35. As shown in Appendix B, there are 11 (sometimes dubious) SwŠw verses like (291), and at least 79 SwS verses like (334). We find 5 Sww...Šw half-lines like (329) against perhaps 37 like (335), with Sww...S (though some of these may be reducible to SwS). Lastly, there are 7 good ww...Šw verses like (336), paralleled by the 26 ww...S half-lines like (342).

36. *Vsp* 2.5, 4.2, 11.1, 12.7, 16.3, 24.5, 51.2; *Vsp H* 39.8; *Hym* 17.1, 21.7, 37.8; *Þrk* 7.8, 8.2, 10.6, 10.8, 14.8, 30.3, 31.4; *Vkv* 4.4, 9.2, 11.8, 21.3, 23.7, 31.1, 40.4, 41.4; *HH* 22.5, 46.8, 47.3, 49.1,

a bracketing mismatch, as we can see in a typical example:

- (343) faðir ok móðir
 ‘father and mother’ (*Gðr I* 7.1)

Part of the reason for this preference is the extreme scarcity of the most obvious sort of alternative, words of the shape Šw̃w. As Kuhn (1939, 182) has noted, monomorphemic words of this shape are vanishingly rare in Eddic poetry as a whole. There seem to be only two examples in type A that are truly morphological simplexes:

- (344) svaraði Hogni
 ‘Hogni answered’ (*Gðr II* 10.1)
- (345) riðoðo augo
 ‘(his) eyes rolled’ (*Rþ* 21.6)³⁷

This rarity is partly linguistic, with earlier words like **katilaz* or **taliðō* undergoing apocope or syncope to become disyllabic: *ketill*, *talða*. New words of this shape were, in turn, created from old Šw̃w words, with shortening of a medial long vowel: **swarōðē* > *svaraði*. Most words of this sort, including this example, are class II weak verbs. Such verbs are not common in poetry in any tense, but their preterite forms are particularly scarce in any metre, Eddic or skaldic (suggesting that whatever they are rare, it is not because of anything unique to fornyrðislag). This avoidance may have a prosodic basis (see further §3.3.2), but its immediate effect is that there is little linguistic material available to fill out a Šw sequence with a single word.³⁸

We find a few more examples of Šw̃w sequences that are morphologically complex, where the final syllable comes from the addition of the enclitic negative *-a*, but the pattern remains very rare, found just three times in fornyrðislag (cf. Gade 1995, 64, 256 n. 10 for a comparable pattern in skaldic verse):

49.7, 55.7; *HHv* 5.3, 36.2; *HH II* 4.12, 14.6, 17.3, 22.5, 24.8, 26.7, 30.2, 46.4; *Grp* 7.5, 9.2, 11.7, 16.1, 18.2, 18.4, 19.5, 21.8, 38.3, 38.7; *Rm* 13.1, 15.6; *Fm* 42.6; *Br* 7.5, 11.5, 14.5; *Gðr I* 7.1, 24.3; *Sg* 8.9, 29.1, 57.5; *Hlr* 10.6, 14.3; *Gðr II* 3.5, 4.1, 16.2, 18.3, 18.11, 40.8 (em.); *Gðr III* 4.8; *Od* 2.8, 4.7, 21.1, 26.1; *Ghv* 6.3, 10.4; *Bdr* 2.4; *Rþ* 2.9, 13.9, 21.4, 24.7, 27.5, 34.7; *Hdl* 3.5, 7.1, 7.10, 23.3, 31.3, 32.1, 34.3, 36.3, 39.3, 41.1; *Grt* 5.5, 5.6, 5.7, 9.5, 18.4, 18.5, 19.6, 24.3; *HerPr* 2.4; *Her* 6.8, 14.1, 14.5, 25.2, 29.1, 29.4. Cf. Suzuki (2014, 213, n. 2). I have again omitted verses with the names *Egill* and *Sigurðr* out of consideration (§3.3.1.3): *Vkv* 2.2; *Grp* 3.5, 24.3, 40.3, 43.3. One could also include the short verse *Þrk* 18.3, and possibly also the nine instances of *vitoð er enn, eða hvat* from *Vsp*, depending on how this phrase is to be scanned.

37. This verse does not lend itself to a concise translation; see Dronke (1997, 224).

38. Words with unshortened Šw̃w, such as the inflected form *konungi*, require further discussion; see §3.3.1.3. For now, it is enough to note that they are never used to form a S^ww = Šw sequence.

- (346) *segiðaða meyiom*
 ‘do not say to the maidens’ (*Vkv* 22.5)
- (347) *þoriga ek at segia*
 ‘I do not dare to say’ (*Vkv* 26.7)
- (348) *dugira*³⁹ *þér at leyna*
 ‘it will do you no good to hide away (the sword)’ (*Her* 18.10)

There is only one type of word reasonably common in Norse poetry which would have allowed a resolved lift without a bracketing mismatch: compounds like *iq̃tunheimr*. These are, however, not in fact employed in case-forms where they would fill out a S^ws foot in any position in fornyrðislag. I can find only two examples in the first foot of a type A verse:

- (349) *valarípt vel fáð*
 ‘well-decorated exotic cloth’ (*Sg* 66.3)
- (350) *fq̃ðurleifð hafi*
 ‘should have his paternal inheritance’ (*Hdl* 9.7)

Lexemes of this type are only common when they have an additional inflectional syllable, as in *iq̃tunmóði* (metrically Ssw), with some 56 lexemes occurring in around 88 verses. A large number of these are place-names, which might favour the dative (*himinfiqlum*) for pragmatic reasons. But this explanation does not fully suffice, since we do find Ss feet with other place names:

- (351) *Sólfiql, Snæfiql*
 ‘(he gave him) Sólfiql and Snæfiql’ (*HH* 8.3)
 SsSs
- (352) *salr í Sámsey*
 ‘hall (stands) in (the southern part of) Sámsey’ (*HerPr* 2.7)
 SwSs

There are no comparable examples for ^{*}*himinfiql* or ^{*}*Heðinsey*, with S^ws for Ss.

The rarity of such forms in fornyrðislag contrasts with their relatively high frequency in prose. In the passages accompanying the heroic poems in the *Codex Regius*, it is easy to find words like *fq̃ðurarf*, *banasár*, and *sonargqltr*, though the size of this corpus is much smaller.⁴⁰ In *Vqlsungasaga* IX, which tells the same story as

39. Emended unproblematically from *dugiræ (H)* (Jón Helgason 1924, 29, n. 4).

40. In the prose accompanying the heroic poems, I count seven words like *fq̃ðurarf* and thirteen like *Gnitaheiði*. By this ratio, we ought to expect some 40 or 50 *fq̃ðurarf*-type compounds in fornyrðislag.

the Helgi poems, rich in place-names of the sort in question, we find forms like *Heðinsey*, *Varinsfiqrðr*, *Varinsey*, and *Frekasteinn*, though far fewer places in total are mentioned in this prose version than in the corresponding poems.

Furthermore, a number of examples of words of this shape are readily found in dróttkvætt (Gade 1995, 60-4), and in at least some lióðaháttir poems: *Grímnismál* alone furnishes some six examples,⁴¹ over half as many as in the entire corpus of fornyrðislag. No matter what angle these words are approached from, the conclusion seems to be that it was a poetic practice of fornyrðislag to avoid using words of this shape. Just why *Himinfiql* should be more metrically problematic, regardless of position, than either *Sólfiql* or *Himinfiqlom*, or *reginþing* than *hiqrþing* or *reginþinga*, is not at all clear to me; nonetheless, whatever the reason, such compounds seem to have been used too rarely in fornyrðislag to serve as a significant vehicle for resolved lifts.

Putting the evidence from first lifts together, we find that S^ww sequences in fornyrðislag could normally only be filled by two-word sequences, S^w.w. Single words that could fill out S^ww are either rare in all Norse poetry (the *svaraði*-type), or else not normal in fornyrðislag specifically (the *iqtunheimr*-type). Such words are found very occasionally, but in typical versification, resolution in a Sw foot goes hand-in-hand with a word-break.

With this in mind, let us return to the second feet of type A verses. Resolution is indeed very rare, occurring only 13 times at best. In 9 of these cases, we find a bracketing mismatch, as expected (cf. Suzuki 2014, 236):

- (285) varðar, at **viti svá**
 ‘it is important that one should know this’ (*Hdl* 18.9; 17.7 by emendation)
- (353) hvetið mik eða **letið mik**
 ‘egg me on or hinder me’ (*Br* 14.5)
- (354) hóf sér á **høfuð upp**
 ‘heaved up onto his head’ (*Hym* 34.5)
- (355) móður átti **faðir þinn**
 ‘your father had a mother’ (*Hdl* 13.1)
- (356) vqromz, at **viti svá**
 ‘we feel that one should know this’ (*Hdl* 31.3, 34.3, 36.3, 39.3)

As noted above (§3.1.2), bracketing mismatches in general are extremely rare in the second feet of A verses, occurring only 37 times in our corpus. If we control for

41. *Veratýr*, 3.3; *Himinbiqrgr*, 13.1; *Nóatún*, 16.1; *Ratatoskr*, 32.1; *Duraþrórr*, 33.5; *Reginleif* 36.8.

this rarity of two-word final feet, then resolution does not appear nearly so rare in second lifts: about 24.3% of A half-lines with a final bracketing mismatch have a resolved second lift. This rate is actually considerably *higher* than in initial lifts, where 14.7% (109 of 739) of mismatched Sw feet have a resolved first position. This apparently higher rate is due to the influence of *Hyndlolióð*, which contains the lion's share of second-foot bracketing mismatches (20 of 37 examples), seven of which have a resolved lift. If we set this poem aside, there are 17 mismatched final feet, two of which show resolution. This rate, around 11.8%, is slightly lower than that of initial feet.

In initial feet, we found only seven examples, at most, of resolved lifts not accompanied by a bracketing mismatch, and, as expected, the frequency of such words is similarly low in second feet. The two clearest examples are made with *íqtunheimr*-type compounds, as is one further more difficult verse:

- (357) eina ogurstund
 ‘one tide’s period’ (*Vkv* 41.5)
- (358) Ámr ok Iqsurmarr
 ‘Ámr and Iqsurmarr’ (*Hdl* 18.7)
- (304) mál qll meginlig
 ‘all mighty pledges’ (*Vsp* 26.7, *Vsp H* 22.7)

See §3.3.1 on the difficulties with (304), where the resolved lift follows a heavy syllable.

That verses of this sort are so rare is doubly expected. Not only are *íqtunheimr*-type compounds rare in fornyrðislag, Ss compounds of any sort are uncommon verse-finally, found only about 17 times.⁴² Once again, the scarcity of second-lift resolution follows from more general factors.

There is one possible example of a verse-final S^ww word, in a very problematic half-line:

- (359) slíks dómi kvaðattu
 ‘such a thing you said’ (*Od* 12.5)

42. *Vsp* 24.5, 41.5, 41.7, 45.7, 45.9; *Vsp H* 30.3; *Vkv* 21.3, 23.7; *HH* 50.7; *HH II* 45.11; *Gðr I* 24.3; *Sg* 4.3; *Gðr II* 15.7; *Rþ* 8.8; *Hdl* 14.5; *Grt* 23.5; *Her* 14.1. Cf. Suzuki 2014, 51, n. 30; 51, n. 31. These naturally favour the on-verse, since that is the only position in which the double alliteration required of second-foot poetic compounds can be accommodated. Beyond these examples, there are some 37 further verses which end in a proper name with the shape Ss, and a handful of mismatched S.s feet.

This verse is difficult to scan even aside from the final word. It seems like the root of *dómi* ought to carry at least secondary stress, which would make the scansion Ssw/Šw-w, with either five or six positions, and an initial Ssw foot of the reversed sort strongly disfavoured and poorly paralleled in fornyrðislag (cf. Kuhn 1939, 216). Regardless of how the beginning of the verse is to be taken, the final word is morphologically very complex, *kvað-at-tu*, with two clitic elements added to a monosyllabic base word.⁴³ Precisely how the phonology and morphology of this word should interact is not at all obvious. Resolution as S^w is probably the most plausible assumption, but with so many uncertainties, this verse is too problematic to provide good evidence about the behaviour of resolution.

That (non-)resolution in a final Sw foot is due primarily to more general lexical factors is also seen in type A3: resolution is very much possible, but largely limited to mismatched, two-word sequences. About 46 A3 verses end with two-word, S.s feet, of which eleven have a resolved lift, S^w.s:⁴⁴

- (360) þá gengo regin qll
‘then all the Powers went’ (*Vsp* 6.1, 9.1, 23.1, 25.1)
- (361) eða skyldo goðin qll
‘or all the gods should’ (*Vsp* 23.7)
- (362) þó mynda ek gefa þér
‘still I would give (it) to you’ (*Prk* 4.1)
- (363) vit skolom aka tvau
‘we two must drive’ (*Prk* 12.7, 20.5)
- (364) því var á legi mér
‘thus was to me by the sea’ (*HH II* 9.3)
- (365) hnipnaði Grani þá
‘then Grani drooped’ (*Gðr II* 5.5)
- (366) grófat mik faðir niðr⁴⁵

43. On the lack of a personal ending, see Noreen ([1923] 1970, 362 (§534.2d)).

44. The 35 without a resolved lift are: *Vsp* 21.5, 25.5; *Vkv* 5.3, 17.2, 21.7; *HH* 50.3; *HH II* 2.3, 8.1, 9.1, 18.5, 40.1, 41.1; *Grp* 32.5, 42.5; *Rm* 11.5, 13.7, 14.7; *Fm* 35.7; *Sg* 69.7; *Hlr* 2.5, 10.1, 10.5; *Gðr II* 2.3, 13.3; *Gðr III* 3.1; *Rþ* 45.1, 47.3; *Hdl* 5.1, 5.5, 5.7, 6.5, 7.3, 10.3; *Her* 1n.1, 19.1. Compare Suzuki (2014, 58, n. 40), though I have pruned his list by removing examples which are better seen as type C with uncontracted final elements (see note 4 above). One might add the textually problematic *Ghv* 8.3.

One could also include short verses of the rhythm wSs. There are three mismatched examples without resolution, *Sg* 28.2, *Rþ* 43.1, and 46.1, and one with, *Rþ* 28.2.

45. This is the reading in *H* and *U*, but in the latter text it has been stricken out; the line is absent in *R* (Jón Helgason 1924, 24, 109).

‘no father buried me under’ (*Her* 12.1)

Beyond these mismatched examples, there are only four further instances of resolved lifts, all made, unsurprisingly, with *íqtunheimr*-type compounds:

(303) gnýr allr íqtunheimr

‘all Íqtunheim groans’ (*Vsp* 48.3)⁴⁶

(367) era konunglikt

‘it is not kingly’ (*Fm* 40.3)

(368) at frá konungdóm

‘that from the kingdom’ (*Sg* 14.5)

(369) ǫll váro sǫðuldýr

‘the saddle-beasts were completely’ (*Gðr II* 4.5)

Matters seem consistent over the various A types. Resolution is almost entirely limited to stressed monosyllables, and therefore is usually found in positions where bracketing mismatches are most freely tolerated. Once this is controlled for, there does not appear to be any significant bias against resolution in second feet. With verses like (353) and (360) providing good evidence for resolved second lifts in full A and A3 verses, there seems to be little objection to taking the Šw sequences in the shorter variants discussed in §3.3.1.1 as resolved. There is some question as to why *íqtunheimr* compounds are so rare in any position, occurring only nine times in fornyrðislag (twice at the start of an A verse, thrice at the end of one, and four times in an A3 half-line). But since these words are rare in any position, even where resolved lifts are otherwise frequent, it seems to be a problem related to the poetic lexicon employed by different metres rather than to any constraints on resolution directly.

3.3.1.3 *Light Lifts in Type C and Konungum-words*

The only really good candidates for wholly unconditioned suspension of resolution in fornyrðislag come from a handful of ‘light’ type C verses with an apparently short first lift, which metricists traditionally scan as unresolved, although resolution is elsewhere found in this metrical position, as in (277) (Sievers 1879, 303f.; 1893, 60f. (§38.3a)):

(370) af konungom

‘from kings’ (*Gðr II* 34.2)

46. On the scansion, see §3.3.1.

- (277) né svalar unnir
 ‘nor cold waves’ (*Vsp* 3.4)

In (370), resolution would give us a w/Sw verse, an otherwise unparalleled rhythmic contour,⁴⁷ while suspension would allow the verse to be scanned as type C, w/Sww or w/Ssw. An exact count is hard to give, since there are etymological difficulties with some potential verses (cf. Kuhn 1939, 202), but there are six pretty clear examples of similar verses. In addition to (370) we have:

- (371) ok í sæingo
 ‘and in the bed’ (*Gðr I* 20.2)
- (372) ok unandi
 ‘and enjoying’ (*Sg* 16.5)
- (373) í sæingo⁴⁸
 ‘in the bed’ (*Sg* 24.2)
- (374) við konungi⁴⁹
 ‘by a king’ (*Sg* 54.4)
- (375) und⁵⁰ vegondom
 ‘beneath slayers’ (*Gðr II* 4.8)

All these examples have the shape Šw̄w, with a long medial syllable.

There is a larger number of more uncertain examples:

- (376) en inn níunda
 ‘but the ninth’ (*Vkv* 3.5)

This verse occurs in the on-verse and has a more substantial upbeat, so a more typical A3 metrical pattern wwS^ww would appear as plausible as a light type C scansion of wwŠw̄w.

Also ambiguous is:

- (377) kvómo konungar
 ‘kings came’ (*Gðr II* 24.5)

This could be a D* verse with suspension of resolution (Sw/Šw̄w), or a type A verse with a resolved second lift (Sw/S^ww).

47. The closest attested pattern is wSs, itself found only four times (and all but one of these are in *Rígsþula*): *Sg* 28.2; *Rþ* 28.2 (with resolution), 43.1, 46.1.

48. It is likely that this and (371) are related, perhaps with one of these poems directly borrowing from the other.

49. This final syllable is an editorial restoration, but a very secure one.

50. Emended from *of*, a change without metrical significance.

The real problem in establishing a dataset of light type C verses is etymology, with a large number of potential examples having initial lifts which could be either light or heavy depending on our historical judgements. Two problematic nouns are found in four verses:

- (378) hefir þú ørindi
‘do you have an errand?’ (*Þrk* 10.1)
- (379) ok ørindi
‘and an errand’ (*Þrk* 11.2)
- (380) ok ekki ørindi
‘and no errand’ (*HHv* 5.2)
- (381) ok faðerni
‘and patrimony’ (*Sg* 70.6)

The recurring *ørindi* has been much discussed. Sievers plausibly took the manuscript form to conceal an original variant with a long root vowel, appealing to the alternate Norse form *eyrindi* (Sievers 1885a, 34, n. 8; 1885c, 531; Heusler 1925, 163). The history of this word is, however, generally unclear. Comparable West Germanic forms, OE *ærende*, OS *ārundi*, OHG *ārunti*, have long vowels (PGmc **ēr*-?), but do not match either *ø*- or *ey*- in Norse; a possible connection with Gothic *airus* only complicates the picture (Kuhn 1939, 187f. de Vries 1977, 682, s.v. Kroonen 2013, 36, s.v. **arundja*-). All that can be said is that both *ørindi* and *eyrindi* existed in Norse, and that the possibility of confusion between the two is too high to read much significance into the apparently short lift in the poetry.

The etymology of *faðerni* ‘patrimony’, apparently substantivized from the adjective ‘paternal’, is also somewhat unclear. Some Germanic forms point to an older form **fadrīna*-, with a heavy initial syllable: Old Swedish *fæprini* in *Östgötalagen*, Gothic *fadrein* (on which see Casaretto 2004, 328, s.v.). In the related adjective for ‘maternal’, a similar suffix seems to be found: **mōdrīna*- > *móðerni*, Old English *mēdren* (and further *mēddernmāgas* ‘maternal kinsmen’, etc.). Perhaps suggesting an original **fadarnija*-, with a light first syllable, are *faðerni* itself, along with Old English *fæderen* (e.g. in *fæderen-mæge* ‘paternal relative’, *Beo* 1263a), and more distantly Latin *paternus*⁵¹ (Kuhn 1939, 206f.); we also find unumlauted forms like *móðerni*. See, in general, de Vries (1977, 108, 391, s.vv.). The Old English words, it should be noted, vary considerably, and more frequently than not we find forms

51. This form may be a red herring, as it might be a secondary formation within Latin (de Vaan 2008, s.v. *pater*).

like *fēdrenmēga*, with a closed root syllable, but also without the umlaut we might expect from the **-īn-* formant (Sweet 1885, 451, Ct. 45/18). To account for all these variations, we may need to posit derivatives to *r*-stems with both **-ar-nija-* and **-Ør-īna-*, which underwent a certain amount of interchange with each other in the development of the Germanic languages. On the evidence of Gothic *fadrein* – also a neuter substantive, and so a rather more immediate parallel than the Old English adjectives – I am inclined to take the **-rīna-* form of the suffix as more original to the noun for ‘patrimony’, which could mean that our scribal *faðerni* stands for a form where the *r* followed the *d* immediately, closing the root syllable. At any rate, as with *ørindi*, there is at the least too much uncertainty to place any great weight on the metrical significance on this word.

Two etymologically complicated proper names also occur in potential light C verses: *Vǫlundr* and the very frequent *Sigurðr*. The former occurs once in a relevant context:

(382) fyr Vǫlundi
 ‘before Vǫlundr’ (*Vkv* 9.6)

Although light *Vǫlundr* is certainly the normal form of the name in classical Old Norse, this is no guarantee that this is the form the *Vǫlundarkviða* poet knew and used. The etymology of the name is discussed by Rosenfeld (1969, 55, 62), who notes that the manuscript form could as easily go back to **Walhundaz* as to **Walundaz* (he argues further for a pre-form **Walnandaz*, with dissimilation and with a variant form of the suffix). Also interesting are variant forms with a long vowel, including *Vólundr* in Norse itself, as well as the well-known West Germanic forms *Wēland*, *Wielant*. A short vowel form is also found in OHG, *Walant*.

There is no clear solution to the etymological puzzle posed by this name, and the possibility is very real that the *Vǫlundarkviða* knew a long-stemmed form, either because he or she was composing in an earlier or dialectally different form of Norse where a variant like *Vólundr* was normal (so Gering and Hildebrand 1904, 213, n. 4.4, but contrast Gering 1924, 29ff.), or because of West Germanic influence (on other possible lexical influences from West Germanic, see Dronke 1997, 277, i.a.). Interestingly, most verses would be unaffected or even slightly improved if we were to read the poem with a long variant of *Vǫlundr* throughout.⁵² The only potentially

52. A heavy variant would make no difference in *Vkv* 2.10, 5.1, 6.3, and 33.8. There are six verses where the scansion would be somewhat improved – that is, would correspond to a more frequently attested pattern – with the heavy variant: 13.3, 29.5, 32.1, 38.1, 40.3, and 41.4. In 18.9 and 29.1 the scansion would change to D*, but it does not seem problematic to take either verse that way, given the general metrical context of *Vǫlundarkviða*.

problematic verses are:

(383) at ek við Vǫlund dǫma
‘that I deliberate with Vǫlundr’ (Vkv 31.8)

(384) né ek þik vilja, Vǫlundr
‘I do not wish upon you, Vǫlundr’ (Vkv 37.3)

A long form of *Vǫlundr* would make each of these verses clearly type A with anacrusis. Anacrusis is highly suspect in fornyrðislag as a whole, but *Vkv* appears to be one of the only poems for which it can be more securely established. With so few examples, the only conclusion that can be safely drawn is that the poet of *Vǫlundarkviða* could fairly plausibly have used a heavy form of this name, but clear positive evidence for this is very slight.⁵³ Given these doubts, it seems best to set aside the single example of (382) as uncertain.

Potentially more relevant to the problem of light C verses is the name *Sigurðr*, which Hans Kuhn makes the centrepiece of an influential explanation of the pattern. The etymological background of Kuhn’s explanation is the relatively late Norse sound change of **w* being lost before the labial vowel **o/u* (reduced from **ǫ*; note that **w* was not lost before full **ǫ*, as in the simplex *vǫrðr* ‘guard’). In *Sigurðr*, the change should only have occurred in the nominative and accusative singular, since these were the only case-forms where the etymological **a* of **-warðu-* became **ǫ* > **o/u* by u-umlaut: **Sigiwarðuz*, **Sigiwarðuⁿ* > **Sigworðuz*, **Sigworðu* > *Sigurðr*, *Sigurð*. In the genitive and dative, sound change would give **Sigiwarðauz*, **Sigiwarðiwi* > *Sigvarðar*, *Sigverði*. The familiar oblique forms *Sigurðar*, *Sigurði* are analogical extensions of the nominative/accusative stem, and there was a period

53. Similarly uncertain is the name *Egill*, found in the same poem. This form of the name is well-known from classical Old Icelandic, and an etymon **Agilaz* is supported by the Gothic name *Agil* (de Vries 1977, 95, s.v. *Egill*; Schönfeld 1911, 3f., s.v. *Agil*, *Agila*). This is presumably directly reflected in the name of the giant *Egill* at *Hymiskviða* 7.4. However, the elvish *Egill* of *Vkv* may instead be related to the distinct *aigil*, found at a very early date on the Pforzen buckle; this would correspond to Germanic **Agilaz*, Norse **Egill*/*Egill*. The shortening of **ei-* could be generalized from the oblique, where an overlong initial syllable would have been shortened: *Egli** < **Aiglē*, etc.; cf. *Helgi* < **Hailgē*. (The development of **Agilaz* has a dative *Agli* < **Aglē*, and this is the only form known by the time of classical Icelandic.)

A link with the *Aigil* of the Pforzen buckle with the *Egill* of *Vǫlundarkviða* is possibly supported by the presence of similar (though not identical) women’s names in both sources: *ailrun* and *Qlrun*. The Old English *ægili* on the Frank’s Casket appears to be a further reflex of the same name, though the ‘überschüssig’ final vowel (to borrow the characterization of Eichner 1991, 614) suggests it has been transferred to a different stem class. It may represent an *i*-stem [æ̃][.gi.li] < **Agiliz*, though it could also be a *ja*-stem [æ̃.gi][.li] < **Agiljaz* (Page 1999, 177).

These etymological doubts make it hard to know, when we run across a line like *Vkv* 4.3, *Slagfiðr ok Egill*, whether we are dealing with the line as the poet composed it, or with a substitution of the frequent Norse *Egill* for an older (possibly originally West Germanic) form **Egill*.

of considerable fluctuation (including the reverse analogy, with the oblique stem extended into the singular) before allomorphy was eliminated from the paradigm (Kuhn 1939, 200f.).

During the period most Eddic heroic poetry was probably composed, there is some direct evidence for the retention of the original, phonologically conditioned allomorphy. The earliest short nominative form Kuhn has found, resolved *Sigurðr*, is in Þjóðolfr Arnórsson's lausavísa 15.1, traditionally dated to the middle of the 11th century. Þjóðolfr also used an unresolved, possibly heavy, oblique stem (*Sexsteffja* 29.4), which could be interpreted as preserving the original, phonologically conditioned allomorphy. A century and a half later, around 1200, the Orkneyan bishop Bjarni Kolbeinsson possibly still used the heavy oblique form in his *Jómsvíkingadrápa* (9.6). From around the same time in Norway (Vinje Kirke in Telemark), another runic inscription, N 170 M, shows the short nominative **sigurþr**.⁵⁴

Some forms show potential analogical reworking, one way or the other. Noreen ([1923] 1970, 128) reports nominative forms *Sigvarþr* in Middle Icelandic and Middle Norwegian, though whether these are rebuilt from the oblique or show influence from German *Sigwart* is not entirely clear. In East Norse, long forms may have endured more generally: in eleventh-century Denmark, a runic inscription dated to 1065-75, DR M71, gives the name as **siguarþ**, with the old labial either preserved or restored even in the (endingless) nominative. If some Eddic poems have an East Norse origin (whether Danish or otherwise), as Kuhn (1939, 209, 236) has suggested, then they may have employed a paradigm of *Sigurðr* with long forms only.

Within the Eddic corpus, there appears to be evidence for both light and heavy forms of *Sigurðr*. Two verses would seem to be improved by assuming resolution:⁵⁵

- (385) við Sigurð mæla
 'speak to Sigurð' (*Grp* 16.6)
- (386) þá er Sigurð vøkþo
 'when they woke Sigurð' (*Ghv* 4.5)

However we also find three verses where a resolved *Sigurð-* would result in an uncommon rhythmic pattern:

- (387) Sigurðr ungi
 'young Sigurðr' (*Sg* 2.7)

54. This inscription may be datable to Saturday (*laugardagr*) the 21st of June, 1197 (Samnordisk runtextdatabas, s.v. N170).

55. *Grp* 10.5 and *Br* 11.6 are ambiguous.

(388) Sigurðr saman
 ‘(myself and) Sigurðr together’ (*Hlr* 14.7)

(389) Sigurðr Grana
 ‘Sigurðr (urged) Grani’ (*Vol* 23.1)

And in a slightly less certain context, since there is a chance that *þá* can condition suspension of resolution, we have:

(390) svalt þá Sigurðr
 ‘then Sigurðr died’ (*Hm* 7.5)

The scansions S^wsw and SwS^w would, as noted above, not be unparalleled, but the assumption that the poets of these poems composed using the early or analogical long form **Sigwqrðr*/**Sigwurðr* would make the verses conform to much more frequent A (A2k, A2b) types. The contrast between (385-386) and (387-389) appears to point to variation within the Eddic corpus, which Kuhn explains as dialect variation.

Kuhn further suggests that similar variation in the oblique stem may have licensed type C verses with a light lift. When they occur in poems like *Sigurðarkviða in skamma* and *Helreið Brynhildar*, which show evidence for heavy **Sigwurð-* in the nominative, Kuhn would also see the heavy form, **Sigwarði*, etc., in the oblique (how could the oblique have been remodelled, if the nominative cannot serve as a source for a light form?).⁵⁶

(391) at ek Sigurði
 *at ek Sigwerði
 ‘that I with Sigurðr’ (*Hlr* 13.3)

Kuhn argues that formulas like this were transmitted to and used by poets who knew only light *Sigurði* in their normal speech, for whom the ‘suspended’, three-position forms represented a metrical archaism.⁵⁷

(392) af Sigurði
 ‘from Sigurðr’ (*Gðr I* 13.2)

(393) um Sigurði
 ‘concerning Sigurðr’ (*Gðr II* 11.10)

56. In addition to *Hlr* 13.3, there are *Sg* 24.4, 63.6, 65.10.

57. Potential candidates for apparent suspension as an archaism are: *Gðr I* 1.4, 13.2, 17.10, 21.9, 27.8; *Gðr II* 7.3, 11.10, 12.4; *Od* 19.8. Also possibly relevant are *Grp* 6.7 and 25.1, though these could be taken as A3 lines.

Since these lines appeared to have suspended Ššw, they provided, Kuhn (1939, 236) suggests, a model for new verses like *af konungom*, with the metrical licence that evolved naturally for *Sigurði* being extended to other, synchronically similar words.⁵⁸

Kuhn's hypothesis that a 'natural' metrical licence was overextended has its appeal, but there are difficulties. Kuhn finds corroboration for his theory in the fact that verses like (371) tend to be found mostly in the poems about Sigurðr, which he takes as a sign that they are directly dependent on the name *Sigurðr*. However, half of the clear 'light' C verses cited at the beginning of this discussion, (372-374), are from *Sigurðarkviða inn skamma*, which also contains an apparently 'heavy' form of the nominative Sigurðr in 2.7 (387). If this poet knew only forms of this name with *-w- – which would be the most consistent phonological interpretation – then this poet would be using light C verses without having Kuhn's proposed source for them. This does not necessarily disprove Kuhn's theory, since the apparently heavy form of *Sigurðr* could be explained away as a formulaic relic. But it casts further doubt on a highly specific explanation, already based only on a very small number of forms.

I would suggest that it is more helpful to widen our focus from the Sigurðr poems, and emphasize, not just how rare light C verses are, but that Ššw words occur very infrequently in any context in Eddic verse. Furthermore, when they do occur, they are almost never resolved. There is only one strong example, from a poem generally held to be one of the very latest Eddic compositions:

(394) Sigurðar ok Gunnars
 'of Sigurðr and Gunnarr' (*Grp* 43.3)

This examples contrasts with the thirteen examples of unresolved *Sigurð-* in the genitive and dative discussed above, including some in poems generally held to be relatively late.⁵⁹

58. Kuhn saw a few other examples of light C verses as also showing a more natural origin, being composed with heavy lifts but transmitted to dialects where these became light. He proposed, for instance, that *unandi* in 372 and *vegondom* in (375) were derived somehow from the West Germanic forms *wuniende* and *wigendum*, and were preserved even though this resulted in short lifts in Norse (1939, 201f.). Kuhn sees in these forms the traces of a number of distinct but parallel dialect transfers, which he uses as the basis for a rather elaborate literary history. The evidence is too slight to support his specific conclusions, though at least some apparently irregular forms may well be explained as being derived from a different dialect.

59. *Vkv* 3.5 (376) and *Grp* 6.7 and 25.1 are ambiguous, and could scan under any assumptions about resolution (resolved as A3, or suspended as C).

Among common nouns, including frequent ones like *konungr*, there are no examples at all of resolution in trisyllabic case forms. West Germanic provides clear examples of resolution in such words:

- (395) **cyninge** mīnum
 ‘to my king’ (*Beo* 3093a)

In *Bēowulf*, the scansion is straightforwardly type A, S^ww/Sw. There are no comparable Norse verses like:

- (396) ***konungi** húnskum
 ‘for a Hunnish king’

We do, however, find minimally different verses, where the same pattern occurs with a word break:

- (276) konungr inn húnski
 ‘the Hunnish king’ (*Sg* 8.9)

This suggests that it is not simply the weight of the resolved sequence that is at issue; something about the word-*shape* of *konungi* seems to have made it – and all other Šw̄w sequences – unsuitable for resolution. This apparent metrical fact, more than the slight clustering of light type C verses in certain poems, is what requires explanation.

3.3.2 OLD NORSE FOOT STRUCTURE AND DEGENERATE FEET

The metrical evidence assembled so far implies a curious difference in behaviour between disyllables and trisyllables. On the one hand, words of the shape Šw̄w are almost never clearly resolved, and are sometimes most definitely not resolved; the most consistent interpretation of this pattern is that such words simply did not resolve for most of the period when Eddic poetry was being composed. On the other hand, plain disyllables resolve consistently. This is not simply a matter of the weight of the second syllable, since *konungom* appears to not resolve, while *konungr* – which is very heavy, with at least three moras in the final syllable, even if we count the final *-r* as extrametrical – does. The only clear difference between the case forms of this word is the extra syllable. But why should the addition of a third syllable make a difference to the grouping of the first two syllables?

I suggest that this behaviour can be explained using the same terms that account for resolution in Old English – polysyllabic feet, the bimoraic principle, degenerate light feet, and perhaps final defooting – but with significant differences

in the relative importance of these factors. Specifically, degenerate feet have become much more acceptable, and polysyllabic feet less favoured, relative to Old English. Under this view, there would be, in principle, two ways to foot a word like *konungi* or *unandi*. Either an overheavy polysyllabic foot ([ko.nun].gi, [u.nan.]di) could be formed, or else an initial degenerate foot could be followed by a bimoraic (optimal) medial foot: [ko][.nun].gi, [u][.nan].di. In Old English, with its relative intolerance of degenerate feet and extensive employment of polysyllabic feet, the former system was employed, even though this created an overheavy initial foot; in Norse, the latter came to be preferred.

Words like *konungr* presented a different set of issues. A degenerate initial foot may have been acceptable, but the second syllable would present a problem: -*ung-* would be overheavy, even if the -*r* is extrametrical. The word could either be formed with two suboptimal feet, as [ko][.nung]r, or with just one overheavy, polysyllabic foot, [ko.nung]r. The latter option was not only less costly, but may have been favoured by the prosodic congruence of foot and word.

There is some question of how trisyllabic words with a light medial syllable behave. These are vanishingly rare in all forms of Norse poetry, and their occurrences in fornyrðislag are inconclusive concerning resolution. Take:

(344) svaraði Hogni

‘Hogni answered’ (*Gðr II* 10.1)

This could be scanned with resolution as $S^w w / Sw$, but a scansion of $\check{S} w w / Sw$ may also be possible. That resolution could take place is suggested by one lone example of a simplex $\check{S} w w$ word in dróttkvætt (Gade 1995, 64, 256, n. 10):

(397) **makara** er mér at mæla

‘more pleasant it is for me to speak’ (*Korm Lv* 9.5)

$S^w w Sw Sw$

Here the stricter demands of dróttkvætt strongly point to resolution, and such a structure would make sense from a prosodic perspective. On the other hand, the normal approach of dróttkvætt, like all Norse poetry, was not resolution or suspension, but total avoidance, and if such words were routinely resolved as $S^w w = \bar{S} w$ it is hard to understand why they should have been in any way problematic. Since all $\check{S} w w$ words in Norse go back to earlier $\check{S} w w$, equivalent to *konungi*, it may be that their exclusion is traditional, and that such words faced difficulties in becoming established in the conservative poetic tradition even if their foot structure had become more amenable to resolution in colloquial speech.

The increased tolerance for degenerate feet implied by this view is corroborated by the lack of any form of Kaluza's law in Norse, noted at the beginning of this section. From a phonological perspective, it is very significant that a degenerate foot is actually preferred over a resolved bimoraic sequence in many verses:

(298) brúnhvít **bera**

‘white of brow to carry’ (*Hym* 8.7)

Polysyllabic feet still had a place in the Norse prosodic system, but it was becoming an increasingly restricted one, and they were apparently no longer permitted in non-initial feet (or their metrical equivalents).

Degenerate feet remained, understandably, disfavoured as primary lifts, which continued to prefer bimoraic sequences, just as in Old English. A few poems from the *Sigurðr* group, and possibly *Vǫlundarkviða*, tolerated degenerate feet in primary lifts, but by and large words of this shape were simply avoided in fornyrðislag. Only in some type D verses, in a context where suspension of resolution would be possible anyway, were Šw used in other poems:

(398) lítt megandi

‘being capable of little’ (*Vsp* 17.6)

(399) þjóðkonungi

‘with a king of a people’ (*Ghv* 14.4)

Even in this metrical context such words remain very rare, perhaps because of the fairly restrictively formulaic nature of this type.⁶⁰

3.4 CONCLUSIONS

In this chapter I have tried to highlight important points of similarity and difference between fornyrðislag and Old English metre, both in terms of metrics and phonology. The rules of syllabification given in (286), which determine not only syllable boundaries, but more importantly also weight, appear to be very much

60. The exact count of D verses of this sort is hard to pin down. Clear examples are *Vsp* 17.6, 20.2; *Gǫr I* 24.10; *Ghv* 7.3, 14.4. It is perhaps possible that compounds like *hiqrunduð* ‘wounded with swords’ should also be taken with a short initial syllable, though it is likely enough that each constituent of a compound counted as a separate phonological word, and was syllabified accordingly (Kuhn 1939, 199f., 211; Heusler 1925, 162 (§212)): *Sg* 35.6, 39.10; *Ghv* 3.10, 6.2, 14.4. Lastly, there are a number of D verses ending with oblique forms of etymologically uncertain names. *Sigurðr*: *Grp* 8.3, 20.6, 30.2, 36.4; *Sg* 21.4, 64.6; *Gǫr II* 1.8, 29.5. *Vǫlundr*: *Vkv* 2.10 (emended), 33.8. Less relevant is the morphologically complex *varattu* at *HH* 40.1, *Faðir varattu* ‘you were not the father’ (Russom 1998a, 17, 19, n. 27).

the same in both systems, most likely reflecting a common inheritance. The most typologically unusual feature of the system is the very strict heterosyllabification of consonant-resonant clusters after short vowels, motivated by the bimoraic principle.

The combination of syllables through resolution shows more divergence between English and Norse. The fundamental principle is the same, with a light syllable and a following syllable combining into a single unit in some circumstances. As in Old English, the Norse conditioning is strict, with either resolution or its suspension being obligatory in any given metrical environment. This is most clearly seen in the relative frequencies of three-position verse types (§3.3.1.1), which give no justification for the common assumption that resolution could be unconditionally suspended to allow a type ‘A1s’ verse: all examples of this supposed type are SwS^w or SsŠw, not SwŠw.

Some discrepancies between fornyrðislag and English are probably purely metrical: the avoidance of words of the *iq̃tunheimr* type appears to be specific to fornyrðislag, rather than founded in any inherent linguistic properties of Old Norse. But the greatest divergences come from what appear to be phonological differences, with polysyllabic feet (and therefore resolution) being much more marked in Norse. The evident non-resolution in *konungom*-type words is particularly telling, suggesting that these words were phonologically footed as [ko][.nun].gom, in contrast to the structure [cy.nin].ge found in English (§§3.3.1.3, 3.3.2). This new foot structure implies two things: that degenerate, monomoraic feet were becoming more acceptable (a conclusion also supported by the total abandonment of Kaluza’s law); and that polysyllabic feet (‘resolution’ in the phonological sense) were becoming restricted, and could violate the bimoraic principle only when the entire word could be accommodated within a single foot (as in [ko.nung]r). That Norse should show a somewhat more innovative prosodic system than *Bēowulf* is wholly unsurprising, given that the corpus is probably several centuries younger, on average, and that Norse has undergone a greater degree of syncope (reducing the number of resolved feet considerably) than Old English. This change has an important place in the diachronic phonological and metrical histories of Germanic verse, which I discuss in chapter 5.

Chapter 4

Word-Feet in Lióðaháttir

4.1 INTRODUCTION

After *fornyrðislag*, LIÓÐAHÁTTIR (or *ljóðaháttir*) is the next best represented of the Eddic metres. Unlike *fornyrðislag*, it has no very precise metrical parallels in any other Germanic language, and in many respects remains more poorly understood (Kristján Árnason 1991, 52). The debates about *lióðaháttir* are of particular theoretical interest, since *lióðaháttir* is quite clearly very closely related to *fornyrðislag*, and consequently seems typologically (and presumably historically) akin to Old English metre. Any examination of this metre therefore involves addressing metrical description on a very fundamental level, testing traditional theories and observing how robust our metrical toolkit is in a familiar but distinct context.

A major task with *lióðaháttir* is to highlight the major metrical constraints whose explanation might serve as the basis of a theoretical account of the metre. Only one rule has traditionally received much theoretical attention, a constraint at the very end of the stanza known as Bugge's rule (see §§4.2, 4.2.3). Although the rest of the metre may at first appear somewhat looser, there are further, less well-known constraints which may be more important to understanding the system as a whole. Particularly important are Andreas Heusler's argument that the full-verse is fundamentally bipartite in structure (§4.2), and the much more recent discovery by Seiichi Suzuki that the ability of 'dips' to be 'expanded' in the full-verse is strictly limited by alliteration (§4.2.1).

The primary task of this chapter is to explore the implications of these constraints, and in particular to highlight the usefulness of the word-foot as a metrical constituent of this poetic form. If the word-foot proves to be a genuine element within the

structure of lióðahátttr, this provides important support for feet as a higher level of prosodic representation not just in this, but potentially in all Germanic metres: not just syllables or bimoraic phonological feet, but the contours of entire words may play a central role in alliterative versification.

In this chapter, I focus primarily on one subset of lióðahátttr lines, the full-verses. A typical lióðahátttr half-stanza or HELMING (Norse *helmingr*) consists of (a) an on-verse, (b) an off-verse, and (c) a full-verse (an arrangement normally repeated twice to form a complete stanza):¹

- (400) (a) Huginn ok Muninn (b) fliúga hverian dag
(c) iǫrmungrund yfir
(a) óomk ek of Hugin, (b) at hann aptr ne komit,
(c) þó síámk meirr um Munin.

‘Thought and Mind fly every day across the great earth. I fear for Thought, that he should not come back, though I am more worried about Mind.’
(*Grm* 20)

The on- and off-verses are linked by alliteration, as in fornyrðislag, but rhythmically these half-lines are much more sharply differentiated from each other than are the two half-lines in fornyrðislag (Sievers 1885a, 63; Heusler 1890, 152; Russom 2009b, 73ff.). Specifically, the on-verse tends to be shorter or lighter, as are *Grm* 20.1 and 20.4 in (400), which each have only three positions. The off-verses tend to be heavier, and especially favour patterns that begin with unstressed material. Distinct from these paired verses are the full-verses,² which tend to be somewhat heavier

1. This division into three types of verse holds whether or not they occur in their usual places in a typical stanza. One common deviation is to place two full-verses in the first half-stanza, an arrangement often referred to as GALDRALAG. This arrangement finds its most sustained use in *Hav* 112-137 (excepting 114, 118, 123-4, and 133), the so-called ‘Loddfáfnir’ section of that poem, but is found not infrequently in other lióðahátttr poems (Sverdlov 2011). Similarly, pairs of on- and off-verses may run in sequence without intervening full-verses, though this may sometimes involve a switch to fornyrðislag (or some other metre) rather than a continuation of true lióðahátttr. In general, I reckon lióðahátttr and galdralag together – their rhythm and use both suggest they are variant forms of a single metre – but I note stanzaic irregularities of any sort where they may be relevant in accounting for metrical peculiarities.

2. Somewhat confusingly, these lines have been variously referred to both as Vollzeilen (‘full lines’) and Kurzzeilen (‘short lines’); cf. Heusler (1890, 122) and Sievers (1893, 80, n. 1). I partly follow the usage of Sievers, which, as he notes, is the least ambiguous term, and also highlights the fact that, when compared with half-lines, Vollzeilen tend to be relatively long or heavy. I do not, however, refer to these verses as a ‘line’ of any sort, instead adopting the term ‘verse’, which has become usual in modern metrical research (in principle either term would do, since the full-verse is best regarded as a single verse occupying an entire line). I avoid the terminology ‘a-verse’, ‘b-verse’, and ‘c-verse’, not uncommonly found nowadays (Russom 2009b, 74; Suzuki 2014, 574), for the reasons already given in §1.1.2.

or longer still, and to show a range of rhythmic patterns not as well-paralleled elsewhere in Germanic. Because of this uniqueness, and because full-verses show some of the clearest and most significant constraints which support the postulation of word-feet, I concentrate on this one verse-type.

As the most controversial aspect of the scansion of *lióðahátt*, I have found it useful to rescan the corpus of full-verses, rather than to rely on one or another of the existing catalogues such as Gering (1902, 454-504) or Suzuki (2014, 665-760, 816-19). The corpus I have used is a fairly traditional one, consisting of the poems included in Neckel (1936).³ This includes most or all of: *Hávamál* (Hav), *Vafþrúðnismál* (Vm), *Grímnismál* (Grm), *Skírnismál* (Skm), *Lokasenna* (Ls), *Alvísmál* (Alv), *Sigrdrífomál* (Sd), *Grógald* (Gg), and *Fiq̃lsvinnzmál* (Fi). Furthermore, significant portions of *Helgakvða Híq̃rvarzsonar* (HHv), *Reginismál* (Rm), and *Fáfnismál* (Fm) are in *lióðahátt*. A certain number of what may be regarded as full-verses are also scattered throughout *Hárbarzlióð* (Hrbl), but since this poem is so irregular in its metre, and contains only one normal *lióðahátt* stanza, I consider its evidence only secondarily. I also make no systematic reference to any other poems in or containing *lióðahátt*, such as *Sólarlióð*, *Hákonarmál*, the riddles from the ‘Gestumblindi’ section of *Hervarar saga*, or stanza 29 of *Hamðismál*, though my readings of these works do not suggest that they contain anything that would seriously modify the arguments presented here. On the *lióðahátt* corpus in general, see further Sievers (1893, 80 (§54)) and Suzuki (2014, 2f.). There is a certain amount of variation within this corpus, with some poems favouring or avoiding certain patterns more than others, but in this chapter I focus on the far more significant commonalities shared by all *lióðahátt* poems: the basic principles, and the most important constraints, that are essential to the form. In Appendix C I give a catalogue of my full corpus, scanned according to the principles developed in this chapter.

4.2 THE DIPODAL FULL-VERSE

The full-verses are the most distinctive unit within *lióðahátt*, marked out by their independent, internal alliteration, and by their special rhythmic constraints. Different views of their rhythm have given rise to several distinct approaches which

3. As with *fornyrðislag*, I take this as my standard edition, but make regular reference to Dronke (1997, 2011) and Jónas Kristjánsson and Vésteinn Ólason (2014a, 2014b), as well as the individual editions of Evans (1986), Machan (1988), and Eysteinn Björnsson (2001). The more liberal edition of Gering and Hildebrand (1904) has also proven useful (see note 5 in §3.1.2).

disagree fundamentally on the internal structure of the full-verse. A central question is whether they are essentially longer variants of ‘normal’ Germanic verses of the sort found in *fornyrðislag* or Old English, or whether they consist of a ‘normal’ verse with an added cadence. While the latter view, articulated in both positional and word-foot terms, seems to currently be the more popular, I argue that there are good reasons to favour the former approach, classically defended by Andreas Heusler.

A third approach, prominently employed by Sievers (1893, 82-9 (§57)) and Gering (1902), was to view each full-verse as a blend of two of the five ‘rhythmic types’, following the analysis developed by Luick (1888) for hypermetrical lines in Old English. This is highly implausible, as the five types have no reality, being mere epiphenomena, and so can hardly serve as the basis for metrical elaboration. Hartman (2011, 241-3) and Suzuki (2014, 757-60) have both effectively rebutted this theory, and there is no need to dwell on it further.

The real issue is to decide whether the full-verse has a special cadence added on the end, a matter closely involved with the precise role played by BUGGE’S RULE, the most well-known metrical constraint on full-verses. Bugge first stated this rule in a discussion of the quantities of long vowels in hiatus, during which he observed that the full-verse should not end in a trochaic sequence, $\bar{S}w$. Instead, the sequences $\check{S}w$ and $\bar{S}$ predominate, though trisyllabic words are also found (Bugge 1879, 142f; Heusler 1890, 135-51; Sievers 1879, 353-6; 1885a, 65-7; 1893, 84 (§57.4); Fidjestøl 1999, 260-2; Suzuki 2014, 751-7).⁴

The existence of this rule has been hardwired into some systems of scansion, with the final S or $\check{S}w \sim S^w$ element being seen as a distinct CADENCE (to use Suzuki’s term) added onto a base structure. A form of this analysis was proposed by Sievers (1885a, 67), and has been elaborated and employed more systematically from a word-foot perspective by Russom (2009b, 76f.), and under a positional framework by Suzuki (2014, 665, 751-7). The following examples are typical; here // marks off the final cadence, and / represents the additional foot division posited by Russom within the BASE VERSE:

4. ‘I dette versemaal [ljóðahátt] betegner jeg den linje, der har allitteration for sig selv, som langlinjen. I langlinjen hviler sidste hovedtone oftest på næstsidste stavelse, endel sjældnere på sidste stavelse. Det første tilfælde forholder sig i hyppig forekomst til det andet omtrent som 2 til 1. Meget sjældent hviler sidste hovedtone på tredje stavelse fra enden, og næstsidste stavelse kan da være lang eller kort. Når sidste hovedtone hviler på næstsidste stavelse, gælder den regel, at denne stavelse er kort.’ (Bugge 1879, 142f.).

- (401) er hann hafðit / gýgiar // gaman
 (ww)ww/Sw//S^w
 ‘when he did not have joy of giantess’ (*Vm* 32.6)
- (402) ok svá / Sólar // it sama
 ww/Sw//(w)S^w
 ‘and so of the sun as well’ (*Vm* 23.3)

In these examples, the removal of the final word leaves a reasonably acceptable verse type, A3. The whole full-verse is thus tripodal by Russom’s analysis,⁵ and has four positions plus a cadence by Suzuki’s (though more often than not fewer than four positions are actually visible on the surface). These base verses are meant to be particularly similar to *lióðaháttir* on-verses (Russom 2009b, 76; Suzuki 2014, 726ff.):

- (403) hvat er þat / manna
 ‘what is that of men’ (*Vm* 7.1)

The main advantage of this approach is that it incorporates Bugge’s rule directly into the scansion. The vast majority of verses do indeed end with a long monosyllable or a short disyllabic sequence, and it is not unattractive to explain this as a separate $\bar{S}$ element (or its resolved equivalent) appended to a core structure.

However, not all verses fall out neatly under this analysis, and a careful review of the whole corpus raises a number of doubts about its viability. Firstly, there are numerous verses where we would elsewhere expect the final ‘S^w’ element to instead be suspended, immediately following a stressed element:

- (404) fyrst með fróð **regin**
 ‘first among the wise powers’ (*Vm* 26.6)

One might argue that a strong metrical boundary between *fróð* and *regin* might allow the latter to be treated as initial within its domain, and so remain resolved. However, the assumption of any sort of caesura seems unlikely, given that there is no corresponding syntactic break – indeed, *fróð* and *regin* are the two most closely connected words in this clause. Verses of this sort seem, far from having a core supplemented by the addition of a final element, to have much the same structure as those ending in compounds:

5. ‘[T]he *ljóðaháttir* c-verse is derived from a two-foot verse type by addition of a third foot with a fixed pattern.’ (Russom 2009b, 76).

- (405) *qldom at ártali*
 ‘as a counter of years for men’ (*Vm* 23.6)

Suzuki (2014, 689ff, 1013) has no compunctions against viewing this as an ‘A-verse’, *qldum at ár-*, followed by a šw cadence *-tali*, but his view seems at odds with all other indicators of internal structure (syntax, morphology, and alliteration).⁶ The only possible motivation for breaking apart compounds in this way is a very strong commitment to an understanding of Bugge’s rule as requiring $\bar{S}$ or $\bar{S}w$ sequences alone as the cadence.

Such a view is probably a mischaracterization of Bugge’s rule, as eloquently argued by Andreas Heusler (1890). One of Heusler’s many insights is that apparent exceptions to Bugge’s rule provide a clue to the structure of the full-verses (see 137f. for a fuller list):⁷

- (406) *hlær at hvívetna*
 ‘laughs at everything’ (*Hav* 22.3)
- (407) *gestr at gest hæðinn*
 ‘a guest scornful to a guest’ (*Hav* 31.3)
- (408) *tveim trémönnom*
 ‘two wooden men’ (*Hav* 49.3)
- (409) *at vitia Vafþrúðnis*
 ‘to visit Vafþrúðnir’ (*Vm* 1.3)
- (410) *segir þú it sannasta*
 ‘say this last’ (*Vm* 42.6)

The final two syllables of all of these examples would appear to form the trochaic sequence otherwise so conspicuously avoided in full-verses, with the independent word of (407) being a particularly serious offender. However, as Heusler (1890, 138) observes, in all of these cases the final three syllables can be regarded together as the final ‘element’ of the verse (the final Takt, in his terminology). Even in (407), which appears to end in a trochaic word, the alliteration falls on the preceding

6. To judge from the numbers given on his table 2, I gather that Russom has also analysed such verses in the same way, but I can find no explicit comment on this (2009b, 78). Russom’s approach probably depends less on finding all $\bar{S}w$ elements as resolved than does Suzuki’s.

7. Suzuki (2014, 752, n. 39) also counts *Hav* 63.6 *þjóð veit, ef þríro*, but since this is presumably simply a scribal representation of *þrír ’ro* or *þrír ero*, whose patterns, Ss or $S\bar{S}w$, are more ambiguous with respect to the rule, I have left it out of consideration (cf. Neckel’s edition before Kuhn’s revision, and further Jónas Kristjánsson and Vésteinn Ólason 2014a, 334, n. 63; Evans 1986, 51; Dronke 2011, 15).

noun, suggesting that *gest hæðinn* ought to be taken as a unit, equivalent to a compound like *trémǫnnom* in (408).

When viewed this way, Heusler's Takte show an obvious similarity with Russon's word-feet, which allow multi-word metrical constituents as long as they conform to the pattern of a (simplex or compound) word. In word-foot terms, we may say that a full-verse may end with a trisyllabic foot as well as a monosyllabic one, and furthermore that a trisyllabic foot may, as per the usual rules of the word-foot system, be filled by two separate words (with a bracketing mismatch), as in (407). If Heusler is correct in identifying these units, Bugge's rule is not a requirement for a particular verse ending, but a prohibition against $\bar{S}w$ feet; short $\bar{S}$ or S^w feet, or long $\bar{S}sw$ or $\bar{S}ws$ feet are all potentially metrical.

Naturally, $\bar{S}sw$ feet are still relatively rare (much rarer than $\bar{S}sw$ sequences), to avoid approaching the prohibited $\bar{S}w$ rhythm too closely, but they are merely disfavoured, not strictly prohibited. It is perhaps noteworthy that among final $\bar{S}sw$ words, only six are true compounds,⁸ while the remaining 11 contain either names,⁹ indivisible words formed with derivational syllables,¹⁰ or the grammaticalized word *hvívetna*¹¹ – all elements which would more obviously constitute single units, and be less readily interpreted as two feet.

These verses are not numerous, but their importance should not be downplayed. Hollander (1931, 493) argues that, for better or worse, we should just get used to emending (407) (though there are no good emendations available, and every modern edition I have seen retains the manuscript text), but even if this one example is set aside, the verses ending in $\bar{S}sw$ words are numerous and textually secure enough to deserve treatment as a valid part of the metre of *líóðahátt*. And these should, furthermore, be taken as they are: I do not think there can be any justification for Suzuki's habit of explaining away any cadences that fail to match his canonical $\bar{S}$ as being so 'underlyingly' – he even proposes that *hæðinn* in (407) is actually an $\bar{S}$ lift: 'the otherwise illegitimate alignment of the lift to this extra prominent material is implemented exceptionally as an excessive but controlled reaction to the clashing of lifts taking place at the end of a verse' (2014, 751, cf. 701f, 993). Suzuki's association of final $\bar{S}sw$ elements with a preceding lift (the

8. *Hav* 49.3, 74.4; *Skm* 31.8; *Ls* 15.3; *Sd* 19.3, 19.4. *Hav* 80.3 should also be mentioned, though its status as a true full-verse is unclear due to its lack of internal alliteration.

9. *Vm* 1.3; *Grm* 27.5, 34.6, 49.3; *Sd* 13.9, 13.10; *Fi* 38.3.

10. *Hav* 132.7 and *Vm* 42.6; *Grm* 27.5 also falls in this category as well as being presented as a proper name.

11. *Hav* 22.3 and 23.3.

‘clashing of lifts’) is descriptively accurate, but he has no explanation for why this should in any way justify the ‘excessive’ move of replacing an ‘underlying’ final $\bar{S}$ lift with a normally banned $\bar{S}w$. Under Heusler’s view, or a word-foot adaptation thereof, the stress clash falls out from general principles: a final trochee can only occur when part of a ‘voller Takt’, i.e. a long foot, which by definition requires the head of the Takt/foot to precede the trochee in question. Since final $\bar{S}w$ occurs only as part of a larger $\bar{S}w$ foot, the phonological fact of two adjacent stresses is purely incidental.

The relatively uncommon $\bar{S}w$ endings provide only the starting point for identifying long feet in full-verses. Also significant are the some 129 verses with antepenultimate alliteration that end in $\bar{S}w$ sequences (with a short penultimate).¹² 85 of these verses¹³ are like (405), ending in a final compound, and 44¹⁴ like (404) with rhythmically similar phrases:

(405) *qldom at ártali*
 ‘as a counter of years for men’ (*Vm* 23.6)

(404) *fyrst með fróð regin*
 ‘first among the wise powers’ (*Vm* 26.6)

Pace Suzuki, it is highly unlikely that the final syllables of any of these verses are resolved, and the final element is rarely syntactically distinct, further challenging the formulation of Bugge’s rule as a requirement for $\bar{S}$ or its resolved equivalent. These final $\bar{S}w$ sequences, whether compounded or not, stand immediately after a lift, and there is no other evidence whatsoever from Norse that resolution was ever possible under such circumstances (see chapter §3). Analysing them as long $\bar{S}w$ feet avoids the need to posit unlikely resolution,¹⁵ and fits more naturally with the morphology, syntax, and alliteration.

12. To put the numbers of verses of various types discussed into context, my corpus includes 1125 full-verses in total (this does not include any with deficient alliteration or which I view as properly scanned as on- or off-verses).

13. *Hav* 4.3, 4.6, 8.3 13.6, 20.3, 22.3, 52.6, 60.6, 80.4, 110.6, 121.7, 134.12, 136.3, 140.6, 142.6, 148.3, 149.3, 152.3, 156.3; *Vm* 11.6, 12.3, 19.6, 23.6, 25.6, 28.6, 45.3, 49.3, 51.6; *Grm* 5.6, 6.6, 12.6, 27.7, 27.11, 28.3, 29.6, 30.9, 31.3, 32.3, 46.3, 50.6; *Skm* 4.3*, 7.3, 8.3, 9.3, 29.6, 39.3*, 41.3*; *Ls* 16.3, 28.3, 29.3, 54.6, 55.3, 58.6; *Alv* 5.3, 6.3, 10.6*, 14.6, 20.3, 30.3, 30.6; *HHv* 15.6, 29.3, 30.3; *Rm* 22.3; *Fm* 37.3; *Sd* 2.6, 10.3, 30.3, 31.6, 32.6, 35.3; *Gg* 3.6, 8.3, 9.3, 10.3, 13.3; *Fi* 7.6, 8.6, 24.6, 28.6, 31.6, 33.6, 34.3, 38.6. An * indicates that the verse is of the minimal S/Sw pattern.

14. *Hav* 47.6, 48.3, 51.3*, 58.3, 63.6, 79.3, 103.3, 112.7, 141.3, 151.3, 163.3; *Vm* 5.6, 13.6, 14.3, 26.6, 33.3; *Grm* 19.6, 27.8, 29.3, 35.3, 37.3; *Skm* 10.4, 37.3; *Ls* 15.6 20.6, 30.6, 31.6, 45.6, 48.6*, 53.3, 60.6; *Alv* 1.6, 18.6, 22.6; *Rm* 6.3*, 9.6; *Fm* 2.6, 13.3, 18.3; *Sd* 14.4; *Gg* 11.3; *Fi* 12.6, 43.6, 44.3. An * indicates that the verse is of the minimal S/Sw pattern.

15. For more on the theoretical implications of Bugge’s rule, see §4.2.3 below.

If we accept that these long feet are the unitary final constituents of their verses, it is difficult to maintain that what comes before this cadence is any normal type of independent verse. The following verses show the range of openings typically found before final long feet:

- (405) **ǫldom** / at¹⁶ ártali
 ‘as a counter of years for men’ (*Vm* 23.6)
- (411) **at aski** / Yggdrasils
 ‘at the ash of Yggdrasil’ (*Grm* 29.6, 30.9, 32.3)
- (412) **nótt á** / niðvegi
 ‘night on a murky path’ (*Gg* 13.3)
- (413) **mína** / meinstafi
 ‘my malicious accomplishments’ (*Ls* 28.3)
- (414) **lundr** / lognfara
 ‘the grove of peace’ (*Skm* 39.3, 41.3)

It is difficult to find complete verses in the first portion of any of these examples. The heaviest is (411), which at least has three metrical positions, but even here the sequence *at aski*, wSw, is virtually unparalleled as a lióðaháttir on-verse (or, for that matter, in any other context in Eddic poetry). I am aware of only two potentially similar verses, both from outside the main corpus considered here (Gering 1902, 188):

- (415) *hans aldar*
 ‘his era’ (*Hkm* 19.3)
- (416) *þá merkir*
 ‘(that) shows then’ (*Sol* 47.3)

Furthermore, it seems likely that (416) is actually *þá merkir þat*. Together with the next clause the text reads:

- (417) *þá merkir þat er guð mælti...*
 ‘then that shows what god said...’

Here *þat* is probably better taken in the initial clause, with *er* on its own serving as the relative marker in the next verse (rather than a compound relative marker *þat*

16. I place this word after the break to emphasize its metrical irrelevance. From a word-foot perspective, it could hardly be taken as anything but an extrametrical proclitic, while from a ‘positional’ approach, it would belong to the same dip as *-om*.

er). Placing *bat* before the verse break would give 47.3 the rhythm wSwS. Short wSw is clearly not a pattern normally able to constitute a verse, even of the relatively light sort found in lióðaháttir on-verses.¹⁷ Matters stand even worse with phrases like *qldom (at)*, *nótt á*, *mína*, and, at the furthest extreme, *lundr*. These elements can all only be *portions* of verses: they have just one or two metrical positions, and would all clearly constitute single word-feet. To analyse any of these verses as a base verse plus a cadence requires either extracting cadences from what are otherwise better regarded as long final feet, or else allowing extraordinarily light elements to occur as entire base verses, uniquely in this one particular metrical context. Neither option is attractive, and both would be highly anomalous if this were really the means by which poets composed lióðaháttir full-verses. This is not a trivial issue affecting a few marginal verses: nearly all of the 147 verses cited so far as having long final feet have correspondingly short initials (see further §4.2.1).

This suggests that the fundamental structure of the lióðaháttir full-verse is, as Heusler (1890, 131) argued, essentially bipartite, and fundamentally the same in structure (if not in precise detail) as any other Germanic verse. This view, most recently championed by Hartman (2011, 252ff.), would see the verses with heavy finals discussed so far – many of which are difficult to describe well under either Russom’s or Suzuki’s approach – as type Da* (with or without anacrusis), and falling within the normal limits of Germanic verse-forms found elsewhere.

4.2.1 RESTRICTIONS ON (w)SWSWS FULL-VERSES

The main suggestions of the previous section are that the full-verse consists of two word-feet, the second of which may not be of the shape $\bar{S}w$ (which in fornyrðislag is the most frequent, and probably normative foot type). We can get a clearer picture of this metrical structure by examining to what extent we are justified in finding two feet in ‘dreihebig’ verses with the pattern (w)SwSwS (with w standing, in the first instance, for one or more unstressed syllables). Verses of this sort are among the more complex full-verses, and show important constraints more clearly than many simpler, more flexible patterns. In the following sections, I argue that

17. Russom (2009b, 80f.) also cites *Hav* 39.5 as a potential w/Sw verse, but acknowledges that this is based on an emendation (and by no means a generally accepted one), and is furthermore an off-verse. He suggests that w/Sw patterns may have generally been reversed to Sw/S (with the final element carrying stress after displacement) in the on-verse. I doubt that this is sufficient to explain the apparently categorical absence of this pattern as an independent verse type, but it is worth acknowledging that wSw, the heaviest of the light onsets discussed here, could perhaps be allowed.

the word-foot approach allows for the most natural description of the full-verse, from which rules for foot combinations and extrametrical syllables emerge that accurately generate and constrain the range and relative frequencies of attested metrical patterns.

4.2.1.1 *Restrictions on Combining Long/Heavy Feet*

We saw above that verses ending with -Ssw elements tended to be preceded by short, single-foot elements. This also holds true for that subset of dreihebig verses that end with a compound rhythm -Sws (with alliterating S):

- (418) dómr um / dauðan hvern
 ‘judgement on every dead person’ (*Hav* 77.6)
- (419) nenna / Niarðar syni
 ‘turn your mind to the son of Niarðr’ (*Skm* 38.6)
- (420) hróðigr / Heriafǫðr
 ‘glorious Father of Hosts’ (*Grm* 19.3)

In (418) and (419), at least, it might at first seem fairly straightforward to take the final words, *hvern* and *syni*, and call them final $\bar{S}$ (S^w) feet, as per either Russom’s or Suzuki’s model. The syntax supports the alliteration in pointing the other way, however, and the most significant syntactic break in each of these lines is between the second and third syllables. Furthermore, *dauðan hvern* and *Niarðar syni* are the sorts of close phrases that Russom elsewhere sees as word-feet, and are rhythmically similar, if not directly equivalent, to *Heriafǫðr* in (420). There are some 128 verses¹⁸ like (418-420), where the alliteration (and, for the most part, the syntax as well) seem to support the interpretation of a final phrase as a long Sws foot.

As usual under the terms of the word-foot theory, extrametrical elements may come before either foot:

18. Most of these would be scanned as Db*: *Hav* 35.3, 44.6, 49.6, 62.3, 64.6, 77.6, 80.5, 84.6, 99.3, 101.6, 105.3, 106.6, 107.3, 114.3, 117.10, 119.10, 119.7, 124.3, 134.7, 137.15, 140.3, 142.5, 143.4, 150.3, 155.3, 156.6, 156.7, 157.3, 158.3, 159.3, 160.6, 164.3, 164.4; *Vm* 8.3, 9.6, 17.6, 18.3, 20.6, 25.3, 30.6, 31.3, 37.3, 40.3, 43.4, 50.6, 51.3, 53.6; *Grm* 2.3, 4.3, 7.6, 8.3, 9.6, 13.6, 19.3, 22.3, 27.4, 33.5, 36.6, 37.6, 41.3, 43.6, 54.9 *Skm* 15.3, 20.6, 21.3, 22.3, 28.7, 30.6, 30.7, 38.6; *Ls* 6.3, 9.3, 10.3, 12.6, 25.3, 26.6, 39.3, 41.6, 49.3, 60.3, 61.6, 62.3, 65.3; *Alv* 12.6, 16.6, 24.6, 35.3; *HHv* 27.6, 28.3, 28.7; *Rm* 3.3, 12.3, *Fm* 10.3, 16.3, 17.6, 31.6, 34.6; *Sd* 14.5, 14.6, 18.3, 25.5, 28.3, 32.3, 35.6; *Gg* 6.6, 12.3; *Fi* 1.3, 1.6, 9.6, 11.6, 25.6, 30.6, 36.3, 45.3, 45.6, 49.6, 50.6. Nine are of the minimal S/Sws pattern: *Hav* 12.3, 118.3, 130.7, 138.6, 143.3; *Grm* 21.3, 49.6; *Ls* 11.6; *Alv* 34.6. Three are too heavy to be classified under Sievers’ types, and will be discussed below: *Hav* 121.10; *Grm* 16.6; *Alv* 14.3.

(421) bryniom / (um) bekki strát
 ‘strewn with mail-coats across the benches’ (*Grm* 9.6)

(422) (með) ungom / Óðins syni
 ‘with the young son of Óðinn’ (*Skm* 21.3, 22.3)

These verses show the same pattern as those ending with -Ssw feet, with long final feet paired with lighter initial feet. This is usually a Sw foot, but S feet are also found:

(423) fiskr / flóði í
 ‘fish in the flood’ (*Grm* 21.3)

The generalization that a ‘long’ or ‘heavy’ foot has to be paired with a shorter or lighter foot is true often enough that it probably constitutes a metrical rule of the full-verse:

A verse may contain only one heavy foot.

‘Heavy’ here means exceeding the normative weight for a foot in some way, and often corresponds to the pattern of a compound word. The clearest, and most common heavy feet are Ssw and Sws, though it is possible that Ss (which has an extra stress, but is no longer than the normative Sw foot) and Sww (which is long, but does not correspond to a compound pattern) may at least sometimes be regarded as ‘heavy’ as well.

This rule fits well with the observation of Russom (1987, 28f; 1998a, 38) that in Germanic verse there are severe restrictions on combining two heavy feet in the same verse. Heusler (1890, 141f.) also notes this tendency to avoid two volle Takte in a verse, though he lists a number of exceptions (in about 12% of verses, by his count). However, he is rather generous in his tally of exceptions, and includes many examples which are (as he points out) highly uncertain:

(424) eða fóro þær fleiri saman
 ‘or did more go together’ (*HHv* 27.6)

It is possible that *fóro þær* constitutes a Sws foot of its own, giving the whole verse the pattern (ww)Sws/Sws, but I can see no reason to favour this analysis. Assuming that the pronoun is even original, it could unproblematically be construed as extrametrical (making the verse pattern (ww)Sw/(w)Sws^w) – certainly this sort of verse hardly constitutes a reliable exception to the proposed rule. If we focus on verses where extrametricality is unlikely, there are only perhaps 6 verses which

seem to have two long feet, among the 276 ‘dreihebig’ verses ending with Ssw or Sws feet. They are not all of the same sort, nor equally certain:

- (425) einhveriom / allan hug
 ‘anyone (to tell) all your thought’ (*Hav* 121.10)
- (426) hátimbroðom / horgi ræðr
 ‘rules the high-timbered fane’ (*Grm* 16.6)
- (427) Ægis holl / (?) um kominn
 ‘come to Ægir’s hall’ (*Ls* 14.3)
- (428) (ok) þóttiska / (þú þá) Þórr vera
 ‘then you did not think yourself to be Thor’ (*Ls* 60.6)
- (429) (kalla) hverfanda hvél / helio í
 ‘they call it the turning wheel in Hel’ (*Alv* 14.3)

The clearest exception is (425), with the rhythm Ssw/Sws. (426) gives the reading of MS A, the *Codex Arnamagnæanus* (748 4⁰); the *Codex Reginus* has the shorter *hátimbroðom horg*. This is obviously defective, and the Arnamagnæan reading is certainly superior in sense (and has accordingly been adopted by virtually all editors), but the discrepancy should caution us against placing too much metrical weight on this example. We should also approach (427) with some reserve: it could be taken as a Sws/Ssw, but this requires an unusual stress on the prefixal *um* (and it otherwise lacks alliteration). In (428) the initial foot seems to be Sw-w, a normal trochaic word with a following clitic; while ‘long’, this is much less above normative weight than the more clearly heavy patterns based on compounds. Finally, (429) can hardly be interpreted without two overlong feet, but the structure of this line is extremely unusual. I can see no way to describe this verse within any metrical framework, unless we were to make the doubtful assumption that *hverfanda hvél* could constitute a single, superlong word-foot. Under a positional analysis, this verse would seem to have eight(!) positions on the surface, and could not be reduced to fewer than six, even with a fairly generous scansion. This verse, completely unparalleled elsewhere in *lióðahátt*, is simply problematic any way we look at it. It may well be that, as Gering (1902, 488) suggests, we ought to remove *hverfanda* as an interpolation. The phrase (*á*) *hverfanda hvéli* also appears in *Hav* 84.4, and *hverfanda* might have been interpolated into an earlier **kalla hvél helio í* – (ww)S/Sws – on the strength of this lexical association.

Beyond this, there are perhaps 12 verses which have a heavy foot paired with a Ss word, which is not long, but is perhaps ‘heavy’:

- (430) **ok versnar allr / vinskapr**
 ‘and all friendship grows worse’ (*Hav* 51.6)
- (431) **allþorfr** / ýta sonom
 ‘needful for the sons of men’ (*Hav* 164.3)
- (432) **óþorfr** / iqtina sonom
 ‘unneeded for the sons of giants’ (*Hav* 164.4)
- (433) **fróðlikt** / (it) fyrsta orð
 ‘wisely the first word’ (*Sd* 14.5)
- (434) **Bolþors,** / Bestlo fǫður
 ‘of Bolþorr, Bestla’s father’ (*Hav* 140.3)
- (435) **Ásviðr** / iqtinom fyrir
 ‘Ásviðr for the giants’ (*Hav* 143.4)
- (436) **Valholl** / víð of þrumir
 ‘Valhalla stands firm and broad’ (*Grm* 8.3)
- (437) **Grábakr** / (ok) Grafvǫlluðr
 ‘Grábákr and Grafvǫlluðr’ (*Grm* 34.6)
- (438) **Duneyrr** / (ok) Dýraþrór
 ‘Duneyrr and Dýraþrór’ (*Grm* 33.5)
- (439) **Miðgarð** / manna sonom
 ‘Miðgarðr for the sons of men’ (*Grm* 41.3)
- (440) **Menglǫð** / mitt gaman
 ‘(if) Menglǫð (will wish) my love’ (*Fi* 43.6)
- (441) **hyggz vætr** / hvatr fyrir
 ‘one who is bold heeds nothing ahead’ (*Ls* 15.6)

In the four examples (430-433), the Ss foot is a plain lexeme; it may be significant that all four are created derivationally, with no examples of true compounds made from fully lexical constituents. In most of the remaining examples, (434-440), the potentially heavy foot is a proper name. Typical heavy feet, with compound words like *biórsalr*, are not found in combination with another heavy or long foot in any full-verse (with the two-word phrase in (441) being the only apparent exception). This pattern may indicate that there was a real prohibition on combining two ‘compound feet’, but that a certain set of Ss-like feet could be used (as long as they did not approach the classic Ss compound form too closely). This resembles

the situation in Old English, where D* verses may not begin with a true poetic compound Ss, but heavy, Ss-like words such as *wīgend* (which could condition suspension of resolution) are permissible (see note 98 in §2.4.1.3).

Together, then, there are no more than five examples in 1125 full-verses of two clear heavy feet paired together. This suggests that feet were real compositional units: that poets built verses out of such feet, and had a genuine bias against combining two heavy, compound-like feet. One major caveat with the testimony of this foot-combination restriction is that it depends on particular choices of line-divisions. In some cases, what is usually printed as an on- and off-verse pair could potentially be taken as a single full-verse with two particularly heavy feet, e.g. *Grm* 2.5-6 or *Skm* 36.2-3. Editorial practice has probably tended to handle these lines correctly, but a thorough reexamination of *lióðaháttr* verse-divisions – a task beyond the scope of the current analysis – could potentially alter or qualify the overall picture. Even granting this possibility, I would emphasize that the corpus of clear full-verses is large enough that we can be sure that the *typical* full-verse has one and only one heavy foot.

Aside from this restriction on their combination, long or heavy feet are extremely common in full-verses, and it may even be a metrical requirement that a properly formed full-verse contains one. It has been noted that there are virtually no full-verses of the structure Sw/S, the most reduced form that appears with any frequency in *fornyrðislag* (Heusler 1890, 146). There are only two examples in my corpus:

- (442) Gípul ok Gǫpul
 ‘Gípul and Gǫpul’ (*Grm* 27.6)
- (443) Dáinn ok Dvalinn
 ‘Dáinn and Dvalinn’ (*Grm* 33.4)

Both occur within runs of full-verses, and are part of sequences of multi-verse alliteration – that is to say, they are both in *galdralag* sequences,¹⁹ and moreover

19. Sverdlov (2011) suggests that a repeated formula of Óðinn’s in *Vm* is in *galdralag*, which would provide a number of instances of the minimal *fiqlð ek fór* as a *galdralag* full-line. It is true, as Sverdlov observes, that the second verse, *fiqlð ek freistaðak*, does have suspicious double alliteration, and his proposal would provide excellent literary sense for the dramatic but enigmatic ending of the poem. If Sverdlov is right, then perhaps the minimal SwS pattern was an acceptable, if highly marginal, verse-type in *galdralag*. Even if this argument is accepted, it would hardly do much to establish SwS verses as a regular type of full-verse. Óðinn’s use of the verse would have to be explained precisely as a deliberate obfuscation, employing an exceptional and marginal pattern in order to increase the overlap of his *galdralag* lines with on- and off-verses: the SwS type would be chosen primarily because it is a normal on-verse rhythm, not because of any considerations

occur as part of catalogue passages that seem to much more regularly employ short patterns of this sort regardless of their broader metrical context (cf. the discussion of the *Dvergatal* in §3.3.1.1).

All other minimal full-verses have at least two syllables in the dip, and could therefore potentially be interpreted as Sww/S verses:

(444) grund ok með / goðom

‘(divides) the earth, also among the gods’ (*Vm* 15.6, 16.3)

There are nine or so full-verses of this sort,²⁰ scattered across ordinary lióðaháttir contexts. Assuming that the initial three syllables represent a single foot (and this is just an assumption; the number of examples is too small for real certainty), we may have the most minimal possible form of full-verse: a long (Sww) foot and a non-trochaic final foot ($\bar{S}$ or S^w). These verses suggest that a truly ‘heavy’ foot, based on a compound pattern, may not have been an absolute requirement for the full-verse, though one foot must at least exceed normative weight in some way (and a genuinely heavy, compound-based foot is very much the norm).

4.2.1.2 *Syntax and Alliteration in (w)SwSwS Verses with Short Final Feet*

From a word-foot perspective, there is a distinction between the 118 or so verses ending in a -Sws compound foot (see note 18), and those which have a longer foot (either Sws or Swsw) followed by a simple $\bar{S}$ or S^w element. In the first instance, the difference is alliterative: in the former category, the first and second lifts of a (w)SwSwS verse alliterate; in the latter, the first and third lifts alliterate. In most of these, syntactic constituency (and morphology) agrees with alliteration in marking out the foot boundaries. Some 74 verses seem to clearly begin with long Swsw feet:²¹

related to the full-verse. And of course, one might object that the very marginality of SwS full-verses constitutes a probabilistic argument against Sverdlov’s proposal. I consider this analysis an interesting possibility, though it is not clear that double alliteration in the off-verse is necessarily completely illicit in lióðaháttir (Suzuki 2014, 659); in general this proposal currently seems too tentative to me to warrant the inclusion of Óðinn’s apparent on- and off-verses in the corpus of full-verses.

20. In addition to *Vm* 15.6 and 16.3: *Hav* 139.3, 162.8, 162.9, 164.7; *Ls* 33.3; *Sd* 19.8, *Gg* 14.6. Probably also to be included here are *Hav* 88.6 and *Ls* 59.6, but it is possible that their medial pronouns should instead be scanned as stressed; see note 24 below.

21. *Hav* 7.3, 8.6, 9.6, 20.6, 35.6, 56.6, 108.3, 111.3, 112.3, 113.3, 115.3, 115.7, 116.3, 117.3, 119.3, 120.3, 121.3, 122.3, 125.3, 126.3, 127.3, 128.3, 129.3, 130.3, 131.3, 132.3, 134.3, 135.3, 137.3, 154.6; *Vm* 4.6, 47.6; *Grm* 5.3, 6.3, 11.6, 12.3, 14.3, 16.3, 39.6, 45.6, 45.7; *Skm* 12.6, 14.3, 26.6, 30.3, 33.6; *Ls* 10.6, 16.6, 18.3, 27.3, 32.3, 37.3, 43.6, 49.6, 50.3, 53.6, 56.3; *Alv* 3.6; *HHv* 18.3, 26.10, 29.6; *Rm* 20.6; *Fm* 2.3, 14.6, 15.3, 24.7, 27.3, 30.6; *Sd* 12.3, 12.9, 20.3; *Gg* 14.3; *Fí*

- (445) gambanreiði / goða
 ‘powerful anger of the gods’ (*Skm* 33.6)
- (446) (inn) móðurlausi / mōgr
 ‘the motherless youth’ (*Fm* 2.3)
- (447) Ægis hōllo / í
 ‘in Ægir’s hall’ (*Ls* 10.6, 16.6, 18.3)
- (448) sessa kostom / (í) sal
 ‘the choice of seats in the hall’ (*Grm* 14.3)

The structure of (445) seems particularly clear, with the verse being very simply made of two words, and (446) is nearly the same, except for an extrametrical up-beat. (447-448) are more complex, but their alliterative patterns are the same. This is further reinforced by the constituent structure, with *hōllo* being subordinated within a genitive phrase in (447). This contrasts with the following superficially similar Db* verse, of the sort discussed in §4.2.1.1:

- (449) heilir / hildar til
 ‘hale to battle’ (*Hav* 156.6)

Here the first word is not strongly connected to the second, but is rather an adjective describing warriors, while *hildar til* comprises the entirety of a distinct postpositional phrase; the alliteration is correspondingly on the medial stress rather than the final one.

It should not be surprising that the full-verse should make use of Ssw feet. Bugge’s rule excludes verses consisting entirely of the type A Sw/Sw rhythm so favoured by fornyrðislag, so there is little danger that a full-verse opening with two trochees could be confused as an whole verse.²² Ssw feet are avoided as second feet,²³ presumably because they come too close to overlapping with the invalid final $\bar{\text{S}}$ w feet.

41.6, 42.3.

It is worth noting that off-verses also seem to avoid Sw/Sw verses, and instead employ Ssw feet (cf. *Hav* 138.2, 164.2; *Ls* 3.2, 4.2; as well as ww/Ssw verses like *Hav* 95.5 or *Fm* 1.5, which notably do not show expansion of the medial dip). This preference for long compound feet over the ‘canonical’ type A structure is probably largely responsible for the apparent affinity of off- and full-verses noted by, e.g., Kristján Árnason (1989; 1991, 163).

22. There are two potential full-verses with this pattern, both in galdralag sequences: *Hav* 164.8 and *Grm* 49.7. There are no examples in normal lióðaháttir contexts, and there is no reason to assume that this is in any way a generally valid type.

23. The only possible example is *Hav* 39.6, whose alliterative pattern may suggest a structure of (w)Sw/Ssw. However, this is at odds with the verse’s syntactic constituency, and this pattern is not paralleled elsewhere. This verse also immediately follows a defective off-verse. This single example is therefore highly doubtful, and of little use as metrical evidence.

There are a handful of more ambiguous verses, where alliteration and syntax do not agree, but the count is not very large. Particularly rare are verses with medial alliteration, but syntactically resemble SswS/S verses. The following list is comprehensive:

- (450) háva hǫllo í
 ‘in the hall of the high one’ (*Hav* 109.4, 111.10, 164.2)
- (451) háva hǫllo at
 ‘at the hall of the high one’ (*Hav* 111.9)
- (452) heimi hveriom í
 ‘in every world’ (*Alv* 9.6, etc. (13x))

While the absolute numerical count of these examples is reasonably high because of the repetitive nature of both *Hávamál* and, especially, *Alvísmál*, it is clear that we have really only two formulas here. Moreover, it seems probable that all instances of the first formula are in fact on- or off-verses, not full-verses. *Hav* 109.4 follows another ‘full-verse’ with single alliteration, and the two probably simply form an on/off pair. 111.9 and 111.10 are similarly paired with each other. 164.2 was, probably rightly, printed as an off-verse by Neckel (1936). This particular formula never occurs in the typical place in a lióðahátt stanza, as a lone full-verse after an on/off pair. No such explanation can hold for *Alv* 9.6 and its repetitions, which stand as regular parts of lióðahátt stanzas, but this one formula is isolated and limited to a single poem: it constitutes a very minor exception to the otherwise very robust generalization that verses which appear syntactically to be (w)SswS/S verses have alliteration on the first and third stressed elements.

Less common numerically, but slightly more varied in form are verses which have final alliteration, but whose syntactic constituency might suggest instead a Db* rhythm Sw/Sws:²⁴

- (453) ok sný ek hennar ǫllom sefa
 ‘and I turn all her thought around’ (*Hav* 161.6)
- (454) siálfr í eyra syni
 ‘himself in the ear of his son’ (*Vm* 54.6)
- (455) sagðir í eyra syni
 ‘said into the ear of your son’ (*Vm* 55.3)

24. To the verses listed here might be added *Hav* 88.6 and *Ls* 59.6; see note 20 above.

- (456) ok svæfir allar sakir
 ‘and calms all quarrels’ (*Grm* 15.6)
- (457) frókn at hefna fǫður
 ‘brave to avenge his father’ (*Grm* 17.6)
- (458) ok varðar alla vega
 ‘and guard all paths’ (*Skv* 11.3)
- (459) mæðr, at þínom munom
 ‘maiden, at your liking’ (*Skv* 35.9)

The number of total cases where alliteration and syntax are in conflict is thus rather low (see further §4.2.1.3). Even counting all repetitions separately, and including the uncertain examples, there are 22 (w)SwsS verses with irregular alliteration, against 193 normal verses (not including, for the moment, those with triple alliteration), making for an alliterative irregularity in about every one verse in ten. If we set aside all verses from *Alvísmál*, whose highly repetitive style can easily skew the overall picture, we are left with nine irregular verses and 188 regular verses: the irregular verses constitute around 4.6% of the total.²⁵

Superficially similar to SwsS/S verses in alliteration is a smaller group which is probably better taken as having the foot structure Sws/(w)S, with the ‘second dip’ consisting only of an extrametrical element:

- (460) lof ok vit, / (meðan) lifir
 ‘honour and wisdom while he lives’ (*Hav* 9.3)
- (461) (ok) silfri þakþr / (it) sama
 ‘and thatched with silver as well’ (*Grm* 15.3)
- (462) gambansumbl / (um) geta
 ‘to have a mighty feast’ (*Ls* 8.6)

25. It is worth mentioning that even if these alliteratively mismatched verses are a tolerable form of metrical variation, their rarity may still have some probabilistic value in considering emendations. For instance, *Fi* 1.3 is traditionally printed as *þursa þjóðar siqt*, but the reading *þurs á þjóðar siqt* has also been proposed (Eysteinn Björnsson 2001, s.v.). This emendation is not unambiguously an improvement from an interpretative perspective: it makes considerably better sense of *koma upp* in 1.2, and much improves the reading of the initial stanzas, but it comes at the cost of having to assume that Svipdagr is, or has the appearance of a þurs, which would then need to be reconciled with his characterization as a maðr later on (perhaps cp. *Vm* 7.1, where Óðinn is incorrectly referred to as a ‘man’, though by Vafþrúðnir rather than a narrator). Interpretative questions aside, however, this emendation perhaps receives some support from the metrical concerns discussed here, in that *þurs á / þjóðar siqt* would show a clearer agreement between the alliteration and the syntactic structure. As with all metrical evidence, this should, of course, be taken as one consideration in a more holistic examination of the very difficult opening stanzas of *Fiqlsvinnzmál*.

The element I take as extrametrical is not only separated from the first foot by a word boundary, but is usually syntactically grouped with the final element (and may be proclitic to it). The first foot, before the extrametrical word(s), is generally a close syntactic unit in itself, and in nine of the 32 verses of this sort consists of a single compound word.²⁶

This scansion is supported by some 24 verses that seem to have the same structure, but without the extrametrical element before the second foot (that is, with the structure (w)Sws/Šw):²⁷

(463) úrig fiöll / yfir
‘over misty mountains’ (*Skm* 10.3)

(464) iǫrmungrund / yfir
‘across the mighty earth’ (*Grm* 20.3)

That these verses are somewhat less common than their cousins like (460), with extrametrical syllables before the second foot, may be due to the desire to avoid stress clash.

It has often been noted that (464) is virtually identical to a verse from *Bēowulf*:

(465) ofer eormengrund
‘across the mighty earth’ (*Beo* 859a)

From a comparative perspective, it is attractive to view these verses as essentially identical in structure, differing only in the order of the two feet. One possible implication of viewing these verses as only minimally different is that lióðaháttir is much more tolerant of ‘reversed’ patterns than the ‘epic’ metre of *Bēowulf*.

There is a final group of (w)SwSwS verses with triple alliteration, leaving syntax alone as a guide to internal structure. Most of these, some 23 examples, appear to have a short initial foot, Sw/Sws:²⁸

(466) hefna / hlýra harms
‘to avenge a brother’s wrong’ (*Rm* 10.6)

26. *Hav* 9.3, 17.3, 27.3, 59.6, 100.3, 114.6*, 120.7*; *Vm* 44.6*; *Grm* 15.3, 30.3*, 54.6; *Skm* 27.7, 32.3*, 32.4*; *Ls* 8.6*, 28.6, 34.3, 35.3, 48.3, 54.3, 65.7; *Alv* 4.3, 8.3; *HHv* 26.3, 26.7; *Rm* 8.3; *Sd* 4.6*, 24.6, 26.3*; *Gg* 7.3, 8.6; *Fi* 16.6. Possibly to be counted here as well is the difficult verse *Ls* 14.6. Verses with Sws compounds are marked with an asterisk.

27. *Hav* 38.6, 53.6, 91.3, 98.6; *Vm* 37.6; *Grm* 17.3, 20.3*, 29.9; *Skm* 10.3, 34.7, 34.8, 35.6; *Ls* 6.6, 13.3, 58.3, 65.6; *HHv* 12.7; *Fm* 26.3, 31.3*; *Sd* 11.6, 22.3*; *Gg* 13.6; *Fi* 2.6, 29.6. Verses with Sws compounds are marked with an asterisk.

28. *Hav* 36.3, 37.3, 42.3, 158.6, 160.3; *Vm* 31.3, 40.6, 41.6, 43.7; *Skm* 26.3, 35.10; *Ls* 12.3, 18.6; *HHv* 28.6; *Rm* 4.6, 10.6; *Sd* 2.3, 14.3, 25.9, 37.6; *Gg* 4.6, 9.6; *Fi* 37.6.

- (467) *mær, at*²⁹ / *mínom munom*
 ‘maiden, by my will’ (*Skm* 26.3, 35.10)

I can find only one example which seems to open with a long initial foot:

- (468) (*með*) *slævo sverði* / *sigr*
 ‘victory with a blunt sword’ (*Fm* 30.6)

That the overwhelming majority of (w)SwSwS verses with triple alliteration should be Db* is probably to be expected. Alliteration is not an infallible guide to foot structure, but it is a significant aural cue, and if a listener has already been presented with an Sw foot, the expectation should be that the next alliterating stress marks the start of the second (and final) foot. A third alliteration would most normally be supplementary, an addition to an already established metrical structure.

Taken all together, verses with the superficially ‘*dreihebig*’ (w)SwSwS pattern appear to fall into several distinct groups. The 141 ‘Db*’ verses discussed in §4.2.1.1 begin with a short foot, and have a compound second element, Sw/Sws. The remaining 105 begin with a long foot, either Ssws or Sws, followed by a short S (S^w) foot, potentially with a preceding extrametrical element – this shows some bias against ‘reversed’ patterns, though the preference appears to be relatively weak compared to ‘epic’ verse. Only in about 20 verses do syntax and alliteration fail to agree in pointing to the internal constituency of these complex full-verses.

4.2.1.3 Feet and Constraints on Extrametrical Syllables

In the preceding sections I have discussed all (w)SwSwS verses in my corpus, in their various types. Important further support for the reality of their different internal foot structures comes from a constraint on the expandability of medial dips. Around 78 (w)SwSwS verses (29% of the 266 verses of this sort) have an ‘expanded dip’, with more than one unstressed syllable between lifts. In only two verses do we find both medial dips expanded:

29. In this and similar verses, there is perhaps some possibility that the second word should be regarded as extrametrical, S/(w) rather than Sw/. I have generally assumed the latter scansion: the Sw foot is important and salient, either as the initial foot of a verse, or as the pattern whose avoidance provides the most important metrical rule for its end. So if a pattern potentially overlaps with this foot, I assume that it is an example of it. It is also striking that ‘plain’ D verses are very rare, which encourages the scansion of sequences like *mær, at* as an Sw foot, though admittedly stress clash avoidance may play at least some role in this.

- (469) Gǫndlir **ok** Hárbarðr **með** goðom
 ‘Gǫndlir and Hárbarðr among the gods’ (*Grm* 49.10)

- (470) veitsta þú þá, vesall, hvé þú vegr
 ‘you won’t know then, wretch, how you will fight’ (*Ls* 42.6)

(470) is not a very secure example. It is not clear how much weight to give the initial verb: Suzuki (2014, 1036) regards it as unstressed and part of the dip, though one may doubt whether the alliteration of the verb should so casually be set aside. More importantly, many earlier editors have suspected that the *þú* may not be entirely authentic. We do not need to fully endorse the reductionist zeal of Sievers (1885a, 76) or Gering (1902, 459) or Gering and Hildebrand (1904, 139) to have some reservations about putting undue faith in every last potentially superfluous unstressed particle (see further §4.2.2.2). It is, at any rate, noteworthy that of only two potential verses of this sort, one should be so obviously doubtful: this is very likely an unmetrical pattern. If so, it would seem to be a metrical rule that only one dip may be expanded.

Moreover, such expansion appears to occur ONLY IF AN ALLITERATING LIFT IMMEDIATELY FOLLOWS (Suzuki 2014, 668-70, esp. table 13.4; 676). There are only five exceptions to this generalization:

- (453) ok sný **ek hennar** ǫllom sefa
 ‘and I turn all her thought around’ (*Hav* 161.6)
- (455) sagðir í eyra syni
 ‘said into the ear of your son’ (*Vm* 55.3)
- (471) lítt **ek þér** þat fyr lygi
 ‘[corrupt]’ (*Ls* 14.6)
- (472) geð **hennar** allt ok gaman
 ‘all her love and love-sport’ (*Hav* 99.6)
- (473) né svá illr, at einugi dugi
 ‘nor so bad that he is good for nothing’ (*Hav* 133.6)

(453) and (455) are, as has already been noted, verses in which the alliteration does not seem to match the syntactic structure of the verse, making these verses doubly anomalous. (471) appears to violate the rule, but is usually emended (see the discussion in von See et al. 1997, 410f.). Even if the verse is left unchanged, with the second word as *ek*, this could be scanned as a cliticized **-k*, removing

the extra syllable and giving the verse a monosyllabic initial dip, Sws/(w)S^w (Sievers 1885a, 71).³⁰ Only in (472) and (473) do we find an expanded dip before a non-alliterating lift accompanied by no other unusual or suspicious features. Even should every possible exception be admitted, we would have only seven full-verses in the entire corpus with an expanded dip before a non-alliterating lift.

Given these facts, it seems justified to propose rather strict constraints on the expansion of medial dups in líóðaháttir full-verses, which I will initially state in traditional terms:

(474) a. When a full-verse has two medial dups, only one of these may be expanded.

b. The lift immediately following such an expanded dip must alliterate.

While these constraints can be described in terms of ‘lifts’ and ‘dups’, they are better understood and motivated with the word-foot theory.

The first part, (474a), is a consequence of the strict regulation of word-feet. Swws and Sws feet are very distinct entities, and there is no possibility of simply inserting extrametrical syllables within a foot. On the other hand, extrametrical syllables may, with considerable freedom, occur before either foot of the verse. Thus, in Ssws/S verses, only the second dip may be expanded to Ssws/(w...)S:

(448) sessa kostom / (í) sal

‘the choice of seats in the hall’ (*Grm* 14.3)

Expansion of the first dip is ruled out by the absence of *Swws feet. Conversely, in Db* verses, Sw/Sws, only the first dip may normally be expanded, since Swws feet are, if not entirely prohibited, very rare and marginal:

(421) bryniom / (um) bekki strát

‘strewn with mail-coats across the benches’ (*Grm* 9.6)

Under this view, the doubly expanded (469) must be regarded as unmetrical, or else licensed in some highly anomalous way. That this verse is so isolated suggests that it is perhaps a virtue of a metrical theory not to expect such patterns.

Since extrametrical syllables are only possible between feet, and since the heads of stressed feet are in most cases marked by alliteration, rule 474b follows naturally as well: extrametrical syllables will almost always be followed by the alliterating lift that begins the second foot. This consideration suggests that the proper scansion of two of our problematic verses may in fact be the following:

30. Dronke (1997, 336) plausibly emends manuscript *ec* to *er*, which is open to a similar scansion as *-s.

- (453) (ok) sný ek / (hennar) qlom sefa
 ‘and I turn all her thought around’ (*Hav* 161.6)
- (455) sagðir / (í) eyra syni
 ‘said into the ear of your son’ (*Vm* 55.3)

These verses were cited above as showing an apparent mismatch between syntax and alliteration. If we take syntax as the better guide to foot structure, then the only anomaly of these verses is their irregular alliteration: the constituency and placement of the extrametrical syllables is otherwise normal. If we were to instead take alliteration as a strict guide to foot structure, then we would have two problems: a mismatch of syntax and foot structure, and unexplained expansion of foot-internal dip. Taking the alliteration as faulty seems the more economical of these alternatives.

(472) and (473) remain problematic, since both syntax and alliteration seem to agree that *geð hennar allt* and *einugi dugi* should stand as single feet. It is unclear whether lióðahátttr had some marginal place for Swws feet (see further in §4.2.2 below), though in any case this pattern is again so very rare that, as with (469), it seems reasonable to regard these two as unmetrical anomalies. It is worth emphasizing that verses like (472) are very easy to imagine within the language, and their general avoidance implies that there was a real metrical factor disfavouring, if not virtually prohibiting, them. The word-foot theory provides a coherent means of describing and motivating these compositional biases.

Neither Suzuki’s positional view nor Russom’s tripartite word-foot analysis seem to me able to adequately account for these constraints. The correlation between expanded dups and alliteration on the following lift is noted by Suzuki (2014, 668-70; 676), but he merely observes the phenomenon without offering any metrical explanation for it. This is most likely simply because no means of explanation exists within his positional framework: the rule may be stated, but it cannot be accounted for. The tripartite word-foot theory has even more difficulties: in what it would regard as Sw/Sw//S verses, it must allow for extrametrical syllables before either foot individually:

- (421) bryniom / (um) bekki // strát
 ‘strewn with mail-coats across the benches’ (*Grm* 9.6)
- (448) sessa / kostom // (í) sal
 ‘the choice of seats in the hall’ (*Grm* 14.3)

It is difficult to see why extrametrical syllables of this sort should not occur before both feet, or why they should be only be allowed before alliterating feet. Only if we view full-verses as fundamentally bipartite, and built using word-feet more or less along the lines described in this section, do the restrictions of (474) become not only describable, but motivated and indeed necessary. The only current metrical framework that can readily operate with the needed verse-internal constituents is the (dipodal form of) the word-foot theory. This patterning therefore not only provides important evidence that Heusler's bipartite analysis of full-verses is essentially correct (though not in precisely the form he proposes), but is a significant corroboration of the word-foot theory as a means of accounting for Germanic metres generally.

4.2.2 VERSES WITH INITIAL UPBEATS

In §4.2.1, I focused on verses that seem to have three stressed or partially stressed elements, namely those in which a S or Sw foot is paired with a compound foot. Such verses serve as a useful starting point because their very complexity highlights important compositional limits of the full-verse, and allows for a clearer view of its metrical constituents. Nonetheless, most full-verses are 'zweihebig', and it remains to be seen how well the conclusions of the previous section generalize to the remainder of the corpus.

To start, the most frequent full-verse pattern was illustrated in (401) above.³¹

31. I count 354 such type B verses: *Hav* 1.4, 2.3, 2.6, 5.3, 5.6, 6.6, 10.6, 14.3, 16.6, 18.3, 22.6, 23.6, 24.6, 26.6, 28.6, 29.6, 30.3, 32.3, 32.6, 33.3, 34.3, 39.3, 40.6, 41.3, 41.6, 48.6, 50.3, 50.6, 52.3, 57.6, 61.3, 63.3, 64.3, 65.6, 66.3, 66.6, 68.3, 68.6, 69.6, 70.6, 72.3, 72.6, 75.6, 76.3, 76.6, 77.3, 78.3, 78.6, 79.6, 88.3, 91.6, 92.6, 94.6, 95.3, 97.6, 98.3, 102.6, 102.9, 105.6, 105.7, 110.3, 111.11, 111.6, 113.7, 116.7, 118.6, 125.7, 125.8, 127.7, 128.7, 129.9, 130.10, 133.3, 138.9, 142.3, 142.4, 145.3, 146.3, 147.3, 148.6, 149.6, 149.7, 152.6, 153.6, 156.8, 163.6, 163.9; *Vm* 2.3, 3.3, 4.3, 6.3, 7.3, 9.3, 11.3, 12.6, 13.3, 14.6, 15.3, 16.6, 17.3, 19.3, 21.3, 21.6, 22.6, 24.6, 32.6, 35.6, 38.8, 39.6, 43.3, 44.3, 45.6, 46.3, 46.6, 47.3, 48.3, 49.6, 50.3, 52.3, 52.6, 53.3, 54.3, 55.6, 55.9; *Grm* 4.6, 13.3, 14.6, 20.6, 25.3, 26.3, 28.12, 30.6, 31.6, 38.6, 39.3, 40.3, 40.6, 42.3, 48.7, 50.3, 52.3, 52.6, 53.3, 54.3; *Skm* 1.3, 3.3, 4.6, 5.3, 6.6, 8.6, 9.6, 11.6, 13.3, 13.6, 14.6, 16.3, 16.6, 17.3, 18.3, 20.3, 23.3, 24.3, 25.3, 29.3, 29.7, 30.10, 36.7, 42.3; *Ls* 2.6, 3.3, 3.6, 4.3, 4.6, 9.6, 17.6, 22.3, 24.3, 27.6, 29.6, 30.3, 31.3, 32.6, 33.6, 35.6, 36.3, 36.6, 37.6, 38.3, 38.6, 39.6, 40.3, 41.3, 43.3, 44.6, 46.3, 46.6, 50.6, 51.3, 52.6, 56.6, 62.6, 62.7, 64.3; *Alv* 1.3, 2.3, 2.6, 3.3, 4.6, 5.6, 20.6, 26.6, 32.6, 35.6, 35.7; *HHv* 13.6, 14.3, 15.3, 16.3, 16.6, 17.6, 19.3, 20.6, 21.3, 22.6, 23.3, 24.3, 24.6, 25.6, 26.6, 28.8; *Rm* 1.3, 1.6, 2.3, 2.6, 3.6, 6.6, 7.3, 12.6, 19.6, 20.3, 22.6, 24.3, 24.6, 25.3, 25.6; *Fm* 1.3, 1.6, 3.3, 4.6, 5.6, 6.3, 7.3, 10.6, 12.6, 15.6, 16.6, 17.3, 19.3, 21.3, 22.6, 25.3, 27.6, 28.3, 28.6, 29.3, 29.6, 34.3, 38.3, 39.6; *Sd* 3.3, 6.3, 6.6, 7.6, 9.3, 9.6, 10.9, 11.3, 13.6, 18.4, 18.7, 18.8, 19.7, 19.9, 20.6, 21.3, 22.6, 23.6, 24.3, 25.3, 25.4, 25.6, 26.6, 27.3, 27.6, 28.6, 33.3, 34.3, 34.6, 35.4, 35.5, 35.7, 36.3, 36.6, 37.3; *Gg* 1.3, 2.3, 4.3, 5.3, 6.3, 7.6, 10.6, 12.6, 15.3, 15.6, 16.3; *Fi* 4.6, 5.3, 5.6, 6.3, 7.3, 9.3, 10.6, 11.3, 13.3, 14.3, 14.6, 15.3, 16.3, 17.3, 18.3, 19.3, 20.3, 20.6, 21.3, 21.6, 22.6, 23.3, 25.3, 27.3, 29.3, 31.3, 33.3, 35.3, 37.3, 39.3, 39.6, 40.6, 41.3, 42.6, 46.3, 46.6,

(401) *er hann hafðit gýgiar gaman*

‘when he did not have joy of giantess’ (*Vm* 32.6)

As noted above, verses of this sort could be scanned as bipartite or tripartite, though there are some initial reasons to favour the former option. Hartman (2011, 251) points out that taking this type as a base verse plus a cadence would make the A3 pattern the single most common type of opening, despite its rather unusual structure among Germanic verse types in general.³² On the other hand, taking them as type B verses would bring the full-verses in line with lióðaháttir off-verses, where this is also the single most common type (Russom 2009b, 74f; Suzuki 2014, 602ff.). This argument of frequency is naturally not conclusive, but it fits well into the picture of dipodal word-feet developed in the previous section.

If these verses are taken as bipartite, their structure is still not immediately clear. Heusler, for instance, takes all B and C verses, in fornyrðislag and Old English as well as lióðaháttir, as containing two alliterating Takte, preceded by a mandatory anacrusis (Heusler 1890, 146). The alternative scansion, more in keeping with the word-foot analysis of type B in other metres, would be to take *er hann hafðit* as a metrical light foot, followed by a single compound foot, *gýgiar gaman*.

The only factor speaking strongly in favour of Heusler’s approach is the alliteration, since the final two lifts always both alliterate in the full-verse. This is not a trivial consideration. Although the word-foot theory can certainly tolerate double alliteration within a foot, it is clear that elsewhere in Germanic metre, double alliteration tends to be much less frequent when both lifts are within a single foot. The suggestion is that since alliteration serves, in some contexts, to highlight foot boundaries, it is somewhat disfavoured foot-internally, where it serves only to mark stressed syllables (§1.2.4). A potential implication of this observation could be that the regular application of double alliteration ought to favour the interpretation of the two stresses as belonging to different feet.

While this argument is not without merit, I do not think it is ultimately persuasive on its own. Russom’s work on word-feet in *Bēowulf* and fornyrðislag has established a precedent for analysing verse-internal constituents (feet) with double alliteration: Sws and Ssw feet do not always have double alliteration, but it is

48.3, 48.6, 49.3. Compare Suzuki (2014, 818). On apparent ‘B2’ verses with longer medial dips, see notes 42-45 and table 4.3 below.

32. For Suzuki in particular, the frequency of such verses is a major problem. By his own scansions, 699 of 1111 full-verses (62.9%), including the many A3 base verses, would have fewer than four positions on the surface. This is difficult to reconcile with his supposition that canonical base verses – all except 21 ‘two position’ verses, in his view – have four positions underlyingly (Suzuki 2014, 738, table 13.58; cf. 726, table 13.53).

clearly permissible. This is because while alliteration can be used to emphasize foot boundaries, its primary role is as a feature of poetic *lines*, marking out prominent syllables, and incorporating them into an alliterative scheme appropriate to the metre (Russom 1987, ch. 7; Yakovlev 2008, 77). In líóðahátt, double alliteration is an absolute requirement for the full-verse: if the only two potentially alliterating syllables fall within a single foot, they should show double alliteration. In light of this, we should probably not place too much weight on alliteration alone in determining foot structure, and look at other features and clues to their composition.

Gýgiar gaman is a tightly bound genitive phrase of the sort that often serves as the final constituent of the Db* verses discussed above (examples 466-467 show precisely comparable doubly alliterating Sws feet). This example is typical. There are a certain number of verses which do show a syntactic break within the final Sw.S or S.w.S unit, but the vast majority end in sequences that appear to be single feet from a syntactic perspective. Even among the *dreihebig* verses, we have seen that examples such as (453) and (455) suggest that syntactic constituency may in general be a more important consideration than alliteration. This provides a significant challenge to Russom's analysis, which would predict that the major syntactic break would normally fall between the opening verse-like constituent and the final S foot.³³

4.2.2.1 *Light Feet and Anacruses*

The considerations discussed so far suggest that type B and C verses consist of an initial light foot followed by a compound foot of the shape Sws or Ssw. This raises a set of further questions concerning the initial unstressed material of full-verses in general, all centring on the issue of how metrical light feet are distinguished from extrametrical anacruses. I use the term UPBEAT to refer to any initial unstressed elements, whether metrical or not.

33. Russom suggests to me (p.c.) that if the metrical constituency of the verse is strongly regulated (an on-verse pattern followed by a foot), then there may be more flexibility in having the major syntactic and metrical breaks not always correspond. This seems to me possible up to a point: if the metrical structure is highly constrained, there should be greater leeway for mismatches and clashes. But I would still expect the syntactic structure to match the metrical structure more often than not, both because of the importance of syntactic constituents to word-feet in the theory in general, and because it is not clear how the abstract structure could continue to be recoverable across generations of poets if the mismatch with surface realizations were too high. The normal occurrence of the largest syntactic break earlier in the verse therefore strikes me as a very significant argument for the dipodal nature of the full-verse.

The most basic requirement of the upbeat before a Sw.S sequence is that it must exist – in Heusler’s view, such verses have a mandatory Auftakt. The two exceptions, (442) and (443), were discussed in §4.2.1.1, and it is clear that such verses do not constitute normally permissible full-verses. For an upbeat to be mandatory suggests that it forms a real part of the verse: an initial light foot. Conversely, a number of base rhythms (including D* verses of various sorts, as already implied in many scansion given so far) can freely occur with or without some unstressed initial syllables at the beginning, strongly implying that these upbeats are extrametrical anacruses. They may be used for syntactic convenience, but have no role in the metrical structure of the verse.

In characterizing anacrusis in *Bēowulf*, Russom (1987, 33ff.) notes that, in that metrical system, anacruses (a) are short (longer strings of unstressed syllables indicate the presence of a light foot), (b) usually consist of lighter elements (such as unstressed prefixes), (c) are limited before more complex foot combinations, and (d) are largely restricted to the on-verse. These constraints are all designed to avoid excessive overlap between metrical upbeats and anacruses: there is some real overlap, but one can tell based on metrical context and the linguistic material involved whether a given upbeat is more likely to be metrical or anacrustic (cf. §1.2.6).

In lióðahátt, the situation is at once similar and different. There are few unstressed prefixes in Norse, so the material used to fill anacruses is generally less distinct from that of light feet. Furthermore, clearly optional upbeats (which are taken as anacrustic even by Suzuki and Russom), such as those before (w)SwSw/S verses, can be much longer than in *Bēowulf*, creating a larger range of overlap with metrical upbeats:

- (422) **(með)** ungom / Óðins syni
‘with the young son of Óðinn’ (*Skm* 21.3, 22.3)
- (475) **(sá skal fyr)** heiða brúði / himins
‘he must be before the bright bride of heaven’ (*Grm* 39.6)
- (476) **í** / gǫrðom goða
‘in the courts of the gods’ (*Vm* 2.3)
- (477) **era þér** / vamma vant
‘there’s no lack of faults in you’ (*Ls* 30.3)

The upbeats in (422) and (475) seem to be genuinely anacrustic, occurring before otherwise full and independently occurring verse patterns, while those in (476)

and (477) would appear to have mandatory, metrical upbeats required to fill out the verses. These scansion show that a light preposition, such as *með* or *í*, can potentially stand in either capacity, as may trisyllabic phrases such *sá skal fyr* or *era þér*.

Despite a larger potential for ambiguity than is the case in *Bēowulf*, on average there is a clear trend for most anacruses to be lighter, with fewer syllables and consisting more often of words with purely grammatical function. The opposite is true of light feet, which are frequently bolstered with further unstressed material to increase their salience, and often have heavier words (more frequent lexical verbs and adverbs, and even nouns and pronouns; though some of these last might be regarded as D* verses with irregular alliteration). As Hartman (2011, 254) has noted, the upbeats of types B and C are, on the whole, considerably longer in *líóðahátt* than in *fornyrðislag*, which is presumably due to a desire to keep them generally differentiated from the longer anacruses found in this system. By my counts, the average upbeats of types B and C together is around 3 syllables, while that of the clearest anacrusic types³⁴ is around 1.5 syllables.³⁵

On the whole, then, the evidence of upbeats appears to be consistent with the presence of a real light foot before types B and C, just as in other Germanic metres. The following verses are typical, with a fairly robust light foot followed by a doubly alliterating compound foot (normally a phrase, since double alliteration within a compound is difficult):

(401) *er hann hafðit / gýgiar gaman*
 ‘when he did not have joy of giantess’ (*Vm* 32.6)

(478) *ok ríð / heim heðan*
 ‘and ride home hence’ (*Fm* 20.3)

A further consequence of seeing these upbeats as real light feet is that the evidence of double alliteration in these types begins to appear fairly marginal. By and large, listeners would be able to understand that the upbeat constituted the first foot of the verse, meaning that whatever followed was likely to be a single compound word-foot. There would be less danger, therefore, of alliteration being taken as an indicator of foot boundaries, rather than simply as a requirement of the line fulfilled within a single foot.

34. Counting all D and D* verses, as well as (w)Sws/S verses and ‘Eb’ verses with the pattern Sws/Šw or Sws/(w)S^w. I discuss types E, A2k, and ‘B2’ below.

35. If the many verses of these types with no upbeat at all are factored in, their average upbeat length is around 0.4 syllables.

4.2.2.2 *Intermediate Upbeats*

The only major complication to this analysis of anacrusis comes from types E,³⁶ A2k,³⁷ and what might be called ‘B2’.³⁸ The most numerous of these is type E, which is amply attested both with and without upbeats:

- (479) vápn^hdauða / vera
 ‘weapon-dead men’ (*Grm* 8.6)
- (480) (eða ero) vápn^hdauðir / verar
 ‘or are weapon-dead men’ (*Sd* 33.6)

This particular example is especially striking, but the general pattern it illustrates is typical: the upbeat before a type E verse appears to be truly optional, strongly suggesting that it is anacrusic.

What is more unusual is that these anacruses are both more frequent (anacrusic variants are actually somewhat more common than E verses with no upbeat), and longer than what we find elsewhere. The situation is somewhat similar for type A2k, though plain variants, such as (481), are considerably rarer:

36. I count 66 type E verses: *Hav* 24.3, 25.3, 29.3, 38.3, 57.3, 71.3, 71.6, 93.6, 97.3, 102.3, 123.3, 123.6, 138.3, 153.3; *Vm* 3.6; *Grm* 8.6, 9.3, 10.3, 18.3, 21.6, 33.3, 34.9, 36.3, 41.6, 43.3, 46.6, 47.3; *SkM* 1.6, 2.6, 6.3, 39.6, 41.6; *Ls* 1.3, 1.6, 2.3, 5.3, 17.3, 19.3, 21.6, 40.6, 45.3, 55.6; *Alv* (all repetitions of the same line) 9.3, 11.3, 13.3, 15.3, 17.3, 19.3, 21.3, 23.3, 25.3, 27.3, 29.3, 31.3, 33.3; *HHv* 14.6, 23.6; *Rm* 19.3, 21.6; *Fm* 24.3, 38.6; *Sd* 8.6, 29.3; *Fi* 10.3, 32.6, 35.6. Three verses unambiguously show a longer pattern Ssww/S, where the initial four-syllable foot is a single compound: *Vm* 23.6, 33.6, and *Ls* 13.7. Other verses also have a long medial dip, but it is less clear whether or not the extra syllables are extrametrical.

There are 86 E verses with anacrusis (E+, with + indicating an anacrusic variant of any more basic type): *Hav* 11.6, 18.6, 25.6, 42.6, 45.6, 55.6, 58.6, 62.6, 67.3, 75.3, 100.6, 101.3, 104.3, 109.7, 122.7, 136.6, 151.6, 154.3, 161.3, 162.3; *Vm* 1.6, 2.6, 5.3, 8.6, 20.3, 22.3, 24.3, 26.3, 28.3, 29.3, 29.6, 30.3, 31.6, 32.3, 34.3, 35.3, 36.3, 38.3, 39.3, 42.3, 42.7; *Grm* 11.3, 18.6, 23.3, 24.3, 32.6, 34.3, 36.9, 44.3; *SkM* 10.7, 17.6, 18.6, 19.6, 37.6; *Ls* 11.3, 13.7, 54.7; *Alv* 7.6, 12.3; *HHv* 25.3, 30.6; *Rm* 4.3; *Fm* 6.6, 7.6, 23.6, 24.4; *Sd* 3.6, 4.3, 12.6, 31.3, 33.6; *Gg* 1.6, 2.6, 11.6, 16.6; *Fi* 3.3, 8.3, 12.3, 15.6, 22.3, 24.3, 26.6, 30.3, 32.3, 40.3, 47.3. Two verses clearly contain the same long Ssww foot as well: *Vm* 10.6 and *HHv* 17.3.

Most plain type E verses are also to be found under Suzuki’s heading D- (2014, 718-20, 819), while E+ verses largely overlap with those labelled C (2014, 702-12, 819; table 13.40).

37. There are 44 A2k verses, mostly with anacrusis (the three without are marked by an asterisk): *Hav* 6.9, 10.3, 11.3, 15.3, 30.6, 37.6, 54.6, 92.3, 103.9, 104.6; *Vm* 6.6, 27.3, 34.6; *Grm* 3.3*, 26.6, 35.6, 45.3; *SkM* 31.3, 35.3; *Ls* 19.6, 25.6, 26.3, 44.3, 51.6, 52.3, 63.6; *Alv* 6.6, 7.3, 18.3, 22.3, 28.3; *HHv* 20.3; *Fm* 9.3, 11.3, 12.3, 14.3, 39.3; *Fi* 2.3, 6.6, 19.6*, 26.3, 34.6*, 43.3, 44.6.

These verses are split into several categories by Suzuki. Those with a word break after the first lift (i.e. w...S.S.Šw) are listed as type C-, while the more frequent pattern, with a compound (w...Ss.Šw), are subsumed under type A3 (which more frequently represents my type B).

38. The classification of this category is complex; see below.

Table 4.1: Presence and Absence of Upbeat by Full-verse Type

PATTERN	TYPE	NO UPBEAT	UPBEAT
(w...)SswS	E(+)	66 (43.4%)	86 (56.6%)
(w...)SsŠw	A2k(+)	3 (6.8%)	41 (93.2%)
(w...)SwSwS	Af(+)	73 (83.9%)	14 (16.1%)
(w...)SwS	B	0-2 (0-0.6%)	354 (99.4-100%)

Table 4.2: Upbeat Lengths by Full-verse Type

PATTERN	TYPE	1	2	3	4	5	6
w...SswS	E +	22 (25.6%)	32 (37.2%)	22 (25.6%)	7 (8.1%)	1 (1.2%)	2 (2.3%)
w...SsŠw	A2k +	13 (31.7%)	17 (41.5%)	7 (17.1%)	2 (4.9%)	1 (2.4%)	1 (2.4%)
w...SwSwS	Af +	9 (64.3%)	2 (14.3%)	2 (14.3%)	1 (7.1%)	0	0
w...SwS	B	31 (8.8%)	115 (32.5%)	111 (31.4%)	73 (20.6%)	19 (5.4%)	5 (1.4%)

- (481) Veratýr / vera
‘the god of men (bids you) be (well)’³⁹ (*Grm* 3.3)
- (482) (**þú ert**) alsviðr, / iqtunn
‘you are all-wise, giant’ (*Vm* 34.6)

The overall average lengths for the INTERMEDIATE UPBEATS of these two types is around 1.5 syllables, much longer than the 0.4 syllable average of other extrametrical upbeats, but far shorter than the 3 syllable length of typical light feet, as discussed in §4.2.2.1. The three patterns are illustrated in tables 4.1 and 4.2, which give data for types E and A2k, as well as SwSw/S verses (labelled ‘Af’ in the table) to represent a more typical anacrustic pattern, and B1 to represent light feet. Table 4.1 compares verses of each rhythm with and without an upbeat (of any length), while table 4.2 shows the numbers of unstressed syllables among those verses that do have upbeats.

Types E and A2k are intermediate by nearly any measure. They both have much larger numbers of verses with no upbeat (43.4% and 6.8%, respectively) than does type B (0.6%, or simply none at all, if typical stanza positions alone are considered), but much lower than Af (83.9%). Among the verses that do have an upbeat of some sort, we find a similar pattern, with Af+ being weighted most heavily towards single-syllable upbeats (64.3%), followed by the intermediate A2k+ (31.7%) and E+ (25.6%). Monosyllabic upbeats are found least often among type B (8.8%). In type B the majority upbeats have three or more syllables (58.8%), while this is true for neither the intermediate upbeats (37.2% of E+ verses have a trisyllabic or longer upbeat, and 26.8% of A2k+), nor Af (21.4%). The details vary somewhat from poem to poem, but the general trend holds across the corpus, with ‘intermediate’ upbeats being longer than clear anacruses, and shorter than clear light feet.

These intermediate upbeats present a problem in scanning full-verses regardless of one’s theoretical perspective. Both Russom and Suzuki (2014, 698; table 13.35; 712, table 13.48) would take them as metrical, but in light of the data we have just reviewed, this is awkward for at least three reasons. Firstly, the presence of so many variants with no upbeat at all is a strong argument for the extrametricality of the upbeat (this is particularly true for type E, the most common ‘intermediate’ type). Under Russom’s approach, for instance, (479) and (480) would have very

39. Some recent translators have alternatively taken *vera* as the GEN.PL. of *verr* ‘man’, giving the rather tautological but possible sense ‘Man-god of men’.

different structures:⁴⁰

(479) vápn- / dauða // vera

‘weapon-dead men’ (*Grm* 8.6)

(480) eða ero / vápndauðir // verar

‘or are weapon-dead men’ (*Sd* 33.6)

It seems more plausible that these verses are simply the same, varying only by the presence or absence of anacrusis. Secondly, in a system which does favour upbeat that are so much longer than those of *Bēowulf*, it is striking that these types should have upbeats so markedly shorter and lighter than is the norm for this metre (a norm which is established across several hundred B and C verses). Thirdly, in the *lióðahátt* off-verses, type E verses also show a predilection for anacrusis (74.2% of E off-verses have anacrusis, a considerably higher proportion than the 56.6% of type E full-verses), and these anacruses are again relatively long and heavy (though not quite as much as in the full-verse: 47.8% of off E + verses have a monosyllabic upbeat; 26.1% have three or more syllables; see Russom 2009b, 75, n. 16; Suzuki 2014, 639, table 12.51).

That is not to say that taking these upbeats as extrametrical is wholly unproblematic either: we still need to explain why types E and A2k should be so much more prone to anacrusis, and more tolerant of longer anacruses, than other verse types. Such an explanation lies, I believe, in the nature of the rhythm of these verses. In both types, the syllable immediately following the first lift is a heavy non-alliterating syllable, usually a secondary stress: (w...)Ss.... Since there are no word-feet which begin with Ss- and go on to have another potential alliterator in the same foot, the single alliteration in these feet sends a clear signal that another foot (containing another stressed element) must follow in the verse. A more ambiguous upbeat could be tolerated before such a Ss- foot, since any uncertainty would very quickly be resolved in favour of extrametricality.

By contrast, anacrusis is much more restricted in verses beginning with a Sw-sequence, (w...)Sw.... These are more ambiguous, and in themselves do not guarantee the upbeat to have been either metrical or anacrustic. They could be the start of a Sws foot, which may follow either anacrusis (type ‘Eb’, (w)Sws/Šw) or a light foot (type B, ww/Sws); or the start of a Ssw foot (which generally only occurs initially, so that anything preceding should be anacrustic); or an entire Sw foot (which also must be initial, as such feet are prohibited finally by Bugge’s rule).

40. These are my own scansions, based on Russom’s principles.

The upbeat itself thus has a larger role in setting up expectations for the structure of the verse as a whole, and is consequently more strictly regulated.

There may be other syntactic and formulaic factors at work influencing the peculiar situation of intermediate upbeats, but an explanation along these lines would go some ways towards accounting for how they may be anacrustic, despite being somewhat longer and more common than other anacruses.⁴¹

4.2.2.3 Types ‘B2’ and ‘B3’

There is one final category – not especially large in number, but interesting to consider – with longer upbeats, which is more problematic: verses that, on the surface, could be described as type B with an expanded second dip:

41. One alternative possibility would be to take type ‘E+’ and ‘A2k+’ as representing dipodal verses ending with particularly long or complex feet: ww/SsŠw or ww/SswS. This is not very plausible as a general analysis of the corpus. For one thing, some E+ verses contain an extrametrical syllable before the final foot, such as:

- (1) (svá hygg ek) Bilskírni / (með) bugom
 ‘so I think Bilskírni has within its compass’ (*Grm* 24.3)

Unless we want to extend the foot repertoire to include SswwS feet as well – a pattern extremely poorly supported by compounds – such verses imply a scansion like that of E verses elsewhere, Ssw/S. Furthermore, SswS and SsŠw feet are not usually found in other metrical contexts, making it less plausible to regard them as part of the general foot inventory of the metrical system.

Still, it may be possible that there is some variation from poem to poem, and that a few poets could employ such longer and heavier feet. The rather short *Grógaldur* has no plain E verses at all, and *Vafþrúðnismál* also shows a very striking preference for E to have anacrusis (*Vm* 3.6 is the only plain E verse, against 21 E+ verses in the poem). Neither poem has any E verses ending with extrametrical syllables before the final lift. It might therefore be possible to regard these two poets, at least, as employing SswS feet. Interestingly, *Vafþrúðnismál* has several verses with a long Ssww foot, otherwise found extremely rarely.

- (2) (hveim er við) kaldrifaðan / kōmr
 ‘for him who comes against the cold-ribbed one’ (*Vm* 10.6)

The full list of ‘E-long’ verses is: *Vm* 10.6, 33.6, 48.6; *Ls* 23.6; *HHv* 17.3 (the same foot may also possibly be found in a repeated formula in *Ls* 57.3, 59.3, 61.3, and 63.3, though the stress patterns are far from clear here). It may be that for verses of this sort, the poets of *Gg* and *Vm* tended towards certain kinds of heavier feet, favouring SswS and Ssww feet.

Similarly, for *HHv*, and *HHv* alone, we have a possible example of a SsŠw foot employed in a non-A2k verse:

- (3) (ek drekþa) Hlǫðvarz sonom / (í) hafi
 ‘I drowned Hlǫðvarðr’s sons in the sea’ (*HHv* 19.6)

It is again interesting that *HHv* in general seems to favour fairly heavy rhythms, and it may be that this poem does use SsŠw as a single complex foot. None of the few A2k verses with no upbeat occur in this poem. Still, this verse is unparalleled elsewhere, and can hardly be taken as evidence for the principles common to the lióðahátt corpus more generally.

- (402) ok svá sólar it sama
 ‘and so of the sun as well’ (*Vm* 23.3)
- (483) ok verpa lauki í lög
 ‘and a leek be cast in the liquid’ (*Sd* 8.3)
- (484) nema þú inn snotrari sér
 ‘unless you be the wiser one’ (*Vm* 7.6)
- (485) sú er faðmaði minn fǫður
 ‘she who embraced my father’ (*Gg* 3.3)

The evidence of syntax provides few initial clues as to whether these verses should be taken as actual ‘B2’ verses, with a light foot followed by a long Swws foot, or as equivalent to SwwS verses with anacrusis. There are few really close syntactic constituents of the sort that would suggest that both stresses belong to a single foot, but sharp breaks of the sort that would point in the opposite direction are also hard to come by.

It would not, for instance be at all difficult to find a single foot in (402), which is a close variation on a typical B1 verse:

- (486) eða / sól it sama
 ‘or the sun likewise’ (*Vm* 22.6)
 ww/Sws^w

Parallelism might suggest the same bracketing in the B2 variant:

- (402) ok svá / sólar it sama
 ‘and so of the sun as well’ (*Vm* 23.3)
 ?ww/Swws^w

On the other hand, it is not clear that such parallelism with B1 holds for most secure ‘B2’ verses, leaving this one example, suggestive as it is, somewhat isolated.

The first issue to consider is how frequent the ‘B2’ pattern actually is, since at least some of these verses could potentially be reduced to B1 (compare the non-reality of ‘B3’ in Old English, §1.2.2). About 15 ‘B2’ verses are like (483) and have adjacent vowels which might be contracted together:⁴²

- (483) ok verpa / lauki í lög
 ‘and a leek be cast in the liquid’ (*Sd* 8.3)

42. *Hav* 19.6, , 28.3, 33.6, 36.6, 59.3, 95.6; *Grm* 23.6, 42.6; *Ls* 20.3, 57.6; *Fm* 5.3, 23.3, 37.6; *Sd* 8.3, 10.3. On the verses in *Lokasenna*, cp. Sievers (1885a, svv.).

Some 28 more verses (though 19 are repetitions of *Hav* 112.4) have been reduced by certain editors, e.g. Gering and Hildebrand (1904), chiefly through the removal of pronouns:⁴³

(487) þér muno / góð ef þú getr

‘they will be good for you if you get them’ (*Hav* 112.4, etc.)

Such reductions leave a core of some 29 B2⁴⁴ and three B3⁴⁵ verses whose polysyllabic medial dip could only be removed through more drastic rewriting.

If the reducible examples are set aside, the remaining ‘B2’ and ‘B3’ verses like (444) might reasonably be taken as anacrusic variants of the seven Sww/S verses:⁴⁶

(444) grund ok með / goðom

‘(divides) the earth, also among the gods’ (*Vm* 15.6, 16.3)

Both the two Swww/S⁴⁷ and the three ‘B3’ verses are easily regarded as variants of this same pattern with an extrametrical syllable before the final foot.

That some sort of distinction like this is valid, with some apparent ‘B2’ verses actually being B1 (with an initial light foot), and others having the shape (w)Sww/S, is supported by a difference in the upbeats of the two sets. This is shown in table 4.3, where ‘B2/1’ includes all reducible verses, and ‘B2 (full)’ and ‘B3 (full)’ stand for unreducible w...Sw...S patterns with two and three syllables in the medial dip, respectively.

Table 4.3: Upbeat Lengths of Type B Full-verses

TYPE	1	2	3	4	5	6
B2/1	2	6	27	4	2	1
B2 (full)	5	12	6	5	1	0
B3 (full)	2	1	0	0	0	0

43. *Hav* 112.4, 113.4, 115.4, 116.4, 117.4, 119.4, 120.4, 121.4, 122.4, 125.4, 126.4, 126.7, 127.4, 128.4, 129.4, 130.4, 131.4, 132.4, 134.4, 135.4, 137.4, 162.7; *Grm* 53.6; *Ls* 28.9, 47.3; *HHv* 28.9; *Sd* 7.3, 21.6. All but the last, where editors have considered moving the verb *skolo* earlier in the verse, concern the removal of a pronoun.

44. These are: 6.3, 7.6, 19.3, 27.6, 27.9, 46.3, 134.1, 134.11, 135.7, 150.6, 157.7; *Vm* 7.6, 10.3, 23.3, 36.6; *Skm* 2.3, 3.6; *Ls* 5.6, 7.3, 7.6, 21.3, 22.6, 23.3, 47.6; *Rm* 9.3; *Fm* 4.3, 9.6, 20.6, 22.3.

45. *Hav* 21.3; *Sd* 21.6; *Gg* 3.3. The first two of these could potentially be reduced to B2, if we invoke both vowel contraction and the removal of a pronoun. Also potentially to be included here are *Fi* 17.6 and 18.6, though it might be possible to construe them as (w)Sws/(www)S^w verses with irregular alliteration in the first foot.

46. *Hav* 139.3, 162.8, 162.9; *Vm* 15.6, 16.3; *Ls* 33.3; *Gg* 14.6.

47. *Hav* 164.7 and *Sd* 19.8. Also worth mentioning are *Hav* 88.6 and *Ls* 59.6, which have ambiguously stressed medial pronouns.

The potentially reducible ‘B2/1’ upbeat resembles those of normal type B1 fairly closely: 4.8% have a monosyllabic upbeat, and even if the 19 repetitions of the formula of *Hav* 112.4 etc. are set aside, the rate of monosyllabic upbeats is only 8.3%. This is close to the 9% typical of B1 as a whole. Furthermore, a clear majority, nearly 81%, have three or more syllables in the upbeat, or 66.7%, setting aside repetitions; this is similar to, though actually somewhat more than, the 58.5% of clear B1.

The non-reducible types show a typical ‘intermediate’ pattern: 21.9% have a monosyllabic upbeat, and 37.5% have three or more syllables. This appears to fall into the same ‘intermediate’ pattern we find anacrustically for type E+ (25.6% monosyllabic, 37.2% trisyllabic or longer). This apparent difference between reducible and non-reducible ‘B2’ (and ‘B3’) verses is noteworthy, and suggests that there is at least some real metrical difference between these types, and I take the reducible variants as properly belonging to type B1.⁴⁸

The analysis of the unreducible variants is more difficult. Since the upbeat pattern so resembles the intermediate pattern of the more numerous types E and A2k, which I take as normally extrametrical, that might imply that the proper scansion of these verses is also with anacrusis: (w)Sww/S. However, I have no good explanation at the moment for why (w)Sww/S verses should tolerate longer anacruses when the initial foot does not begin with a Ss- sequence. Perhaps these Sww feet were felt to be close variants on Ssw feet.

The other possibility is that these are true ‘B2’ verses, with a dipodal structure ww/SwwS, which for some reason tends to favour lighter initial feet than type B1. There are, however, some real theoretical costs to this idea. Firstly, why should the upbeats be so much shorter than other B verses? There is also the problem of overlap with Sww/S verses like (444), where a verse and a verse-portion have the same structure. Furthermore, as noted above in §4.2.1, if Swws feet were real, we would expect to find fewer constraints on expanding medial dips in (w)SwSwS verses: structures like Swws/(ww)S or S/(ww)Swws should be possible, as should verses of the shape Swws/(w)S with an ‘expanded dip’ before a non-alliterating medial s. In practice such verses are so very rare as to appear unmetrical.

48. This is also a potential argument for taking vowel reductions and the eliminations of superfluous words seriously, though this is a topic which properly requires an extensive reevaluation. Such reductions were much discussed in the earlier literature; see especially the foundational discussions of Sievers (1878, 473-5; 1879, 307f; 1893, 62 (§39.2)) and Ranisch (1888, 32-7). This matter has, unfortunately, been increasingly rarely discussed in the context of Eddic poetry, and is entirely ignored by, for example, Suzuki (2014) in his otherwise comprehensive discussion of Eddic verse.

The linguistic basis of such a foot is also problematic. There do not seem to be any Swws compounds in Norse, so we would have to suppose that lióðaháttir had maintained use of this old metrical pattern purely as a conventional archaism that had been lost in the terser fornyrðislag. This is perhaps imaginable – traditional maintenance might help explain why the Swws foot is employed only in very simple verses, after light feet – and if accepted would provide important evidence for the conservatism and highly archaic nature of lióðaháttir. It is, however, a lot to assume on the basis of a rather small number of verses. Taken together with the other concerns just discussed, it seems difficult to justify scanning this type with Swws feet.

In any case, the number of of unreducible ‘B2’ verses is small – around 29, constituting 2.4% of the full-verse corpus – making their relevance for assessing intermediate upbeats in general somewhat limited. The general assessment of upbeats remains more or less the same, looking across the range of patterns. Anacruses tend to be relatively short and light, while light feet tend to be longer and heavier. Before Ss, Ssw, and Ssww feet, whose lack of double alliteration on the second stressed syllable quickly conveys the implication of a further second foot, slightly longer anacruses are tolerated. Only the small group of (w)Sww/S (?) verses remain uncertain, and do not fit neatly into this picture; their scansion remains a point for further consideration.

4.2.3 BUGGE’S RULE AND RESOLUTION

The arguments presented in the preceding sections leave open the question of just precisely what the role of Bugge’s rule – long the only real rhythmic rule proposed for the full-verse – actually is. In principle, the rule may be viewed either as a positive or a negative constraint: it could be a positive requirement for a certain kind of verse-ending, or a negative prohibition against $\bar{S}w$ endings. The arguments of Heusler, and the evidence of alliteration reviewed in §4.2, strongly suggested that Bugge’s rule cannot be a positive requirement in any strong form, since there is considerable variation in the precise form of the cadence. The foot-based scansion elaborated in the previous sections removes the focus even further from a final $\bar{S}$ or S^w sequence, implying that many verses which end with such syllables contain them only as elements within larger Sws units. In fact, if we accept the foot divisions outlined above, only around 31.8% of full-verses end with a genuine $\bar{S}$ or $\check{S}w$ foot. The proper form of Bugge’s rule therefore appears to be that A VERSE MAY

NOT END WITH A $\bar{S}W$ FOOT.⁴⁹

It nonetheless seems likely that there was an additional, weaker rhythmic preference for certain endings. Over 72% of all full-verses end with an $\bar{S}$ or S^w word that immediately follows an unstressed syllable (where suspension of resolution is not likely), regardless of whether the final word is part of a larger foot or not. Of these, the element is a resolved sequence about 60% of the time:

- (401) er hann hafðit / gýgiar gaman
 ‘when he did not have joy of giantess’ (*Vm* 32.6)
- (445) gambanreiði / goða
 ‘powerful anger of the gods’ (*Skm* 33.6)

This long-noted tendency seems clear, and apparently constitutes a real surface preference for the full-verse. Still, prominent as the $-S^w$ ending is, it occurs in only around 43% of full-verses in total – a very healthy minority, and the single most common pattern, but far from being even a loose requirement. It is a tendency, no more, to favour resolved sequences at the end of a full-verse when this can be accommodated within the more general demands of vocabulary, content, and phonological conditions permitting resolution. This tendency should not be confused with Bugge’s rule. A similar preference is found in the *lióðaháttir* off-verses, which also frequently show verse-final resolution (Suzuki 2014, 602-7; Russom 2009b, 74f.), but most certainly do not adhere to Bugge’s rule, clearly allowing $\bar{S}w$ endings (Suzuki 2014, 754-7). Bugge’s rule is a restriction special to full-verses; final $-S^w$ is a rhythmic tendency common to all line-endings in *lióðaháttir*.

The only way to bolster the tally of final resolved sequences, should one wish to find as many $-S^w$ endings as possible, is to ignore the usual conditions for suspension of resolution, and assume that *lióðaháttir* is subject to rules for resolution unique among Germanic verse. In §4.2 above, I gave, following Heusler, a number of metrical arguments that subordinated $-\bar{S}w$ sequences should simply be regarded as part of larger metrical constituents, rather than distinct resolved cadences. The evidence of alliteration, and the other constraints and patterns noted in the preceding sections, seem to corroborate this view, but it is worth returning to final

49. There are, by my analysis, only four verses that genuinely violate this rule: *Hav* 107.6, 142.7, 164.8; *Grm* 49.7. The first of these appears to be more generally corrupt, and is often emended (Dronke 2011, 23; Jónas Kristjánsson and Vésteinn Ólason 2014b, 343, s.v.). The remainder all occur in runs of *galdralag*; the last is furthermore absent from the *Codex Regius*, and found only in A. There is not a single secure example of a final S^w foot from a normal *lióðaháttir* stanza anywhere in the corpus.

disyllabic sequences and reviewing the possible evidence for exceptional resolution, in whatever capacity, in the full-verse.

Suzuki (2014, 745-51) has recently made the case for universal verse-final resolution in full-verses, and would take even second elements of compounds as adhering to a ‘Bugge’s rule’ equivalence of $\sigma w = \bar{o}$ (where σ stands for a syllable of any stress). He therefore sees ‘resolution’ even in a verse like:

- (411) (at) aski / Yggdrasils
 ‘at the ash of Yggdrasil’ (*Grm* 29.6, 30.9, 32.3)

In fairness to Suzuki, he does distinguish between this process and normal resolution, suggesting that this syllable equivalence at the end of the full-verse should instead perhaps be called ‘contraction’ (though in practice he refers to it as resolution throughout his discussions), and arguing that it has a distinct historical origin (2014, 750). While Suzuki is right to acknowledge how anomalous his framing of ‘resolution’ in these contexts is, he does not adequately justify his new ‘contraction’ rule. It seems highly unlikely that lióðaháttir should not only retain traditional resolution (seen in numerous lifts in all parts of the stanza), but also innovate a new syllabic equivalence rule on a purely metrical basis, which is very similar to resolution but subject to no phonological constraints, and which applies only in one part of the stanza. The existence of such a remarkable metrical rule ought to be supported by substantial evidence.

If anything, however, the evidence points in the opposite direction, suggesting that resolution is subject to the normal constraints, and is suspended after a heavy syllable, just like in fornyrðislag. Beyond the general arguments for long final feet presented in the previous sections, Suzuki’s approach makes an incorrect prediction about verse frequencies. There are around 88 verses ending in compounds like *Yggdrasil*, which ought to be Ss^w under Suzuki’s framework. On this basis, we would expect a reasonable number of final Ss words, the same rhythm realized with a final monosyllable instead of ‘contraction’. However, only three final Ss compounds exist in the corpus of full-verses:

- (430) (ok) versnar allr / **vinskapr**
 ‘and all friendship grows worse’ (*Hav* 51.6)
- (488) Svöl ok / **Gunnþró**
 ‘Svöl and Gunnþró’ (*Grm* 27.3)
- (489) (en síá) hálf / **hýnótt**
 ‘than half this (pre-)wedding night’ (*Skm* 42.6)

These are much rarer even than verses ending in a $\bar{S}\bar{S}w$ sequence, to which suspended $\bar{S}\bar{S}w$ words would be more nearly equivalent:

- (406) hlær at / hvívetna
 ‘laughs at everything’ (*Hav* 22.3)

The situation is similar when the verse ends in a distinct word:

- (404) fyrst með / fróð regin
 ‘first among the wise powers’ (*Vm* 26.6)
- (478) ok ríð / heim heðan
 ‘and ride home hence’ (*Fm* 20.3)

(404) and (478) simply end with two-word variants of compounds like *Yggdrasils*, and as with such compounds, $\check{S}w$ sequences are strongly preferred both to $\bar{S}\bar{S}$ ⁵⁰ and $\bar{S}w$ verse endings. There is no reason to try to shoehorn these common verses into the highly marginal pattern of verses like:

- (490) fiqlð er, / (þat er) **fira tregr**
 ‘there is much that troubles men’ (*Sd* 30.6)

This is all to say that suspended $\check{S}w$ and $-šw$ represent independent patterns, not precisely equivalent to either $\bar{S}$ or $\bar{S}w$. The first non-equivalence provides initial evidence against Suzuki’s ‘contraction’. The second is equally important, and is already partly apparent from Old English metre (see the discussion in §1.2.5.2). It is also familiar from dróttkvætt, where the final $\bar{S}w$ trochee is never replaced by a suspended $\check{S}w$ (Gade 1995, 35). There seems to be a real distinction between a ‘heavy trochee’ and a ‘light trochee’: $\check{S}w$ is permissible at the end of a full-verse because the light syllable distinguishes it sharply enough from the banned $\bar{S}w$ ending. Nearer equivalents, such as $-šw$ and Ss , with a heavy first syllable, apparently overlap more strongly with $\bar{S}w$, and occur only very rarely. This moraic distinction between ‘heavy’ and ‘light’ trochees thus provides a means of explaining the acceptability of $-šw$ in the full-verse without recourse to Suzuki’s ‘contraction’ rule.

The avoidance of $\bar{S}$ as a substitute for $\check{S}w$ after a stress extends even to examples where the syllables in question constitute a distinct foot. We find regular examples of final $\check{S}w$ such as:

- (463) úrig fiql / **yfir**
 ‘over misty mountains’ (*Skm* 10.3)

50. *Hav* 43.3, 60.3, 69.3, 70.3, 74.3, 159.6; *Ls* 42.3; *Sd* 30.6.

(464) iǫrmungrund / **yfir**

‘across the mighty earth’ (*Grm* 20.3)

I can find, however, only two potentially comparable verses with final $\bar{S}$ instead of $\check{S}^w$:

(491) hálf er ǫld / **hvár**

‘mankind is half of each’ (*Hav* 53.6)

(492) (hví) þrasir þú svá, / **þórr**

‘why are you so provocative, Thor’ (*Ls* 58.3)

(492) is, furthermore, dubious, since it is not entirely clear whether *svá* is in fact stressed; it should perhaps be counted among the ‘B2’ verses. It is possible that the avoidance of verses like (491) is due to reducing the effects of stress clashes in rising $s\bar{S}$ sequences (compare the arguments of Cable 1991, 150 with respect to Old English). This is not a terribly satisfactory explanation, however, since we might expect even $s\check{S}$ - sequences to be avoided on this basis. As a starting point for an alternative explanation, the more interesting generalization is perhaps that monosyllabic final $\bar{S}$ words seem to be disallowed in contexts where suspension of resolution would occur. This could even be taken to suggest that $\check{S}^w$, rather than $\bar{S}$, is the standard form of the short stressed foot: when conditions allow resolution, $\bar{S}$ may, as normal, stand as an equivalent to S^w , but this would not be possible in a suspension context.

A similar explanation may also hold for the frequency of final resolution in types B and Db(*): that alongside S^w (which sometimes is realized as $\bar{S}$) lióðahátttr favours Sws^w feet (which may, again, be realized as Sws). This Sws^w foot would be based on compounds such as *bróðurbani* (cf. *Ls* 17.6). This would mean that Terasawa’s rule does not apply in Norse (cf. §2.4.4), or at least in lióðahátttr, which is perhaps to be expected. As has often been noted, lióðahátttr seems to be a much more heavily ‘end-weighted’ metre, with considerably less subordination towards the end (also compare the greater tolerance for reversal). In §2.4.3, I argued that Terasawa’s rule stemmed from the interaction of linguistic subordination in a compound with metrical subordination at the end of a verse, causing overapplication of phonological defooting: final Sws^w would have to be realized as $Swww$. If metrical subordination is weaker in lióðahátttr, then there is no compelling reason why Terasawa’s rule should continue to apply, so that Sws^w compounds could be used as such, even finally. Importantly, this applies not just to full-verses, but to lióðahátttr as a whole (cf. *lastastofom* in the off-verses *Ls* 10.5, 16.5, 18.2), and is related

to the high frequency of resolution in all parts of the stanza.

Altogether, there are some 289 verses in which a final Šw sequence immediately follows a stress and is probably suspended; these form around 23.6% of the total corpus. These would be hard to reconcile with a strong, positive form of Bugge's rule demanding that all verses end with an $\bar{S}$ element or resolved equivalent – but as we have seen, such a strong rule is untenable, a will-o'-the-wisp created by the linguistic possibilities once Šw feet are removed. It is true that short disyllables are more common in this metre, leading to a high frequency of both S^w and Šw sequences at the ends of full-verses. Whether this stems from a basic preference for S^w and Sws^w feet in this system, or whether such feet are preferred as a way to meet these rhythmic preferences, this additional rule is a striking feature of líóðaháttir as a whole. It marks out the ends of all lines, both the long line and the full-verse, and is unrelated to the prohibition against ending full-verses with Šw by Bugge's rule.

4.3 CONCLUSIONS: THE COMPOSITION OF THE FULL-VERSE

Putting all the arguments of this chapter together, we are now in a position to offer a systematic scansion which accounts for the attested types, bans significant non-occurring patterns, and correctly predicts the relative frequencies of verses in the corpus. The basic metrical constituents of this scansion are verse-internal units corresponding in all essentials to Russom's word-feet. These may be classified into two types: one shorter or lighter, and corresponding to a simplex word; the other longer or heavier, and corresponding to a compound word. The only short feet to occur with any real frequency are Sw, S^w ($\sim\bar{S}$; I use S^w as a cover term for both to emphasize the preference for resolved variants), and light feet (variously w, ww, or www; I will use ww as a cover symbol for these possibilities). Of these, only S^w may occur verse-finally (where they are realized either as $S^w(\sim\bar{S})$ or Šw): light elements generally acquire positional stress when displaced to verse-final position, and Sw feet are prohibited by Bugge's rule. S^w feet may in principle also stand earlier in the verse, but they appear to be rather disfavoured initially, perhaps because there, before the overall structure of the verse has become clear, they may be too easily mistaken as the initial components of compound feet. There are only a handful of Da and Db verses, like (414) and (423) above, alongside the plentiful Da* and Db*

half-lines.

The most frequent long feet are Sws and Ssw, along with Ssws, licensed by the impossibility of plain type A (Sw/Sw) full-verses (§4.2.1.2). This last foot type is also either banned or highly discouraged verse-finally due to overlap with the prohibited Sw sequence. Otherwise long feet occur freely in either position. These considerations produce the following set of six standard verse types:

short-long: ww/Sws (B), ww/Ssw (C); Sw/Sws (Db*), Sw/Ssw (Da*)

long-short: Sws/Šw (Eb); Ssw/S^w (E); Ssws/S^w (Af)

On the term ‘Af’, i.e. the one allowable verse pattern that contains a foot equivalent to the verse-type A, see §4.2.2.2. I use the label ‘Eb’ both for the basic pattern given here, and for ‘expanded’ variants with an extrametrical element before the final foot: Sws/(w)S^w. These seven patterns are the seven most frequent, and together account for over 87% of all full-verses. It is easy to give examples of these basic combinations in order of frequency (counting variants with extrametrical syllables):

- (493) um þinn bróðurbana
ww/Sws^w (B1), c. 397 occurrences
‘around your brother’s killer’ (*Ls* 17.6)
- (479) vápndauða / vera
Ssw/S^w (E), c. 152 occurrences
‘weapon-dead men’ (*Grm* 8.6)
- (419) nenna / Niarðar syni
Sw/Sws^w (Db*), c. 149 occurrences
‘turn your mind to the son of Níqrðr’ (*Skm* 38.6)
- (413) mína / meinstafi
Sw/Ssw (Da*), c. 140 occurrences
‘my malicious accomplishments’ (*Ls* 28.3)
- (445) gambanreiði / goða
Ssws/S^w (Af), c. 87 occurrences
‘powerful anger of the gods’ (*Skm* 33.6)
- (478) ok ríð / heim heðan
ww/Ssw (C), c. 88 occurrences
‘and ride home hence’ (*Fm* 20.3)

- (464) *iqrmungrund / yfir*
 Sws/Šw (Eb), c. 59 occurrences
 ‘across the mighty earth’ (*Grm* 20.3)

Most of the remaining verses adhere to the same general principles, but are made with more marginal foot types. Ss feet are the single most common remaining foot type, found particularly in type A2k(+) (see note 36 above), and more rarely as the second foot in various further combinations.⁵¹ Sww feet seem to appear initially in the verses like (444) and the ‘B2’ verses discussed above; they are even rarer finally, occurring in perhaps three verses.⁵² A handful of verses also show the long Ssww foot, both initially⁵³ and finally.⁵⁴ This accounts for all but some 21 verses in my corpus, all of which are widely regarded as problematic in one way or another. Most of these have already been noted in the course of discussion for various reasons: violating Bugge’s rule,⁵⁵ having patterns that seem to decompose into illicit foot types,⁵⁶ having two long or two short feet,⁵⁷ or having only single alliteration.⁵⁸ Aside from their rarity, a number of these verses show signs of textual corruption.

Beyond these foot-combination rules, the composition of the full-verse is rounded out by a relatively high tolerance for extrametrical syllables before either foot. These are usually very restrained – most frequently a single light syllable – but may be longer, especially when the dipodal structure of the rest of the verse is made clear early on. Light feet, correspondingly, tend to be reinforced in length and weight, to help determine their analysis more unambiguously.

That this system of scansion is correct in its essentials is suggested by a number of factors. Firstly, it is closely based in the two aspects of the verse that are most linguistically salient: the syntactic structure, and the alliterative pattern. Mismatches on both counts do occur, but typically only when the structure of the verse is oth-

51. There are perhaps nine verses of the type ww/Ss: *Hav* 1.3, 1.7, 13.3, 31.3, 60.3, 70.3, 159.6; *Skm* 40.3; *Alv* 10.3. Seven seem to have the structure Sw/Ss (A2b): *Hav* 43.3, 51.6, 69.3, 74.3; *Grm* 27.3; *Ls* 42.3; *Sd* 30.6. Two additional verses, *Skm* 42.6 and *HHv* 21.6, may have the structure (w...)S/Ss.

52. *Hav* 74.6, 93.3; *Ls* 8.3. The behaviour of this foot pattern is in general somewhat unusual, virtually the only part of the scansion of full-verses that does not fall out naturally from the expectations of the word-foot theory, as far as I understand it.

53. *Vm* 10.6, 33.6, 48.6; *Ls* 23.6; *HHv* 17.3.

54. *Ls* 57.3, 59.3, 61.3, 63.3 (all repetitions of a single formula).

55. *Hav* 39.6 107.6, 164.8; *Grm* 49.7. *Hav* 142.7 is problematic, but may be type Da* with faulty alliteration.

56. *Hav* 99.6, 133.6; *Grm* 38.3, 49.10; *Ls* 42.6; *HHv* 19.6.

57. Long: *Hav* 121.10; *Grm* 16.6; *Skm* 21.6; *Ls* 14.3; *Alv* 14.3. Short: *Grm* 27.6, 33.4.

58. *Hav* 80.3, 109.3, 117.7, 139.6.

erwise clear (this is particularly frequent with double alliteration within what is already established as a unitary second foot). Secondly, this system predicts well not only what verse-types are possible and which are prohibited, but also which are common and which are rare. Thirdly, and most concretely, the constraint on the expandability of internal dips is a strong indication that full-verses really do have some sort of internal constituency along the lines described here.

These metrical facts provide a very significant challenge to Suzuki's positional analysis of the full-verses, which, aside from the great variation in the number of positions, requires improbable views of resolution and unmotivated restrictions on the expandability of dips. They also suggest a considerable modification of Russom's specific approach, which is fundamentally tripodal. I should acknowledge that, insofar as Russom sees full-verses as a set of nested binaries – a base verse of two feet bound more tightly, with a third foot joined to this complex structure – it bears some resemblance in outline my approach. Nonetheless, the differences are also significant. Most obviously, Russom allows for initial verse-like feet with patterns that are not rooted in compounds, such as wwSw; my system derives all word-feet from actual words, as is the case for most Germanic metres. Furthermore, the scansion proposed here is better able to correctly restrict the placement of extrametrical syllables within verses, and allows for a much greater correspondence of metrical and syntactic or morphological structures. Still, though I have taken issue with the particulars of Russom's scansion of the full-verse, I would emphasize my own analysis owes a deep and obvious debt to his approach to Germanic verse, and can be seen as supporting his word-foot theory in general.

My analysis is still preliminary in some respects, and there are no doubt various ways it may be improved on in detail, but I would argue that all of the considerations just mentioned would need to be substantively addressed to cast serious doubt on the general principle that pairs of word-feet serve as the basic building blocks of the full-verse.

Chapter 5

Conclusion: Language and Metre in Early Germanic

In this thesis I have focused on two traditions of Germanic alliterative verse: those of Old English and of Old Norse. I began with English in chapter 1, concentrating on the role of metrical theory in the identification of linguistic features in the metrical system. In particular, I found that both the positional and word-foot approaches drew attention to a similar range of distributional facts in the Old English poetic corpus; the word-foot theory often accounted for these somewhat better, but on the basis of that body of evidence alone it was difficult to make a decisive choice between the two theoretical approaches.

In chapter 2, I considered the specific problem of Kaluza's law and resolution, arguing that on a metrical level the operation of the law is relatively straightforward and very regular: after heavy syllables, resolution occurs if the resulting unit is precisely bimoraic, and otherwise is suspended; a regular class of exceptions occurs in the second elements of verse-final compounds. This metrical process is deeply rooted in the phonological system, reflecting constraints against trimoraic sequences also evident from the process of high vowel deletion. It goes beyond this phonological basis in two ways, both consisting of metrical extensions of phonological operations. Firstly, the verse is treated as a 'cohesive' unit similar to a compound word, so that Kaluza's law applies across word boundaries. Secondly, even phonological feet with lexical heads may be defooted in the doubly-subordinated position of the second compound element of a second word-foot (thus accounting for the 'exceptions' to Kaluza's law in types C and D). All in all, Kaluza's law provides extensive evidence not only for the phonology of early Old English, but for the close relationship between the phonological and metrical systems.

I turned to Old Norse in chapter 3, beginning by examining the phonological features in the fairly well-understood *fornyrðislag* metre. Many features of the phonological system are similar to that of English, including, despite some doubts in the scholarship, syllabification. The metrical conditions for suspending resolution are also essentially the same, only occurring after heavy syllables; the metrical facts do not support claims that suspension could be conditioned only by the subordination of non-initial feet. However, there are also striking differences. There is no possibility of resolution in a suspension context, even of a bimoraic sequence (there is no Kaluza's law), pointing to a greater tolerance for isosyllabism in Norse. Isosyllabism is also seen in the metrical behaviour of *konungom*-type words, which are never permitted to resolve. Taken together, these facts indicate that while Norse could still create polysyllabic feet, this was a much more marked process, and degenerate stressed feet were far more acceptable than in English.

Fornyrðislag forms only a portion of the Eddic corpus, and in chapter 4 I considered the other well-represented metre, *líóðahátt*. The scansion of the full-verses of this metre has long been controversial, but I argued that a combination of the descriptive insights of Heusler with Russom's word-foot theory can describe them in more or less the same terms as any other Germanic verse: as consisting of two paired word-feet. The full-verse is distinguished by a preference for heavier, compound feet, and a prohibition against ending with the otherwise normative $\bar{S}w$ foot. Considerations of syntax, alliteration, and unstressed syllables all support this proposed scansion, and testify to the significance of the word-foot as a central principle in the composition Germanic verses generally.

In each chapter, I took an essentially synchronic approach, attempting to understand each body of evidence on its own terms. In the remainder of this conclusion, I will explore what the comparison of these various systems can tell us about Germanic metre, metrical history, and phonology. Such a comparison is necessarily largely diachronic: the metrical forms in question are, like the Norse and Old English languages, similar enough to strongly suggest a historical relationship of some sort. Furthermore, in the context of this thesis, many of the most interesting questions concern the interactions over time between languages and the metrical systems embedded within them.

In particular, one of the greatest challenges in tracing the attested metrical systems back in time is understanding the significance of the many syncope and apocope that North and West Germanic languages independently underwent in their development from Northwest Germanic. Four-position approaches have had

a particularly hard time with these linguistic changes, whether they propose a continuity of form or a transformation of the system triggered by syllable losses. On the other hand, the word-foot theory is flexible and robust across changing linguistic contexts, at least to a point. All of the previous chapters have discussed features potentially supporting the word-foot theory in synchronic terms, from its ability to account for the variety of D* verses in Old English (§1.2.5.3), to the central role of metrical compounding in motivating Kaluza's and Terasawa's laws (§2.4.1), to the constraints on verse-final bracketing mismatches in *fornyrðislag* (§3.3.1.2), to the usefulness of word-feet in scanning the problematic full-verses of *líóðaháttr* (ch. 4). These synchronic considerations provide a solid basis for considering the word-foot theory historically and comparatively, and are in turn reinforced by diachronic considerations.

Supposing that earlier Germanic metre was based on word-foot principles still leaves open a number of questions about the role of language in verse. If the word-foot has a metrical reality, this raises questions about its linguistic basis, the word, in Germanic. The combination of words into compounds is also a significant linguistic process that plays a crucial role in understanding a word-foot based system. On the level of phonological feet, the preference for precise bimoraism – which plays such a central role in governing resolution in *Bēowulf*, and is still discernible in Norse prosody – can be reconstructed on a phonological basis back even into pre-Germanic, but its interaction with the metrical systems over time is not immediately obvious. Despite recent arguments to the contrary, it seems likely that some form of resolution existed in the earliest Germanic verse, even if the role of trimoraism and the suspension of resolution remain somewhat obscure.

5.1 THE HISTORY OF ALLITERATIVE VERSE

5.1.1 SYNCOPE AND APOCOPE

Many diachronic discussions of Germanic metre take the close similarity of the classical Old English metre with *fornyrðislag* as a starting point for comparing the two traditions (Russom 1998a, 8f; Suzuki 2014, 773-86). Since Old Norse and Old English share a common linguistic origin in Northwest Germanic (Grønvik 1998, 67-154; Ringe and Taylor 2014, 10-40), a simple hypothesis is that the Proto-Northwest-Germanic speakers had a metrical system which was transmitted along with their language to the later speakers of North and West Germanic. Some form

of this hypothesis is probably correct, but any detailed consideration is complicated by the extensive linguistic changes that affected the independent histories of Norse and English.

Among the most significant of the many changes that occurred between Proto-Northwest-Germanic and the later literary dialects of North and West Germanic are the losses of unstressed syllables. These include both the apocope of many inflectional syllables – including the universal loss of the frequent *a*-stem endings NOM.SG **-az* and NOM.ACC **-aⁿ*, and very widespread loss of the equivalent endings among the *i*-, *u*-, and *ō*-stems – as well as the syncope of various medial vowels, including stem vowels in composition.¹

Differences of chronology (both relative and absolute) and effect show that these changes were dialectal, not part of a common Northwest Germanic period of development. The earliest change is most likely the apocope of unstressed **-a* (< **-az*, **-aⁿ*) in West Germanic, which appears to belong to the common development of the branch, and is, unlike some later changes, extremely thoroughgoing in its operation (Ringe and Taylor 2014, 45f.). The high vowels **-u* and **-i* (of various origins) were preserved much longer, into the separate histories of the various West Germanic languages, and even when they were eventually lost this was only partial and conditioned; see §2.2.8.2, especially note 42, with references.

The same pattern of losses also took in the syncope of medial vowels, though it is not always clear whether syncopes and apocopes are the same change, or distinct but similar changes.² A particularly important consequence of syncope is that a large number of compounds lost their connecting stem vowels, bringing stressed roots into direct contact much more frequently. Whitman (1993, 92-7) gives a number of concrete examples of this, contrasting, e.g., Gothic *airþakunds*³ with Old English *eorðcund** (cf. *GenA* 1627a), both ‘earthly’ (NWGmc **erþakundaz*). The dense stress patterns familiar from much later verse must have been much rarer in earlier Germanic. In Gothic, even compounds beginning with root nouns often have a connecting vowel separating the lexical heads, a pattern which may well

1. The full details of unstressed vowel developments are too complex to cover here, but are well-known and described in the standard handbooks. Both data and citations in this section are therefore selective, though hopefully illustrative, meant to outline the broad changes in linguistic structure.

2. In §2.2.8.2 and Goering (2016) I argue that Old English high vowel deletion is a single process, not to be separated into separate apocope and syncope stages, but this does not necessarily mean that a similar unitary account also holds for the earlier loss of **a*.

3. The asterisk here indicates that the word is recorded, but an inflection other than the normal citation form given here.

go back to Proto-Germanic (Braune 2004b, 89 (§88a, Anm. 3)).

In Old Norse, a similar set of vowel losses occurred, but runic evidence suggests that change was here much more rapid, with no long pause between the elimination of **a* and unfooted high vowels. Grønvik (1998, 16-26) sees the changes occurring and becoming generalized over the course of just a couple of generations in the sixth century. Riad (1992, 108-14) differs in the details, and extends his chronology into the seventh century, but similarly works with a limited ‘first syncope period’. Nielsen (2000, 95-100, 259-61) is less committed to a precise absolute or relative chronology, but is in general agreement in seeing ‘an initial spell of syncope’ in the sixth and early seventh centuries. The results of these syncopes produced, by the eighth century, a system that was much like that found in the Old English of the day, but achieved much more quickly, in the space of perhaps three generations of relatively continuous reductions.

Old Norse did eventually go even further than English in eliminating unstressed vowels, but this was largely achieved through a second, much later set of vowel losses which removed unstressed short high vowels, even after light syllables. On the Rök stone, c. 825, we still find ACC.SG **sunu** ‘son’ (cf. OE *sunu*), but by c. 900 the Tryggevælde and Rønninge stones show apocopated **sun** (cf. literary *sun*, *son*), giving us an approximately ninth-century date for this ‘second syncope period’ (Riad 1992, 112-14; Grønvik 1998, 21; Nielsen 2000, 99-101, 261).

These changes are a significant obstacle in reconstructing Germanic metrical history. Aside from questions of how principles of versification might have survived or been altered by such widespread losses of unstressed syllables, the ordinary surface patterns of earlier Germanic would have been quite different from what we find later. Stress clashes should have been much rarer, overall syllable counts for any given expression were on average higher, and the relative frequencies of various word shapes would have been rather different. Since many of the most significant patterns and constraints observed in the Sieversian metrical tradition involve unstressed syllables, and considerations of stress clash have featured prominently in scholarship, the implications of these linguistic changes for metrical theory are both significant and not immediately apparent.

5.1.2 DIACHRONY AND THE FOUR-POSITION PRINCIPLE

The four-position theory in particular has had difficulties with these linguistic changes, though a wide variety of diachronic accounts have been proposed over

the years. A few researchers have advocated simply taking the surface features of the ‘Germanic long line’ – the ‘classical’ type of metre found in Old English and *fornyrðislag* – and projecting this abstract pattern back in time. A recent advocate of this approach is Marold (2011, 64-8), whose argument has the advantage of making the most of the similarities between *fornyrðislag* and OE poetry. It is true that the idea of an abstract system persisting even as the linguistic material used to fill it out changes has something of an analogue in the history of OE verse (Fulk 1992), but as Mees (2007, 222) points out, this approach does not address how the abstract system survived the more extensive linguistic changes discussed in §5.1.1, especially in a purely oral context. Such survival is not, perhaps, impossible, but no one has yet made a compelling case for how the four-position principle would remain transparent through the syncope periods.

There is also the more specific question of how readily the familiar Sievers’ types could apply to earlier Germanic linguistic material. The reduced frequency of stress clashes should make types A2, C, D, and E more difficult to create. There is also a syntactic problem: a verse could only be kept down to four positions by using, on average, fewer words per verse, which would probably imply significant differences in poetic syntax. Pascual (2016, 297f.) has pointed out that this is particularly problematic in the case of formulas, many of which appear to be the products of long tradition in the attested poetry, but which very often do not go back to four-position preforms.

Rather more frequently, the ‘two-stress’ principle has been highlighted as a point of continuity between older and younger verse (Lehmann 1956, 29; von See 1967, 2; Naumann 1998, 695ff; Schulte 2009, 5-7; 2010, 47-50). This at least has the advantage of being linguistically robust, since the numbers of stressed syllables remained relatively unaffected by the phonological changes from Northwest Germanic on. It suffers from the problem that, as argued in §§1.2.3.1, 1.3, there is no such two-stress principle in later verse, and no reason to postulate it for pre-historic poetry. Stress counting has no place in either the rigorous Yakovlevian four-position approach, or the word-foot theory, and no one has yet proposed a descriptively adequate account of how a stress counting metrical form could motivate the many constraints on unstressed syllables found in Old English and Norse metres.

Perhaps the most popular four-position approach has been to seek the origin of Germanic verse in an early syllable-counting metre, as argued already by Sievers (1893, 172ff.). Suzuki (1988) gives what is probably the fullest modern exploration

of how this might work, and the notion that the historical metrical forms were arrived at by the losses of many unstressed syllables has been frequently, if often rather vaguely, suggested by many others (West 1973, 179-81; Fulk 1992, 378 (§402); Solopova 2009, 30; Pascual 2016, 295ff.).

This view would connect Germanic to Indo-European traditions of syllable-counting metres, particularly to a potentially reconstructible octosyllabic line of the sort found in Vedic (in the *gāyatrī* and *anuṣṭubh* forms) and Young Avestan (Geldner 1877, vii; Sievers 1893, 179f; Watkins 1963, 197–9, 204–12; West 1973, 184f; 2007, 49–51):

- (494) *nír u svásāram askṛta*
Uṣásam dēví āyatí
ápéd u hāsatē támaḥ
 ‘She has expelled her sister, Dawn – she, the goddess, while coming hither – and darkness will race away.’ (RV 10.127.3; trans. Jamison and Brereton 2014, 1605)
- (495) *yim θraētaonō taxmō barat*
yō janaṭ aṣīm dahākəm
 ‘Which [weapon] bold Thraētaonō carried, who smote the dragon Dahākō.’ (Yašt 14.40.1-2)

That Indo-European had syllabic metres seems very likely, and an eight-syllable line is probably a plausibly reconstructible variant (see in particular Meillet 1923; Watkins 1963; Schmitt 1967, 310f; West 1973, 2007; Korn 1998, 11-14, 23-5, 43; though some caution is called for in the specifics, see Simms 2003, 36-44).⁴

However, it is far from certain that a syllabic scheme of this sort, perhaps with a quantitative rhythm,⁵ could develop into the rather different patterns and rhythms of Old English and *fornyrðislag*. A point of theoretical continuity might perhaps be found in the view of Cable (1991, 39; 2009, 264) that the four-position principle

4. Among other reasons for caution, it should be remembered that much of the best metrical evidence comes from Greek and Indo-Iranian, which may belong to the same subgroup within Indo-European (Ringe, Warnow, and Taylor 2002, 87). It is possible, therefore, that any similarities between them are due to relatively late developments, perhaps arising even after the departure of pre-Germanic.

5. Vedic in particular shows a strictly regulated iambic cadence. Avestan metre has traditionally been seen as quantitatively freer, though recently Kümmel (2014b) has suggested that Avestan syllabification has been incorrectly analysed, and that if the language is viewed as very strongly maximizing its onsets, more quantitative patterns emerge. This proposal is still very preliminary, and Kümmel has so far applied his analysis only to Old Avestan; even if his arguments are accepted, it remains to be seen whether they would also apply to Young Avestan octosyllabic lines.

is fundamentally a four-syllable system. However, both *fornyrðislag* and OE metre share a number of striking features, such as the ability to ‘expand dips’, whose development from a true syllable-counting system is not easily explained even once, much less independently in North and West Germanic (Heusler 1925, 283). The problem of discontinuity is even more acute for Pascual (2016, 294f, 298–300), who favours scanning historical verse along very strict four-position lines, but who seems to assume a word-foot system for the prehistoric metre (and perhaps simultaneously for the historical forms as well).⁶ Leaving aside the fact that the word-foot theory is primarily motivated by evidence from the surviving texts rather than speculations about the prehistory of the metre, this view supposes that Germanic poets shifted from using word-feet to the fundamentally different positional scansion not just once, but in both English and Norse.

The specific problem of parallel evolution might be answered by positing a later spread of metrical features (Kuhn 1939, 232–6; Heusler 1925, 281; Simms 2003, 196, n. 137; Mees 2007, 210f.). This has not not been widely invoked to explain, say, the more specific points of agreement between Old English metre and *fornyrðislag*, presumably because it has been assumed, on cultural-historical grounds, that there was little contact between Norse and English at the right time, between the earlier syncope and the appearance of the Germanic verse in our literary records (Kuhn 1939, 234).⁷ Such contact is perhaps not, however, as self-evidently implausible as has traditionally been assumed. There are a number of striking linguistic parallels between North and West Germanic that are quite clearly separate changes, but which operate along very similar lines and may suggest direct or indirect diffusion of sound changes across Germanic dialects in the sixth and seventh centuries. The most obvious candidates are breaking (Dyvik 1978, 34f.) and umlaut (Tolkien [1955] 1983, 188, 197, n. 25; Grønvik 1998, 80). The presence of these not-quite-parallels is, at the least, an important and complicated problem for early Germanic language history, too often explained away by the

6. From time to time various theorists have suggested or implied that the four-position and word-foot theories are somehow complementary or compatible, with, in the words of Stockwell (1996, 91), the word-foot theory giving the positional approach an ‘element of psychological reality’ (Fulk 1992, 56, n. 93; Stockwell and Minkova 1997, 80f; Pascual 2016, 290, 294f, 300). This sort of conflation is best avoided: the two theories are incompatible, competing explanations for defining metricality in old Germanic metre, and the adoption of either one would render the other superfluous.

7. Even Heusler, who sees the origin of the ‘epic’ style of Old English in (unattested) Gothic poetry and spreading to West Germanic shortly after the first major apocopes and syncope in these languages, supposes that at least Old Norse must have known this form before the vowel losses affecting that language (1925, 170f, 281).

poorly-defined concept of ‘drift’ (for a real alternative explanation, see Schrijver 2013, 65f.). Language aside, there is good reason to suppose that legends and stories spread across these areas (at least among the elite classes) during this time (Harris 2009; Anderson 2016, with further references on the archaeological background of possible contacts). It seems very likely that stories and legends would usually have been transmitted in metrical form, providing a ready channel for metrical convergence across various Germanic-speaking communities.

Nonetheless, even if some specific commonalities of *fornyrðislag* and OE metre can be explained through contact, the development of a *fornyrðislag*-style metre still had to happen at least once, and accounting for this remains awkward for any of the approaches just discussed. Moreover, the development of other metrical forms – especially *líóðahátt*, but also the ‘irregular’ metre of the *Atlakviða* and other early Norse poems – needs to be explained, and has not received sufficient attention. Contact may explain why a certain core of the alliterative tradition shows some similarities, but a positional view of Germanic metrical history can explain its diversity no better diachronically than it can synchronically.

5.1.3 RUNIC EVIDENCE

Aside from the comparison of the later poems recorded in literary form, a potentially important body of evidence comes from possibly-metrical runic inscriptions. Many of the more explicit discussions of early Germanic verse have taken runic metrics as their point of departure, and although it is very often difficult to judge whether a given inscription is actually in metre, they provide a concrete illustration of many of the issues in Germanic metrical history (Naumann 1998; Mees 2007, 2012; Schulte 2009, 2010; Marold 2011).

Most of the more clearly metrical inscriptions are relatively late in date, postdating the various vowel losses of §5.1.1: the Frank’s Casket and the Rök stone show metrical forms agreeing closely with the literary patterns, but this is relatively uninformative. More interesting is the inscription, possibly a mythic charm, on the Pforzen buckle from southern Germany, which has what looks like a perfectly regular pair of type A half-lines (Düwel 1999; Nedoma 2004; Marold 2011, 94f.):

(496) Aigil andi Ailrūn / elahu gasōkun
 ‘Aigil and Ailrūn hunted (an) elk(s)’

This inscription appears to postdate most of the vowel losses affecting German, with **Aigil** < **Aigilaz* and **Ailrūn** < **Ailrūnu* (< PGmc **Ailrūnō*) attesting the

losses of non-high and high vowels, respectively. The retention of the final vowel in the weakly stressed **andi** ‘and’ is not significant; this remains in later OHG and OS *enti*, *endi*. The form **elahu**, with its apparently retained *-u*, is potentially more difficult. I follow the reading and interpretation of Düwel (1999, 48-51), who takes it as the German accusative *n*-stem ending **-un*, with the final nasal omitted in writing.⁸

The interest of this line lies primarily in its very early date – the late sixth century – which can hardly be much later than the German form of high vowel deletion. The first half-line has the look of a traditional collocation, but a generation or two earlier it would not have been metrical according to either an octosyllabic scheme or a four-position scansion:

(497) *Aigil andi Ailrūnu

This has seven syllables (counting both half-lines together would make it 12), and five metrical positions: Sw...Ssw. Under the word-foot theory, two proper names serving as word-feet connected by an extrametrical conjunction should be stable across these sorts of changes. Too much weight should not be placed on this or any other single inscription, but its early date does highlight the problems involved in accounting for the creation of the four-position principle, which would have had to become a dominating principle very quickly after apocopes, even in older formulas and legendary name groups.

Easily the best candidate for a piece of early syllabic verse in EARLY RUNIC – North Germanic before the period of rapid vowel losses – is the Strøm Whetstone, which bears an alliterating, and possibly metrical inscription (frequently held to be some sort of work song or charm, though interpretation of the second line in particular is very difficult):

(498) (A) wātē hal[l]i hīnō horna
 (B) hāha skāþi, hǣpu līgi
 ‘Wet [sic] this stone, o horn!
 Scathe, o (?)tool! Lie, o (?)hay!’

This text has struck most investigators as being strongly rhythmical, and if quantity is ignored, it shows a possible trochaic pattern (Krause 1971, 166; Antonsen 1975, 124; Mees 2007, 2011f; Schulte 2009, 16). The lack of quantity sensitivity is,

8. Düwel (1999, 48) himself notes that this interpretation is a little awkward, since the inscriber wrote the nasal in **andi**, in the context (in a word-internal coda before a dental) where it is most likely to be omitted. For other readings, see Nedoma (2004, 342-54) and Looijenga (2003, 253-5, no. 35).

however, a real problem. Later verse clearly shows mandatory resolution in similar contexts, and as I will argue in §5.2.3 below, the phonological basis for bimorism is clearly very old, dating to pre-Germanic. If we were to assume resolution here, the trochaic pattern would be disrupted, since at least *hinō* and *skapī*, probably *ligi*, plausibly *hapu*, and possibly *haha* all have light root syllables.⁹ Resolution in some or all of these cases would give a much less regular pattern, destroying both the trochaic rhythm and the equivalence of syllable count between the two lines. Although resolution as such may not be a part of Indo-European metre, it was quantity sensitive, especially in the cadence. The whetstone could fit into a syllabic tradition only by assuming a Germanic shift away from quantity sensitivity to a strictly syllabic basis, and then, in later Germanic, reintroducing quantity sensitivity. This is perhaps just about possible, but it is a lot to ask when the metrical correspondence on an Indo-European level consists only of the fact that these two lines have eight syllables each, and the link to later Germanic verse remains unclear (aside from the problem of rhythmic transformations, the alliterative pattern here corresponds to no known later scheme).

These lines are also isolated within the runic corpus. Mees (2007, 212f.) tries to support his argument that the Strøm inscription represents a more general syllabic tradition by pointing to the Eggja stone, but this is somewhat later and not strictly trochaic. He has also compares it to Aldhelm's Anglo-Latin poetry, but this is by no means obviously a simple copy of a Germanic model. His other examples show varying syllable counts, often from line to line within a single short inscription, and there is no evidence of any of these alternative syllabic 'schemes' recurring across multiple inscriptions. Schulte (2009, 16f.) would count the Ällerstad inscription as octosyllabic, but this is fragmentary, and preserves not a single eight-syllable 'line' intact. All in all, the runic basis for early Germanic octosyllabic verse, or strictly syllabic verse of any sort, is extremely weak, and it is difficult to connect what there is either to earlier Indo-European metre or to later Germanic verse.

More easily linked with later Germanic is the famous Gallehus horn inscription, widely (though not universally) regarded as one of the earliest attested examples of the long line:

(499) ek Hlewagastiz : Holtijaz : horna : tawidō

‘I, Hlewagastiz of Holt, made this horn’

9. The exact details depend on one's favoured linguistic interpretation of the whetstone, which is highly uncertain in many points. I have printed the quantities following Marold (2011, 82), except that I am less certain about the interpretation of *hapu*, and I have removed length marks from the final syllables of *skapī* and *ligi* (see note 28 in §2.2.5 on the problems of length with this ending).

The more familiar aspects of this line have been well-documented, but are of a relatively general sort: there are four stressed words, and (more significantly) an apparent alliterative scheme resembling that of the long line (reinforced by the inclusion of the alliterating patronymic *Holtijaz*, which is not necessary for a mere maker's note), with the non-alliterating finite verb placed finally (Lehmann 1956, 28f; Eichner 1990, 313). As with the preform of the Pforzen buckle, the unstressed material is difficult to fit into any of the forms proposed as plausible forerunners of the four-position metre. This inscription is certainly not itself four-positional: the first half-line has at least five positions, even if *ek* is taken as anacrustic and the rule of the coda is not applied so that *-ijaz* counts as a single dip. It could only be characterized as an 'E*' verse with anacrusis, (w)S^wswSw^w, which is to say it shows a normally prohibited base pattern accompanied by multiple metrical licences.

In terms of syllable counts, we find thirteen syllables across the whole long line. At least *hlewa-* and *tawi-*, and perhaps also *-ijaz*, are plausibly resolved, and *ek* may or may not be anacrustic, so the number of metrical 'syllable equivalents' could be as low as nine. There is no obvious way, however, to reduce the count further, to the octosyllabic form favoured by Sievers and Suzuki, and the scheme does not match any of the many ad hoc scansion proposals proposed by Mees (2007) to account for other putatively metrical runic inscriptions. Furthermore, the imbalance of the two half-lines, with the first so much heavier than the second (something also found on the Pforzen buckle, and typical of later verse), is a potential problem for any attempt to derive half-lines from regularly syllabic lines (Whitman 1993, 128-30).

The Gallehus inscription is much more easily scanned using word-foot principles, and illustrates the ways that a word-foot system might have applied in the different linguistic context of earlier Germanic. The line would show the usual division into two verses, each with two word-feet: (w)S^wsw/Sww // Sw/S^ww. The first half-line shows two features that would be possible, but relatively complex by the standards of later verse: initial anacrusis, and the placement of the heavier foot first (reversal). There is also an absolute difference from historical poetry in the combination of two long feet in the same verse.

The relative complexity of anacrusis is hard to judge, but the other two features are plausibly explained as natural by-products of the word-foot theory operating on the linguistic material of fifth-century North Germanic. The large number of heavy *ja*-stem nominals such as *holtijaz* and **rīkijaⁿ* 'dominion', and several present forms of the numerous *ja*-stem verbs such as **dōmiju* 'I judge', would have made the uncompounded word shape Sww very basic. The verse may only thus

have two ‘long’ feet from the perspective of later Germanic, with the greater average length of words making ‘normative length’ somewhat longer than it would later become: the trochaic Sw foot need not yet have become the dominating standard of weight we find later on (a point made well by Pascual 2016, 295). This same greater average length may explain why the ‘reversal’, the initial placement of the heavier foot *Hlewagastiz*, is tolerated. Ssw feet must have been somewhat complex, being based on compound patterns, but if they were not as far above the standard weight/length of the time, then restrictions on their reversal ought, by the principles of the theory, to have been somewhat looser (much as Ss feet are generally more flexible than Ssw later on).

It is important to emphasize that this runic evidence can only play an illustrative role in metrical arguments, suggesting possibilities and providing concrete examples of the problems of discussing early Germanic metre from the perspective of the later systems. The metrical status of these inscriptions (or of any others) is not absolutely certain, and in any case the corpus is far too small to serve as the basis for any early Germanic metrical rules. But insofar as they can be taken as valid, it seems easier to fit the Gallehus horn and the Pforzen buckle into a tradition leading to the ‘classical’ long line of Old English and *fornyrðislag* using the principles of the word-foot theory.

5.1.4 DIACHRONY AND THE WORD-FOOT THEORY

One of the synchronic strengths of the word-foot theory is that, as argued in chapter 4, the principles developed in the context of Old English metre and *fornyrðislag* can be readily extended to account for the full-verses of *lióðahátt*, not only describing but motivating their patterns, frequencies, and constraints. This application of word-foot principles to a different metre involves what might be described as regulated flexibility: the surface patterns it generates in *lióðahátt* are different, both in absolute limits and relative frequencies, than the classical long line the theory was invented to describe, but the core mechanisms and types of limitations remain the same. Verses are formed from two feet; feet are limited by the range of patterns found in the natural language; and variation within feet is constrained. A phrase may replace a single word, but a syntactically close constituent is favoured, especially in cases where other factors add to the complexity of the verse. Extrametrical syllables are allowed, but not within feet, and they are regulated to minimize overlap with light feet. The ability of feet to combine is limited, so that a

verse usually does not contain two ‘heavy’ feet, and there is a preference (weaker in the full-verse, but still evident) to put ‘heavy’ feet second.

This regulated flexibility is an advantage for the word-foot theory from a historical perspective, since it can robustly accommodate language change, as long as certain essential things, such as compounding and stress rules, remain fairly constant. The reductions and losses of §5.1.1 would be expected to change the surface outputs of the metre, but there is no reason the underlying principles should not have continued to operate in more or less the same way from Proto-Northwest-Germanic on.

That fornyrðislag and Old English metre should agree fairly closely is, for instance, not a significant problem: it is a straightforward result of the similar phonological changes in both languages. As suggested in §5.1.2, it is possible that fornyrðislag does indeed owe something more specifically to exposure to West Germanic traditions, which may have provided a model for a particular word-foot system in which the trochaic Sw word has a truly fundamental position. This would help explain why Norse has this ‘Beowulfian’ metrical system alongside not only líóðahátt – which is to some extent still oriented around the Sw foot by virtue of limiting its occurrence under Bugge’s rule – but also several older poems in a ‘looser’ metre reminiscent of but clearly distinct from standard fornyrðislag (Sievers 1893, 78f. (§52), 90f. (§59); Suzuki 2014, 499-570). These poems, namely *Atlakviða*, *Hamðismál*, many parts of *Hárbarzlióð*, and *The Battle of the Goths and Huns*,¹⁰ are widely regarded as among the oldest Eddic poems, and among the most difficult to classify metrically. The positional approach can only account for them, as Suzuki (2014, 523, 791) has done, by viewing them as a random mixture of four- and five-position verses, in which D* and ‘E*’ verses (cf. §5.2.2) coexist alongside a number of ‘basic’ four-position verses, and even some three-position half-lines. Under a word-foot view of metrical history, it may be possible to view these as the most direct Norse development of the Germanic long line, as represented by the Gallehus inscription. Sw feet are common, but Ssw feet also play a very basic role, leading to a much higher proportion of what, in comparison to fornyrðislag at least, look like overly long or complexly reversed half-lines. This form does not seem to have endured, being displaced by fornyrðislag with its more strictly normative Sw foot.¹¹

10. One might also include stray portions from other poems, especially stanzas 81-90 of *Hávamál* (excepting 84 and 88) and stanzas 15-17 of *Sigrdrífomál*. Skaldic málahátt could also be considered here.

11. This is not to say that fornyrðislag does not have a very long history in Norse, or that every

The precise set of rhythmic patterns current at any given point in prehistory is difficult to reconstruct. Taking a word-foot approach means, in effect, reconstructing metrical principles rather than forms. These principles, outlined in the first paragraph of this section, would be essentially those gathered in his appendix by Russom (1998a, 216-9). The definitions of ‘short’ and ‘long’ feet, and normative length more generally, are not defined by these rules, nor is the precise set of allowable word-feet; these are based instead on the linguistic material available, with some consideration for convention. Different inputs could yield a variety of surface forms, even while the principles need not be any different.

We can suggest some formal specifics. Since bimoraic feet are reconstructible (see §5.2.3 below), it seems likely that a word like **hazidē* ‘praised’ was most likely the resolved equivalent of **k^wādun* ‘they said’. And if the principle of bracketing mismatches applied also in earlier verse, both of these should have been the metrical (near-)equivalents of **k^wap þan* ‘said then’. It also seems likely that the suspension of resolution would have been fairly uncommon. Hans Kuhn (1939, 191-5, 210–13) has drawn attention to the following archaic formula, which shows suspension of resolution in English, Norse, and Old Saxon:

- (184) þēodcýninga
‘of people-kings’ (*Beo* 2a)
- (500) þjóðkonunga
‘of people-kings’ (*Akv* 43.6)
- (501) thiodcuninge
‘to the people-king’ (*Hel* 2767b)

Suspension here is of course perfectly regular in each synchronic system, but, as in so many suspension contexts, the earlier prosody would have been rather different:

- (502) **þeudakuningōⁿ¹²*

While **kunin-* is overheavy, and subordinated as the secondary lexical head within a compound, this compound no longer meets the conditions for suspension known from any later Germanic verse, since it does not immediately follow a heavy syllable (§2.4.2). This is typical, and stem vowels of this sort would have originally

poem in this metre is necessarily younger than the poems just mentioned. It is just that fornyrðislag at some point became the dominant mode for narrative heroic poetry, displacing possible competitors (including Eddic *málahátt* – actually just the metrical form of the single somewhat younger poem *Atlamál* – which appears to represent a different tendency, standardizing longer Ssw and Sww feet).

12. The form given is approximately that of Proto-Northwest-Germanic. The Proto-Germanic form would have been **þeudōkuningōⁿ*.

separated lexical heads much more regularly: it seems likely that the conditions for suspending resolution would have increased significantly as medial vowels were syncopated. This would suggest that while the operation of Kaluza's law in *Bēowulf* may be the result of old principles of foot structure and the preference for bimoraism, the actual routine contrast of resolved and suspended sequences across hundreds of verses most likely entered the metrical tradition much more recently (though still perhaps a couple of centuries before *Bēowulf* itself was composed).

Much the same holds for suspension across word boundaries. I argued in §2.4.2 that this sort of suspension, most frequent in type A2k, implies a type of metrical coherence, with phonological processes applying within the verse as they would within a (compound) word (a notion very much in keeping with the word-foot concept of metrical compounding). Even assuming such metrical coherence existed in Northwest Germanic poetry, opportunities for it to affect the trimoraic licence in independent roots would have been much more limited than in later verse. Possibly the only pattern of A2k verses found in later verse that could plausibly have occurred in the pre-apocope period is that of a participle or *nd*-stem agent noun followed by a suspendable disyllable.¹³

(139) *rīdend swefað*
'riders sleep' (*Beo* 2457b)

(503) *riúfendr koma*
'come destroying' (*Bdr* 14.8)

These two verses as such, with their plural forms going back to **rīdandiz* and **reubandiz*, do not go back to preforms with suspension of resolution, but similar verses with singular subjects would:

(504) **rīdandz swibip*
'a rider sleeps'

(505) **reubandz k^wimip*
'comes destroying'

Such constructions are far from common in later verse, however, and it is not clear that they would have been any more frequent at an earlier period. As with compounds, the prosodic preconditions for suspension across word boundaries may

13. Stressed monosyllabic words could of course have conditioned suspension as well, but the only really common words of this shape were verb forms (preterite singulars of strong verbs), which are unlikely to have occurred before suspendable sequences for syntactic reasons. This leaves only a relatively small number of root nouns, along with the *nd*-stems, to potentially condition suspension.

have existed in prehistoric verse, but the actual word forms available must have made this rare in practice. Only with the apocopes that the separate branches of Germanic independently underwent would heavy final syllables have grown common enough to regularly produce many of the surface patterns familiar from later poetry.

Even if everything argued here is correct, I should emphasize that these sorts of reconstructions fall far short of describing a full metrical system. We can only speculate about the precise inventory of word-feet; or which word-foot combinations would have been most favoured, and which prohibited; or how the presence of longer word-feet based on larger Proto-Germanic compounds would have interacted with the principle of overlap avoidance.

What we can do (granting these premises) is suggest how the later metrical forms might have developed through a combination of phonological and metrical changes. The system of Old English is a relatively straightforward continuation from the ‘long line’ alliterative scheme, marked by the possibility of double alliteration in one verse followed by an off-verse with strict single alliteration. The rhythmic constraints came to be defined above all by the centrality of the trochaic Sw foot in the system (cf. already the Gallehus and Pforzen inscriptions). This form was continued into Middle English in the poems of the Alliterative Revival, though these showed considerable further development reflecting the significant linguistic changes English underwent in the central Middle Ages (Russom 2004, 2007, 2009a; Fulk 2004; Yakovlev 2008, 266-92; Hartman 2011, 551-3).¹⁴

Old Saxon metre and the verse form of the *Hildebrandslied* are presumably also generally part of same trend of development that we find in Old English; the greater ‘fullness’ often attributed to them is due to their somewhat larger word-forms (Russom 1998a, 169f, 192f.). Old Saxon in particular also likely provides a good example of continued metrical contact across languages, a good reminder that while the general principles of the word-foot theory may be old, their specific manifestations may be at least partly shaped by interacting traditions (Eichner 1990, 311f; Suzuki 2004, 4-7).

Norse not only continued the long line (perhaps in various forms, and perhaps

14. There are still defenders of discontinuity between Old and Middle English alliterative metres, such as Minkova (2003, 61-5; 2009, 91), but the situation now seems very different than it did as recently as 2004, when Fulk could write that ‘[t]he idea that Old English poetry simply died out and that Middle English alliterative poetry should instead be a lineal descendent of Ælfric’s alliterative style seems to have won the day among medievalists’ (2004, 305). Even Cable, one of the most prominent advocates for discontinuity (1991, 41-65), seems to have been at least partly persuaded by Yakovlev’s arguments for continuity (Cable 2009, 264).

with some West Germanic influence, as noted above), but also preserved or developed alternate arrangements, most obviously *lióðahátt*. Russom (2009b, 74f.) observes that the off-verses of this form tend to allow heavier word-feet (and word-foot combinations) than the on-verse, and in light of the arguments in chapter 4 we may characterize the full-verse as allowing even heavier patterns. This use of a stanzaic structure to avoid the problems of overlap inherent in a word-foot system may well have old roots, though it seems likely that the specific details of *lióðahátt* evolved in reaction to Norse linguistic changes. In particular, the great, if negative, importance of the trochaic Sw foot in Bugge's rule could be a response to the growing centrality of this foot in *fornyrðislag*. Further specialization of verse forms to accompany varying ranges of possible normative word-foot combinations is probably evident in the short and light *kviðuhátt*, attested from a relatively early date (Sapp 2000), and in the systematically longer and heavier *málahátt* found in *Atlamál*.

A similar differentiation of foot patterns might also be responsible for the development of hypermetric lines in West Germanic. These appear to contain longer and heavier feet, of the sort which must have been more common – that is, better supported and more useful because of the nature of the lexicon (cf. Hanson and Kiparsky 1996, 294) – in earlier Germanic. To take another later phrase by way of example, we might suppose that the following formula from *Bēowulf* and the *lióðahátt* *Grímnismál* reflects a common inheritance:

- (465) ofer eormengrund
 ‘across the mighty earth’ (*Beo* 859a)
- (464) iǣrmundgrund yfir
 ‘across the mighty earth’ (*Grm* 20.3)
- (506) *obār ermanagrundaⁿ or *ermanagrundaⁿ ubir

Regardless of the order of the feet, **ermanagrunda*ⁿ would appear to be a SwwSw foot serving as a verse-*component*, rather than a complete verse, something found in later verse only in hypermetric lines, *lióðahátt* off- and full-verses, and the ‘irregular’ Norse poetry mentioned above (*Akv*, *Hm*, *Hrbl*, *GH*).¹⁵ It is possible that

15. On OE hypermetric lines, see Sievers (1887), Heusler (1925, 180-7), Bliss (1962, 88-97), Pope (1966, 99-158), Russom (1987, 98-100), Hutcheson (1995, 317-24), Yakovlev (2008, 83-8), and Hartman (2011, 21-211, with very full references and discussion). In OE, hypermetric lines continue to employ even what I take to be particularly long SwwSw feet, e.g. *suhtergefæderan* in *Beo* 1164a, or *ecga gelācūm* in 1168a. Similar feet are found in Old Saxon, e.g. *aðaligeburdeo* in *Heliand* 2985b or *hungres gethuinge* in 2824a. On Old Saxon hypermetrics, see further Hofmann (1991a, 153-82; 1991b, 214-21, 241), Russom (1998a, 151-6), Suzuki (2004, 295-329), and Hartman (2011,

‘hypermetric’ lines are the most direct continuation of Northwest Germanic typical verse forms; at the least, such rhythms were likely considerably less marginal.¹⁶

If accepted, this view of the development of Germanic verse has consequences for earlier metrical history, before Germanic. Strictly speaking, the approach taken here is based on the comparison of North and West Germanic metres, and can only point to metrical features no further back than the Proto-Northwest-Germanic level. Nonetheless, this metre almost certainly has a longer history. Phonologically speaking, a similar system could easily be much older, dating before Proto-Germanic to the period of development from PIE (see §5.2.3 below). The only firm limit is the fixing of stress on the initial syllable, before which point alliteration and the interaction of bimoraism and stress cannot have corresponded especially closely to anything known from later Germanic.

Wider connections and comparisons are difficult to be sure of. Since the syllable plays little direct role in a word-foot view of early Germanic metre, there does not seem to be much promise in looking to Indo-European syllable-counting traditions as the origin of Germanic poetic forms. However, Germanic verse has frequently and plausibly been related to Celtic and early Italic verse, which all seem to prominently feature alliteration (Kuryłowicz 1949; Klar, Hehir, and Sweetser 1983–1984; Haycock 1988; Whitman 1993, 5.2; Russom 1998a, 205f; Stifter 2016). An early connection between Germanic and Celtic verse would be unsurprising, since these neighbouring cognate traditions were in direct contact, and their speakers appear to have shared much in common culturally (Hyllestad 2010).¹⁷ Watkins (1995, 20, 230f, 255–64), in his very extensive review of Indo-European poetic traditions, argues for a STROPHIC type of poetry, proposed especially on the basis of Old Irish:

That is to say it [the Old Irish *rosc*¹⁸ form] should be compared with other examples of what I term ‘strophic structures’ or ‘strophic style’, an Indo-European poetic form distinct from, and perhaps of earlier date than, the quantitative meter ancestral to that of Greek and Vedic.

288–404). Such SwwSw feet are not found in Norse at all, as is to be expected given the difficulty of making compounds of that shape after the loss of so many unstressed syllables (including, especially, unstressed prefixes).

16. It is possible that dróttkvætt lines also originated as hypermetrics, as suggested by Simms (2003), and possibly implied by the similarity of Russom’s analyses of the two forms (1987, 98–100; 1998a, 30f.). Perhaps the exclusion of extrametrical syllables from within its longer feet provided a starting point for the stricter syllabism of dróttkvætt in its developed form.

17. Italic verse is separated from Germanic by a greater span of time, space, and culture. If Germanic verse is to be connected with any other Indo-European tradition, Celtic would appear to be a much more promising starting point.

18. Or more correctly, *roscad* (Corthals 2004; Stifter 2016).

(Watkins 1995, 20)

Watkins elegantly highlights a number of rhetorical and formulaic features of this ‘strophic’ form, but if (some) Old Irish, Welsh, Germanic, and Italic metres are historically related, the actual metrical details of the ancestral verse form(s) remain nearly completely obscure, at least so far. This may well be an inevitable consequence of the evidence available, the difficulties of comparative metrics, and the great time-depths involved, but it has surely not been helped by the constant misrepresentation of Germanic metre as ‘stress-based’ in most comparative discussions (examples of which: Murphy 1961, 6f; Kuryłowicz 1970, 17; Carney 1971, 54; Travis 1973, 2f; Klar, Hehir, and Sweetser 1983–1984, 30; Sweetser 1988, 142; Salmons 1992, 165; Whitman 1993, 5; Schürr 2003, 108, 122; West 2007, 54; Stifter 2016, §7.3). While initial stress is certainly an important feature for alliteration (Roper 2012, 82), a comparison of metrical systems should take as its point of departure features likely to have actually played a direct role in the metre. Whether the word-foot theory has any greater potential for clarifying the place of Germanic verse within European and Indo-European metrical history remains to be seen, but I would hope that shifting focus from stresses to the words and prosodic details can only help make comparative projects more precise and detailed, and so more convincing if successful. It is certainly initially encouraging that Old Irish also has metrical forms which have been analysed as based on word counting, which might provide a point of departure for tracing some form of (Indo-)European word-foot metre backwards in time (Travis 1973, 3-14; Carney 1989; Russom 2011, 343-9).

Whether or not the word-foot theory can help unravel the earlier prehistory of Germanic metre, its consequences for Germanic itself are significant. Aside from the inherent interest of metrical history (especially insofar as it sheds light on the metrical properties of extant poems), it also has implications for the linguistic basis of Germanic verse. Different linguistic elements – syllables, feet, words, stress, etc. – all clearly play a role in Germanic poetry, but having a plausible metrical framework allows for a clearer understanding of how they interact direct and indirectly with the principles of versification.

5.2 LANGUAGE IN OLD GERMANIC METRE

A well-known truth in metrical studies is that versification is dependent upon the prosodic system of the language that the poetry is expressed in.

It is quite generally accepted too... that this relationship is of particular consequence in the case of folk poetry. (Sarv 2011, 1)

Metre by definition involves the regulation of linguistic elements in some way in the organization of the line, the fundamental unit distinguishing poetry from prose (Fabb and Halle 2008, 1). If the arguments of the preceding section are correct, the basic metrical unit of Germanic alliterative verse is the word-foot, based on the linguistic WORD. The basic status of the word should not, however, obscure the more indirect but equally important roles played by other phonological constituents: the bimoraic foot in particular appears to be a fundamental linguistic unit which has a significant impact on the linguistic patterns. The antiquity of these phonological entities in Germanic suggests that, despite the syncope and apocopes described in §5.1.1, the basic ingredients for the interactions of language and metre found in historically attested poetry potentially have a very long prehistory.

5.2.1 WORDS

Russom's choice of the term 'word-foot' for the basic unit of Germanic poetry is apt. These feet show significant variations in terms of syllable counts and stress patterns, and the one common factor tying them together is their rootedness in the shape of an actual simplex or compound word. 'Word' is, however, a potentially ambiguous word from a linguistic perspective. Russom (1987, 8-12; 1998a, 13-7, 216) provides practical working surveys of the 'words' that provide the basis for word-feet in Old English and Norse, but does not identify the linguistic bases of these word-feet any further.

The type of word that serves as the basis of word-feet appears to correspond closely to the GRAMMATICAL WORD as defined by Dixon (2010, 5): a grammatical word encompasses a lexical (or grammatically functional) root and all associated suffixes (derivational, inflectional, or, in compounds, lexical). In Germanic, unstressed prefixes appear to count as separate 'words' in a manner perhaps comparable to entities like modern English *give up*, which is a single lexeme, but two distinct grammatical words. This may suggest that they are better regarded as a type of proclitic particle than a true derivational affix (cf. §1.2.3, note 44).

I cannot say for sure whether or not the early Germanic grammatical word further corresponds to the category of PHONOLOGICAL WORD. To the extent that the phonological word in older Germanic is understood to include unstressed 'pre-

fixes' and other unstressed particles (such as prepositions or enclitics),¹⁹ or that each element of a full compound is a distinct phonological word, the word-foot would correspond better to the grammatical than to the phonological word. On the other hand, if we assume that the metre should largely draw on phonological units, perhaps the metrical behaviour of words can be taken as evidence that prefixes counted as separate phonological words, and that compounds could be treated as single phonological words while retaining secondary stresses.

5.2.2 COMPOUNDING

An essential component of the word-foot theory is the principle of metrical compounding. Russom (1987) has explored how viewing the verse as a type of compound is useful in accounting for the alliterative patterns of the long line. In §2.4.3 I extended this concept to motivate exceptional final defooting as a means of explaining apparent exceptions to Kaluza's law in *Bēowulf* (which further serves as a way of accounting for Terasawa's rule).

Metrical compounding may potentially also help motivate the NORMATIVE FOOT ORDER and constraints on REVERSAL, which are perhaps the most significant elements of the word-foot theory to still lack a clear grounding in metrical or linguistic principles. As discussed in §1.2.1, normative foot order is the claim that, if the two feet of a verse are different in length or weight, the default order is short then long. Placing the elements in the opposite order – 'reversing' them relative to the normative order – is held, under the word-foot theory, to create a significant metrical complexity: D* verses (Sw/Ssw) are more basic than 'E*' (Ssw/Sw), as seen in the exclusion of the latter from Old English verse. These principles are absolutely critical to the word-foot theory, and serve to exclude or limit many imaginable verse types (keeping the theory from overgenerating).

In many ways, the principles of normative foot order and the complexity of reversal are very useful descriptively, and have a practical value that seems to support their theoretical reality. For example, the 'metrically irregular' Norse poem *Atlakviða* shows a much higher proportion of Da* verses than the more standard OE/fornyrðislag style metres: *Akv* has around 70 D* verses in 351 scannable half-lines (20% of verses), compared to 92 or so '1D*2' and '1D*3' verses in *Bēowulf*

19. Russom (1998a, 17, 19, and n. 27) does assume enclitics could count as part of a word-foot, so that a trisyllabic www foot may be projected from *vant-at-tu* 'you did not'. I do not think this assumption is metrically necessary, but in general the phonological and metrical status of enclitics in early Germanic is not well understood.

(1.4% of the total; Bliss 1962, 123). *Atlakviða* also has around 11 ‘reversed’ E* half-lines (3.1% of half-lines) of the sort completely banned from the more ‘classical’ metrical systems:

- (507) rógmálmi skatna
 ‘strife-metal of princes’ (*Akv* 27.6)
- (508) *Scyldinga þēoden
 ‘prince of the Scyldings’ (cf. ex. 94: *Beo* 1675a, 1871a)

This distribution seems to support some sort of principle of normative word order, which can only be deviated from within limits: when D* verses are rarer, the reversed E* type is banned; when D* verses are more frequent and play a more basic role in the system, E* verses begin to appear, but remain a less frequent alternative.²⁰

Despite the necessary, and even useful, role normative foot order plays in word-foot explanations, it is not fully motivated theoretically. Russom (1987, 29-31) justifies it by an expectation for longer second feet created by the common types B and C, but this is essentially a restatement of the problem: if type E verses (for example) were more common in practice, they would contribute to the opposite expectation. The frequency of different foot combinations is precisely what is at issue, and some independent motivation is needed for such an apparently fundamental, normative principle like reversal.

More work remains to be done in exploring the role of foot order in other metrical forms, and especially in giving it a sound theoretical motivation, but I would suggest that metrical compounding may be a useful starting point. Linguistic compounds in Germanic often appear to favour placing longer elements second. For instance, in the lexicon to the Old Icelandic Homily Book, edited by van Weenen (2004), I count 88 lexemes like *stór-tíðendi*, which are clear compounds with an uninflected initial element shorter than the following sequence. Reversed examples are vanishingly rare, though it is certainly possible that at least some units where the first element is inflected for the genitive should nonetheless be taken as compounds (especially examples like *athuga-samr**, where the final element is derivational; but these are not frequent).

20. Compare note 64 in §1.2.5.3 on ‘plain’ D and E verses in Old English. Also note that for Db verses, S/Sws, there are no reversed equivalents in *Bēowulf*, *Sws/S. Russom (1987, 29-31) appeals to the complexity of the Sws foot as limiting its ability to partake in a further complex operation like reversal (though it is also possible that the avoidance of the awkward rising stress clash in *Sws/S plays a role in this particular type).

If this sample reflects a real trend in the formation of early Germanic compounds – something that could only be determined by a much broader investigation of the relative lengths of elements, with due attention to the problems that can accompany the identification and analysis of possible compounds – then this preference may be the linguistic basis for metrical preference for short feet to come first, and long second. Whatever prosodic or morphological factors govern the formation of linguistic compounds could, under the word-foot principle of metrical compounding, be directly extended into the metrical system.

5.2.3 BIMORAIC FEET

Under the word-foot theory, the role of phonological feet²¹ is more indirect, but no less fundamental for that. The metrical importance of the bimoraic foot has been recognized at least since Kurylowicz (1949, 35f.), who seems to have been the first to explicitly draw the link between metrical resolution and strictly phonological phenomena such as high vowel loss (Fulk 1995, 492). The importance of resolution to the metrical patterns found in alliterative poetry was discussed in chapters 2 and 3, where we saw the metrical influence of what appear to be significant differences between Norse and English foot structures: despite a basic similarity of resolution in main lifts, suspension of resolution is regulated rather differently in the two languages.

Specifically, *Bēowulf* shows a close sensitivity to strict bimoraism, allowing overheavy sequences only in initial feet under the trimoraic licence, and otherwise limiting feet to precisely two moras. This is reflected phonologically in the loss of unfooted high vowels in early Old English (§2.2.8.2), and in verse in the restrictions on the resolution of trimoraic feet described by Kaluza's law (§2.4). Norse, on the other hand, has a stronger tendency to isosyllabism. Even bimoraic units are routinely suspended, and there is no evidence of resolution in non-initial syllables (§3.3.1). Very strikingly, Norse appears to prefer the creation of an initial degenerate foot rather than an overheavy resolved foot in *konungom*-type words (§3.3.2).

In a comparative view, it seems much more likely that the system of *Bēowulf* is closer to the foot structure of earlier Germanic. This is not merely because Norse poetry is so much later in absolute terms – the youngest Norse poems might be nearly half a millennium younger than *Bēowulf* – but because the English metrical

21. Remember that these are wholly distinct from metrical word-feet.

evidence is much more deeply rooted in old Germanic and pre-Germanic phonology.

This claim is not necessarily self-evident, and the opposite argument has been made, that bimoraism arose relatively late in Northwest, or North and West Germanic. Kuryłowicz (1949, 38; 1970, 8f.), followed by Fulk (1995, 491), argues that the introduction of a requirement for a stressed word to have two moras led to the lengthening of words like **þu* ‘thou’²² and the MASC.NOM.SG demonstrative **sa*, whose lengths are clearly discernible in North and West Germanic (Norse *sá*, OE *sē*) but are not as apparent in Gothic. The implication of this premise is cogently drawn out by Pascual (2016, 300, and n. 24):

[T]he Northwest Germanic lengthening of final vowels [in monosyllables] marked the transition from a syllable counting to a position counting system. [Note:] An interesting implication of this argument is that Gothic verse must have been syllable counting.

This is an interesting argument, and Pascual is to be commended for recognizing the great significance it could have for Germanic phonological and metrical history. There is, however, very extensive evidence from a variety of sources (phonotactics, Sievers’ law, shortenings of overlong sequences) that the bimoraic principle significantly predates Northwest Germanic, and is reconstructible not only for Gothic and Proto-Germanic, but at least for a late stage of pre-Germanic.

5.2.3.1 *Phonotactics and Lengthening*

Within Gothic itself, it is worth observing that there are no monomoraic content words. We find a variety of bimoraic types – *qab* ‘said’, *skip* ‘ship’, *snau* ‘snowed’ – but nothing lighter. The few probably monomoraic words are all unstressed function words like *sa* ‘that (MASC.NOM.SG)’, *ni* ‘not’, and *bi* ‘by’. The simplest explanation is that Gothic shared an inherited phonotactic constraint that a stressed element had to contain at least two moras (Russom 1998a, 15f; Fikkert, Dresher, and Lahiri 2006, 128).

As Kuryłowicz observed, in North and West Germanic unstressed particles clearly show secondary lengthening when stressed (while remaining short otherwise). This need not reflect anything innovative in these branches, however. For one thing, the

22. This is not a good example of lengthening, since this pronoun had a historically long vowel: PGmc **þū* < PIE **tuH* or **tū* (Katz 1998, 23f; Ringe 2006, 57, 290).

same pattern may well have held in Gothic as well, largely hidden by the orthographic system. Nothing can be made of the supposed lack of length on <sa>, for instance, since this could stand potentially for either *sǎ* or *sā*. Secondary lengthening under stress would be visible only in words ending with a short *-i. As it happens, alongside the regular negative *ni* we do find the rare variant *nei*, /ni:/.

Many of the lengthenings in North and West Germanic were clearly late and dialectal. OE *sē* is lengthened from unstressed *sě* where the *e* developed regularly, and in Norse *sú*, PGmc **sō* was probably shortened and raised in NWGmc before being relengthened. But this does not mean that the *pattern* of lengthening is necessarily young. On its own, there is nothing to say whether lengthening under stress is an innovation in the various branches, or a long-standing principle under which the lengthened variants were periodically renewed with reference to the more basic unstressed forms.²³ The important point is not that Gothic certainly did or did not show lengthening under stress, but that this is largely unknowable, and that it is not methodologically sound to make too much of a supposed difference between Northwest and East Germanic that may well not exist. Against this, the clearer evidence of phonotactics suggests that a bimoraic requirement was in effect in all of Germanic.

5.2.3.2 Sievers' Law

Better evidence for bimoraic feet in Gothic, and indeed in Germanic generally, comes from Sievers' law. This has been extremely well covered in the literature,²⁴ but in brief, in synchronic terms Sievers' law describes a morphophonological alternation between the allomorphs -*jī*- and -*ei*- (/i:/) in Gothic. Normally, the former appears after 'light' roots, and the latter after 'heavy', giving contrasts like *lag-jī-p* 'lays' versus *wahs-ei-p* 'grows' or *wēn-ei-p* 'hopes'. This in itself suggests some sort of weight sensitivity, since the only feature uniting the two types of 'heavy' stem

23. With some function words, there seems to have been considerable interplay between stressed and unstressed forms. A classic example is the development of Anglian OE *þēr* 'there', which probably arose as a lengthened variant of **þar* > **þār*, which was then caught up in the fronting of West Germanic **ā* > Anglian **ē* (Stiles 2004; Ringe and Taylor 2014, 13). A similar lengthening might lie behind Gothic *her* 'here', with its apparent example of Germanic **e₂*, if this really is lengthened from **hīr*/*hēr* (cf. OHG *hēra*) (Grønvik 1998, 92f; Ringe and Taylor 2014, 36f.). Either the final *-*r* is extrametrical, or these examples suggest that such lengthenings were motivated by more than bimoraism alone.

24. The following give a good range of modern perspectives, and contain extensive further references: Vennemann (1971, 106ff.), Murray and Vennemann (1983, 518), Murray (1988, 1991; 1993, 10-14), Drescher and Lahiri (1991, 264-9), Riad (1992, 65-67), Suzuki (1995b), and Kiparsky (1998).

– those with a short vowel followed by a consonant cluster and those with a long vowel and a single consonant – is that they contain one more mora than the ‘light’ stems.

This is reinforced by most theoretical explanations for the law, which is widely held to involve the interaction of syllabification and foot structure. One mainstream tradition of analysis, alluded to in §3.2.2, holds that medial $\check{V}C.ji$ -clusters would be heterosyllabified in light stems in order to satisfy the bimoraic requirement of the initial syllable: $[lag].jip$.²⁵ After heavy stems, retention of the $-ji$ -form would result in either an overheavy coda – $^x[wahs].jip$, $^x[wēn].jip$ – or else an excessively complex onset – $^x[wah].sjip$, $^x[wē].njip$ – depending on one’s favoured assumptions about syllabification.²⁶ Either pattern would be improved by vocalization of the $/j/$ to $/i/$, giving $[wah].seip$, $[wē].neip$, etc.²⁷

Another tradition of analysis, represented by Barrack (1991, 130-4), Drescher and Lahiri (1991, 264-9), and Kim (2001, 120-2), assumes tautosyllabification of all $-Cj$ -clusters, but is equally dependent on bimoraic feet as the controlling phonological entity. To explain the difference between *la.gjip* and *wē.neip*, the change of $/ji/ > ei$ is held to be blocked in light stems because both syllables are part of the initial, ‘resolved’ foot: $[la.gjip]$ remains unchanged, while $[wē].neip$ allows this development.²⁸

The importance of bimoraic feet is further indicated by the treatment of polysyllabic stems. Short disyllabic stems behave as the equivalents of heavy monosyllables: *mikil-ei-d* ‘magnifies’, *ragin-ei-s* ‘counsellor’. The simplest explanation for

25. Or $[lag][.jip]$, but I assume that the final syllable was defooted.

26. The supposedly problematic nature of $.Cj$ onsets has received the most attention within Germanic, but the law’s possible operation in PIE has been analysed as a type of *i*-epenthesis meant to avoid overlong syllables (Kobayashi 2004, 25-9; Byrd 2010b, 128-30; 2010a, 52f.), and this analysis could apply equally well to Germanic. Kiparsky (1998, 350f.), whose account of the law I find the most compelling in detail, assigns roles to both the avoidance of overheavy syllables and $.Cj$ onsets as relevant constraints.

27. Note that words like *stō-ji-p* ‘judges’ have a long root vowel, but because there are no other consonants all requirements of syllabification and foot structure are straightforwardly satisfied in $[stō].jip$.

28. Drescher and Lahiri (1991, 268) assume that the change of $.Cji > i$ is the default change, avoiding the awkward syllable onset, and provisionally suggest that it does not occur in light stems because the second syllable of a resolved sequence is ‘frozen’ (they also entertain the possibility of resyllabification). Kim (2001, 122) argues that neither allomorph is more basic, but that in each case either $-ji$ - or $-ei$ - is chosen depending on which creates a more optimal sequence of precisely bimoraic feet (assuming all word-final consonants are extrametrical): $[la.gji]p$ is preferred to trimoraic $^x[la.gi]p$; but $[wē][.ni]p$ has two bimoraic feet, while $^x[wē].njip$ would leave the second syllable too light to be footed. Kim’s approach would be more compelling if there were better evidence for default final consonant extrametricality (compare the contexts for high vowel loss in Old English, where final consonants have moraic value).

this apparent equivalence is that it is real, and both stem types open with heavy feet, achieved through ‘resolution’ in the case of the polysyllabics: [mi.ki].leid, [ra.gi].neis, like [wah].seiþ or, as examples of a non-initial heavy feet, [wei][.twō]-.deiþ ‘bears witness’ and [lai][.sā].reis ‘master, teacher’.²⁹ Potential confirmation of this foot structure could come from words where the *-ji-* formant followed an HL stem, but these are hard to come by in the corpus. A possible example is [fair][.gun].jis ‘mountain (GEN.SG)’, which appears to show the expected *-ji-* alternant, but the value of this form is limited, since the genitive singular of neuter *ja*-stems has largely become morphologically fixed as *-jis* (Mossé 1942, 92; Braune 2004b, 94 (§95, Anm. 1)).

Even if Sievers’ law were limited to Gothic, its testimony would be important, since there would be evidence from the separate histories of every branch of Germanic for the significance of the bimoraic foot. But it goes further than that, since the law is reconstructible for Proto-Germanic itself, providing direct testimony for bimoraism throughout the entire history of the older Germanic languages. The morphologization in the neuter *ja*-stems just mentioned is one indication that Sievers’ law already has a venerable history before Gothic, an impression supported by probable analogical restructuring of most instances of the *-ji-* alternant from *j*-less **-i-* (Ringe 2006, 129-31; Schuhmann 2008; Barber 2013, 12-14). More directly, Sievers’ law alternations appear to be discernible in the runic corpus (Schuhmann 2008, 512), and comparative evidence from the literary languages allows the reconstruction of the law for Proto-Germanic: Gothic *andeis* = OE *ende* (with the length of final **-ī* < **-ij-* indicated by the failure of apocope) < **andijaz*; Gothic DAT.SG *kunja* = OE *cynne* < PGmc **kunjai*.³⁰ It is hard to reconstruct any specific *ja*-stems after resolved bases, but the type is represented across Germanic: compare Gothic *ragineis* with OE *æðele* ‘noble’ < **apalija-* (like heavy *līþe* < **linþija-*, against light *midd-* < **midja-*). This original operation of the law appears to have been very general, applying to any instance of postconsonantal **j*, not just before **i* as in Gothic.

The precise dating of the law is somewhat unclear. The development of the heavy Sievers sequence **-iji-* > **-ī-* is generally held to be a late pre-Germanic change, suggesting that the law predates Proto-Germanic. Its origins may lie much further back, in Proto-Indo-European (Byrd 2010a; 2010b, 116-47; Barber 2013, 377-88). Even if this is so, Sievers’ law must have remained a productive rule

29. On the long medial vowel, cf. its source in Latin *-ārius*.

30. On the problems in reconstructing the genitive singular ending, see note 15 in ch. 1.

or constraint (or been reinvented) in the separate history of Germanic, as shown by the oft-cited example of **wurkijō* ‘I work’, a heavy class I weak verb within Germanic which would have been light in Proto-Indo-European, **urǵiōH*, as well as by the innovation of the ‘converse’ of Sievers’ law (Barber 2013, 15-17, 45ff; note 28 in §2.2.5). Either way, Sievers’ law suggests that bimoraism has a very long history, extending back before Proto-Germanic.

5.2.3.3 Shortenings of Overlong Syllables

Supporting evidence for the importance of bimoraism extending back into pre-Germanic comes from sound changes reducing the inventory of overlong syllables. Sievers’ law itself may have originally been motivated as part of this tendency; see note 26 above. Clearer evidence comes from Osthoff’s law, which shortened long vowels in overlong syllables,³¹ and from the simplification of geminate consonants (including those derived by Kluge’s law) after long syllable nuclei (Streitberg [1896] 1974, 70ff; Kluge 1913, 77-9, 112; Hirt 1931, 120f; Ringe 2006, 75-8, 88; Kroonen 2011, 45f; 2013, xl-xli):³²

(509) OSTHOFF’S LAW

**wēn.daz*³³ > **wen.daz* (> **windaz*) ‘wind’

**(t)pér.sneH₂*³⁴ > **fer.snō* ‘heel’

(510) SIMPLIFICATION OF GEMINATES

**ēd.tom* > **ēs.san* > **ē.saⁿ* ‘dead meat, food, carrion’

**deub^h.nó-* > **deup.pa-* > **deu.pa-* ‘deep’

Either of these sound changes on its own would provide good evidence for pre-Germanic bimoraism, and together they suggest it was a significant phonological

31. A rare potential counterexample to Osthoff’s law is OHG *muoltra* ‘capisterium’, as if < PGmc **mōltrō*. But since the word is not supported by any comparative evidence, and is morphologically transparent, it may be a relatively late formation in West Germanic or pre-OHG (Darms 1978, 249-51).

32. For bimoraism as a possible preference already in Proto-Indo-European, see Kobayashi (2004, 25-9) and Byrd (2010b, 88ff, 128ff.); this would require assuming relatively frequent word-final consonant extrametricality.

33. Perhaps, as Kroonen (2013, xxx-xxxi, and 587, sv. *winda-*) suggests, from post-PIE **H₂uéh₁entos*, levelled from ablauting **H₂uéh₁nt-*, **H₂uH₁ént-* (cf. Kloekhorst 2008, 368, sv. *ḥuuant-*). Reconstructing this preform would require Osthoff’s law to be relatively late within Germanic relative chronology, after Verner’s law (Kroonen 2013, xxxi, xli). Ringe (2006, 77) proposes a preform with a suffixal accent, which would have no chronological implications of Osthoff’s law.

34. Based on the agreement of Gothic *fairzna*, OHG *fersana*, and OS *fersna* with YAv. *pāšnā** ‘heel’ (on the stem and gender, see Lubotsky 2006, 1005f, n. 1), Homeric *πέπνη** ‘heel’, and Latin *perna* ‘ham’ (Casaretto 2004, 322; Ringe 2006, 271; Lubotsky 2006). The *i*-stems found in OE and Sanskrit, *fyrsn** and *pārṣṇi-*, are generally held to be secondary (Ringe 2006, 271; Lubotsky 2006, 1007).

principle.

5.2.3.4 *Bimoraism in Later Germanic*

The preceding sections provide a range of evidence that bimoraism was an important principle throughout early Germanic. Overheavy sequences were, when possible, brought down to weight, while Sievers' law provides evidence for the early operation of resolution and, one way or another, a dispreference for light initial feet. The phonological persistence of bimoraism into the individual Germanic languages is further supported not only by the lengthening of particles like **sa*, but also by the details of high vowel deletion and later shortenings of overlong words, which show the continued importance of *precise* bimoraism (Goering 2016; Fulk 1998). Bimoraism appears to play a role even into Middle English, in the allomorphy of class II weak verbs in the 'AB' dialect discussed in §2.4.1.1 (Tolkien 1929, 117ff.). The widespread process of open syllable lengthening across the later Germanic languages is also presumably a reflection of the bimoraic principle, though the details of these changes are debated (Luick 1898; Prokosch 1939, 140; Minkova 1982; Bermúdez-Otero 1998; Lahiri and Drescher 1999).³⁵

In Old Norse, the varying effects of *i*-umlaut are also apparently weight dependent, with the process being very general except when a potentially triggering **i* stands in the same bimoraic foot as the potentially umlauting vowel: **dōmidē*, **[dō].mi[.dē]*³⁶ > *dómði* 'judged', but **walidē*, **[wa.li][.dē]* > *valði* 'chose'; **katilōz* > *katlar* 'kettles'.³⁷

While this appears to serve as a basic indicator of foot structure, the full evidence of umlaut is difficult to interpret. It is tempting to see in umlaut evidence for the Norse tendency to favour light, degenerate feet over trimoraic resolved sequences. In an LH sequence – a light syllable followed by a heavy – an umlaut factor in the second syllable can affect the first: **glaðī* > *gleði* 'gladness'; **katilz* >

35. Pace Bredehoft (2004), there is also metrical evidence for resolution continuing into Middle English (Fulk 2002; Yakovlev 2008, 212-21; cf. Pascual 2014, 817).

36. Presumably then defooted to **[dō].mi.dē*, though this is not immediately relevant.

37. The literature on umlaut is vast. I have generally followed the descriptive account of Grønvik (1998, 52-65), who provides an excellent synthesis of the data, and whose explanation of the process strikes me as on the right track, even if it is not theoretically precise. See further Kock (1888) for a foundational treatment; recent discussions include Lahiri (2000), Iverson and Salmons (2004, 2012), Voyles (2005), and Kiparsky (2006), all with further references. I would only emphasize that neither the assumption of multiple periods of umlaut nor the extensive analogical processes often proposed are necessary. The only systematic analogy required under Grønvik's view is the elimination of umlaut in the NOM.SG of light *i*-stems on the basis of the oblique forms (**steðr* > *staðr*, cf. ACC.SG *stað*).

ketill ‘kettle’. If umlaut does not occur within a foot, this would imply *[gla].ðī-, *[ka].tilz. In such cases, the failure of the second syllable to be footed would presumably be due to its length, suggesting that already at a relatively early stage Norse ranked the tolerance of degenerate feet more highly than the trimoraic licence when compared with the situation in English.

The matter is not straightforward, however. Further evidence for bimoraic feet in Norse comes from the first apocope period, when high vowels were deleted after heavy roots but not light roots: compare Sölvesborg **asmut** = *Aⁿsmund* < **Ansmundu* versus **sunu** < **sunuⁿ* (Riad 1992, 111; Nielsen 2000, 99f, 142, n. 37). The runic evidence is too slight to reconstruct all the details, but this basic pattern is strongly reminiscent of Old English high vowel deletion (§2.2.8.2). A simple explanation would be that *[aⁿs][.mun].du lost its unfooted final vowel, while in *[su.nu] it survived within a foot.

There is a discrepancy between umlaut and syncope as potential evidence for foot structure. Words like **waliz* > *velr* ‘choose (2SG)’ show umlaut, which might imply the foot structure *[wa].liz, but they also show (late) loss of the second syllable, in contrast to words like ACC.SG **katil* > **ketil*. As far as vowel deletion goes, *velr* appears directly comparable to both **sunuz* and **sunu* (both of which lose their second vowels), as if the final **z* were phonologically extrametrical and could not serve to protect the second syllable, *[wa.li]z, *[su.nu]z. How to explain this so-called *ir*-umlaut is a major issue for any theoretical account of umlaut, and this uncertainty weakens the evidence of umlaut as a direct indicator of foot structure (including for initial degenerate feet).³⁸ But the details of overheavy resolved sequences aside, it is clear that both umlaut and high vowel loss depend on bimoraic feet in some way, and show the continued importance of weight sensitivity in the phonological history of Norse.

In the later history of Norse, syllabism becomes more prominent. The second apocope period (§5.1.1) eliminated many high vowels which had earlier been preserved in a bimoraic foot: Rök **sunu** > *sun*. The result was still bimoraic, [sun], but with both moras in the same syllable. The later metrical evidence suggests that resolution continued to be (or again became) possible even of heavy sequences such as *konungr*, but we have seen in chapter 3 how much more of a role degenerate, light feet play in Norse verse: even bimoraic sequences are suspended after heavy

38. One possibility suggested by Reid (1990, 39) is that the umlaut factor was in fact the *-z^j (palatalized by the preceding vowel), not the *-i- itself. That would allow *[wa.li]z^j to be fully footed, and still have a source for umlaut. This explanation is perhaps somewhat formalistic, however.

syllables, and resolution cannot create an overheavy foot if this would not encompass the entire word (the non-resolvability of *konungom*-type words; §3.3.2). It is difficult to relate these metrical patterns in precise detail to the considerably earlier evidence of umlaut or vowel loss, but the more reduced role of resolution and greater preference for isosyllabism in Norse poetry does seem to be secondary compared to Old English, following from the significant phonological changes seen in North Germanic.

5.2.3.5 *Strict Bimoraism in Proto-Germanic?*

Although the Norse situation is largely secondary, Riad (1992, 100, 160) and Kim (2001, 119) have argued that one feature suggested above – the non-resolvability of LH sequences – may go back to Proto-Germanic. Kim’s explanation of Sievers’ law depends on the supposed unacceptability of a trimoraic foot like *[la.gī]p. If this were correct, it would suggest that even though *cyning* and *konungr* are both resolvable in later verse, the first two syllables of earlier **kuningaz* would not have been. The trimoraic licence for initial feet would have to be an innovation. If we were to accept this starting point, we might speculate that it was only with the apocopes in words like **wulfaz* > NGmc **wulfz*, WGmc **wulf*, that overheavy root feet became common and acceptable enough – independently in each branch – to license resolution in **konungz*, **kuning*.³⁹

There is no solid basis, however, for reconstructing initial bimoraism so strictly. For one thing, Kim’s specific analysis of Sievers’ law is hardly necessary, and without this the non-resolvability of trimoraic sequences would only be a back-projection from Norse (especially the evidence of umlaut, whose significance is not clear-cut), not a comparative reconstruction. Since the resolution of overheavy sequences is known from all branches – very extensively from Old English, but also compare the resolution of *konungr* in Norse metre, and the ‘heavy’ Sievers’ ending in Gothic *šipōneis* ‘disciple’ – it seems more likely that the trimoraic licence is old.

Overheavy resolution certainly seems plausible in the context of Proto-Germanic phonotactics, which clearly allowed initial trimoraism in monosyllabic feet (even if these were not so frequent as they would later become). A number of root nouns such as **algz* ‘temple’ and *burgz* ‘fortified settlement’ (Griepentrog 1995, 55f, 112)

39. Incidentally, the failure of resolution in Norse *konungi* would, under this supposition, be identical to its behaviour in pre-Norse, though this would not necessarily imply that there was not an intermediate stage akin to Old English, when the trimoraic tolerance was extended to polysyllabic forms like **konungē*.

can only be made bimoraic by taking multiple final consonants as extrametrical. Much the same goes for the 2.SG.PRET of most strong verbs, such as **gaft* ‘gave’, **kaust* ‘chose’, etc., and the 1/3.SG.PRET of strong verbs of classes 1-3 and 6-7: **raid* ‘rode’, **band* ‘bound’, **fōr* ‘travelled’, etc. No extrametricality is possible in words like **berhta-* ‘bright’, **wurhtē* ‘wrought’, **pā^htē* ‘thought’, **aihtiz* ‘property’, or **purftiz* ‘need’, in which a trimoraic initial foot could be avoided only by positing exceptional syllabifications of the medial clusters. The full details of when resolved overheavy feet were allowed are probably not reconstructible, but that they could occur at least in minimal words like **gibō* ‘gift’ or **gumô* ‘man’ seems more likely than not, and this would presumably apply to the roots of long words, such as **kuningaz* ‘king’, as well.

5.2.4 INTERACTIONS OF LANGUAGE AND METRE

Sections 5.2.1-5.2.3 touch on three linguistic elements, each with a different relationship to the metrical system. Assuming the word-foot approach advocated for in this thesis is correct, (grammatical) words have the most direct role, serving as the basis for word-feet, which are the fundamental building blocks used by poets and audiences to intuit metrically acceptable arrangements of linguistic material. The formation of compound words also appears to have a fairly direct metrical role, but as an element of principle, providing the basis for metrical compounding and metrical cohesion. This principle has many important metrical effects: explaining patterns of alliteration, the suspension of resolution across word boundaries, Terasawa’s rule, exceptions to Kaluza’s law, and the normative foot order within verses. Finally, the bimoraic foot may not have any direct metrical representation at all, but since it plays an essential role in the structure of words, it is inevitably a major factor in determining how words and word-feet are arranged in practice. This importance is seen above all in the enduring role of resolution and its suspension, which have a very significant effect on the surface patterns we find in the various Germanic metrical traditions.

5.3 FURTHER DIRECTIONS

In this thesis I have broadly considered the mutually illuminating interactions of linguistic and metrical theory in the older Germanic languages. In practice, I have concentrated on key specific points: the significance of the word-foot theory in

explaining the metre of Old English, fornyrðislag, and the full-verses of lióðahátt; and the issues of moraic phonology underpinning resolution, especially the bimoraic foot. Germanic metre and phonology are large topics, however, and the approaches taken here could be applied in a number of further directions.

Within Norse, skaldic verse, the poems preserved in runic inscriptions in the Younger Futhark, and the ‘irregular’ Eddic poems discussed in §5.1.4 all potentially provide further material for considering early Norse metrical developments. The importance of the remaining Eddic poems is suggested by the evidence provided by a poem like *Atlakviða* for reversal (§5.2.2). The skaldic metre of dróttkvætt in particular stands out both for its constraints on resolution, and especially for Craigie’s law. As a restriction against overheavy syllables, this provides an important parallel to constraints on trimoraism like Kaluza’s law, but this large and intricate corpus has not yet been thoroughly reviewed in the light of metrical phonology and current metrical theory. Other skaldic metres remain understudied from any perspective. Resolution is very frequent in the short and light kviðuhátt, for instance, which may provide corroboration for the workings of resolution in fornyrðislag argued for in chapter 3.

Despite the vast amount of attention it has received over the years, there is also much to do within English, especially outside of *Bēowulf*. It would be valuable to reexamine the operation of suspension and resolution in the remainder of the corpus, investigating the full range of suspension environments. Kaluza’s law explains the patterns of resolution and suspension in *Bēowulf*, but it is less clear how other poets chose when to resolve and when to suspend (and to what extent this was a metrical versus a phonological decision). The role of resolution in Middle English, which has only very recently become a topic of discussion, also needs to be integrated into a broader view of prosodic and metrical developments.

Across the channel, the closely allied tradition of Old Saxon – chiefly represented by *Heliand*, the single longest early Germanic poem – has only recently been subject to the kind of sustained metrical inquiry as Old English,⁴⁰ and much more work remains to be done. Intriguingly, Suzuki (2014, 286-303) believes he has found traces of Kaluza’s law in this poem, which could have both synchronic and comparative implications for this branch of Germanic. Aside from this, the role of extensive epenthesis in the *Heliand* opens up new areas to explore concerning the relationship of linguistic changes, prosody, and metre.

40. The chief studies are Hofmann (1991a, 1991b), Russom (1998a, 136-70), Suzuki (2004), and Hartman (2011, 288-404).

Near the beginning of this thesis (§1.1), I justified my orientation to the Sieversian metrical tradition in progressive terms, arguing that this represents a very successful example of researchers building on previous work and moving, perhaps slowly, towards a clearer view of Germanic language and metre. As the breadth of the alliterative tradition continues to be explored and studied, I think there is reason to hope that building further on this tradition can help us keep getting closer to a (perhaps never fully obtainable) ‘sense of real understanding’ about how Germanic poets regulated the possibilities of their languages in the artful constraining of speech we call metre.

Appendix A

Kaluza's Law in *Bēowulf*

This appendix contains the data for Kaluza's law in *Bēowulf*, divided into three large groups. In chapter 2, I organized the discussion by verse-type, but I take the opportunity here to arrange the data by metrical context alone. The first group therefore contains all verses showing positive resolution after a heavy syllable (a suspension environment); the second consists of verses which show suspension of the second element of a verse-final compound, where Kaluza's law might not apply as strictly because of the defooting rule (§2.4.3); and the third has all remaining examples of suspended resolution. This is not quite a mechanical aggregation of the categories as listed on table 2.1: since the eight three-word D² verses do not end with compounds, they are listed in group one rather than with their two-word fellows in group two (cf. note 66 in chapter 2).

Within each group, verses conforming to Kaluza's law (either by showing resolution of a bimoraic sequence or suspension of a longer sequence) are given first, followed by clear violations of the law (resolution of an overheavy unit; suspension even when the second syllable is light). Then I give verses whose relevance to the law is uncertain for one reason or another, but which do not seem to violate it. A final section contains ambivalent verses, which could be taken as either conforming or violating, depending on particular textual or etymological judgements. These four sections correspond respectively to the categories CONF., VIOL., CONF?, and AMB. in table 2.1.

In each category, verses are given in order of occurrence, accompanied by their line number of metrical label. I have used square brackets and underdots to highlight editorial changes of potential metrical relevance. I refer to the discussion in chapter 2 and the critical edition of Fulk, Bjork, and Niles (2009) for details on individual lines.

Resolution in a Suspension Environment

Conforming

76a	folcstede frætwan	A2a ¹
136a	morðbeala mære	A2a ¹
156a	feorhbealo feorran	A2a ¹
193a	nȳdwracu niþgrim	A2a ¹
208a	sundwudu sōhte	A2a ¹
215a	gūðsearo geatolic	A2a ¹
222a	brimclifu blican	A2a ¹
226a	sæwudu sældon	A2a ¹
232a	fyrðsearu fūslicu	A2a ¹
328a	gūðsearo gumena	A2a ¹
430a	frēowine folca	A2a ¹
467a	hordburh hæleþa	A2a ²
468b	unlifigende	D ¹
485a	drihtsele drēorfah	A2a ¹
487a	heall heorudrēore	D ¹
501a	onband beadurūne	D ¹
522a	freoðoburh fægere	A2a ²
622a	sincfato sealde	A2a ¹
640a	gilpcwide Gēates	A2a ¹
715a	goldsele gumena	A2a ¹
737a	mæg Higelāces	D ¹
744a	unlyfigendes	D ¹
753a	mundgripe mārān	A2a ¹
758b	mæg Higelāces	D ¹
767a	dryhtsele dynede	A2a ¹
784a	atelic egesa	A2a ²
813b	mæg Hygelāces	D ¹
819a	gūðhrēð gyfeþe	A2a ²
914a	mæg Higelāces	D ¹
994a	gestsele gyredon	A2a ¹
1047a	hordweard hæleþa	A2a ²
1079a	morþorbealo māga	A2a ¹
1116a	bānfatu bærnan	A2a ¹
1121a	bengeato burston	A2a ¹
1147a	sweordbealo sliðen	A2a ¹
1171a	goldwine gumena	A2a ¹
1177a	bēahsele beorhta	A2a ¹
1198a	hordmāðum hæleþa	A2a ²
1205a	wælrēaf werede	A2a ²

1239a	bencþelu beredon	A2a ¹
1243a	bordwudu beorhtan	A2a ¹
1246a	þrecwudu þrymlic	A2a ¹
1267a	heorowearh hetelic	A2a ²
1284a	wīgryre wifes	A2a ¹
1308b	unlyfigendne	D ¹
1317b	healwudu dynede	A2a ¹
1369b	holtwudu sēce	A2a ¹
1389a	unlifigendum	D ¹
1463a	folcstede fāra	A2a ¹
1476a	goldwine gumena	A2a ¹
1485a	gesēon sunu Hrædles	D ¹
1516a	færgripe flōdes	A2a ¹
1530b	mæg Hylāces	D ¹
1558a	ealdsweord eotenisc	A2a ²
1602a	goldwine gumena	A2a ¹
1607a	wigbil wanian	A2a ²
1619a	wighryre wrāðra	A2a ¹
1676a	aldorbealu eorlum	A2a ¹
1722a	lēodbealo longsum	A2a ¹
1738a	ecghete ēoweð	A2a ¹
1802a	bliðheort bodode	A2a ²
1847a	hild heorugrimme	D ¹
1852a	hordweard hæleþa	A2a ²
1906b	sundwudu þunede	A2a ¹
1940a	cwealmbealu cȳðan	A2a ¹
2043a	gārcwealm gumena	A2a ²
2046a	wigbealu weccēan	A2a ¹
2072a	hondræs hæleþa	A2a ²
2077a	feorhbealu fægum	A2a ¹
2096b	he on weg losade	C ^{2w}
2120a	wighete Wedra	A2a ¹
2154a	gūðsweord geatolic	A2a ²
2239a	weard winegeōmor	D ¹
2250a	feorhbealo frēcne	A2a ¹
2265a	burhstede bēateð	A2a ¹
2313a	beorht hofu bærnan	A2a ¹
2320a	dryhtsele dyrnne	A2a ¹
2357a	frēawine folca	A2a ¹
2408a	hæft hygegiōmor	D ¹
2419a	goldwine Gēata	A2a ¹
2424a	feorh æþelinges	D ¹
2429a	frēawine folca	A2a ¹

2456a	wīnsele wēstne	A2a ¹
2537a	feorhbealu frēcne	A2a ¹
2583b	hrēðsigora ne gealp	E
2584a	goldwine Gēata	A2a ¹
2607a	wīcstede weligne	A2a ¹
2616a	ealdsweord etonisc	A2a ²
2618a	furdsearo fūslic	A2a ¹
2650a	glēdegese grim	E
2661b	wigheafolan bær	E
2708a	sibæðelingas	D ¹
2742a	morðorbealo māga	A2a ¹
2780b	līgegesan wæg	E
2796b	þe ic hēr on starie	C ^{2w}
2908b	unlifigendum	D ¹
2958b	segn Higelāces	D ¹
2979a	ealdsweord eotonisc	A2a ²
3006a	folcrēd fremede	A2a ²
3041a	grimlic gryrefāh	A2a ²

Violating

330a	æscholt ufan græg	A2a ²
1778a	mōdceare micle	A2a ¹
3149a	mōdceare mændon	A2a ¹

Possibly Conforming

242a	þe on land Den(ig)a	C ^{2w}
253b	on land Den(ig)a	C ^{2w}
286a	weard maþelode	D ¹
341a	wlanc Wedera lēod	D ¹
423a	wræc Wedera nið	D ¹
450a	mearcað mōrhōpu	A2b
596a	atole ecgþræce	A2b
657a	ðrȳþærn Den[ig]a	A2a ²
764a	flēon on fenhōpu	A2b
986a	hæþenes handsporu	A2b
1358a	warigeað wulfhleoþu	A2b
1670a	dēaðcwealm Denigea	A2a ²
1946a	þæt hīo lēodbealewa	C ^{1w}
2035a	dryhtbearn Den[ig]a	A2a ²
2047a	meaht pū, mīn wine	A2b
2705a	forwrāt Wedra helm	D ¹
2758a	gold glitinian	D ¹
2800a	frōde feorhlege	A2b

2921b	milts ungyfeðe	D ²
3056b	hord openian	D ¹

Ambivalent

1122a	lāðbite lices	A2a ¹
1187a	umborwesendum ær	E
1534a	mundgripe mægenes	A2a ¹
2950a	frōd felageōmor	D ¹

Suspension in a Defooting Environment**Conforming**

31a	lēof landfruma	D ²
37a	of feorwegum	C ^{1w}
54a	lēof lēodcýning	D ²
68a	þæt healreced	C ^{1w}
73a	buton folcscare	C ^{1w}
99a	swā ðā drihtguman	C ^{1w}
117a	æfter bēorþege	C ^{1w}
126b	mid ærdæge	C ^{1w}
160a	deorc dēaþscua	D ²
174a	wið færgryrum	C ^{1w}
175b	æt hærgratfum	C ^{1w}
177a	þæt him gāstbona	C ^{1w}
180a	in mōdsefan	C ^{1w}
187a	æfter dēaðdæge	C ^{1w}
189a	swā ðā mælceare	C ^{1w}
198b	hēt him yðlidan	C ^{1w}
199b	cwæð he gūðcýning	C ^{1w}
249b	nis þæt seldguma	C ^{1w}
285a	on hēahstede	C ^{1w}
288a	scearp scyldwiga	D ²
317a	mid ārstafum	C ^{1w}
322a	heard hondlocen	D ²
349a	wæs his mōdsefa	C ^{1w}
367a	ðīnra gegncwida	C ^{1w}
373a	wæs his ealdfæder	C ^{1w}
382a	for ārstafum	C ^{1w}
385a	for his mōdþræce	C ^{1w}
388b	þæt hīe sint wilcuman	C ^{1w}
394b	hider wilcumen	D ²
458a	ond for ārstafum	C ^{1w}

APPENDIX A. KALUZA'S LAW IN *BĒOWULF*

460b	to handbonan	C ^{1w}	1317a	mid his handscale	C ^{1w}
476b	is mīn fletwerod	C ^{1w}	1320a	æfter nēodlaðum	C ^{1w}
479a	þone dolscaðan	C ^{1w}	1325a	mīn rūnwita	C ^{1w}
551a	heard hondlocen	D ²	1325b	ond mīn rædbora	C ^{1w}
554a	fāh fēondscaða	D ²	1330b	to handbanan	C ^{1w}
617b	æt þære bēorþege	C ^{1w}	1342a	se þe æfter sincgyfan	C ^{1w}
640b	ēode goldhroden	C ^{1w}	1351b	ōðer earmsceapen	C ^{1w}
664a	wolde wīgfruma	C ^{1w}	1353a	þone on geārdagum	C ^{1w}
692a	eft eardlufan	D ²	1368a	þeah þe hæðstapa	C ^{1w}
704a	þā þæt hornreced	C ^{1w}	1388b	þæt bið drihtgumuan	C ^{1w}
707a	se scynscaða	C ^{1w}	1403a	æfter waldswaþum	C ^{1w}
710b	under misthleopum	C ^{1w}	1421a	on þām holmclice	C ^{1w}
714b	tō þæs þe he winreced	C ^{1w}	1427a	swylce on næshleoðum	C ^{1w}
737b	hū se mānscaða	C ^{1w}	1433a	of flānbogan	C ^{1w}
738a	under færgripum	C ^{1w}	1445a	seo ðe bāncofan	C ^{1w}
742a	bāt bānlocan	D ²	1451b	swā hine fyrndagum	C ^{1w}
766a	þæt se hearmscaþa	C ^{1w}	1480a	wes þū mundbora	C ^{1w}
786b	godes andsacan	D ²	1554a	gewēold wīgsigor	D ²
792a	þone cwealmcuman	C ^{1w}	1622a	oflēt lifdagas	D ²
793a	ne his lifdagas	C ^{1w}	1635a	from þām holmclice	C ^{1w}
801b	þone synscaðan	C ^{1w}	1641a	frome fyrdhwate	D ²
812a	þæt him se lichoma	C ^{1w}	1682b	godes andsaca	D ²
840a	geond wīdwegas	C ^{1w}	1695a	þurh rūnstafas	C ^{1w}
866a	ðær him foldwegas	C ^{1w}	1704a	geond wīdwegas	C ^{1w}
868a	guma gilphlæden	D ²	1712a	on to dēaðcwalum	C ^{1w}
885a	æfter dēaðdæge	C ^{1w}	1744a	se þe of flānbogan	C ^{1w}
936a	wēa wīdscofen	D ²	1754a	þæt se lichoma	C ^{1w}
945a	þæt hyre ealdmetod	C ^{1w}	1768a	þæt ðec, dryhtguma	C ^{1w}
971a	tō lifwraþe	C ^{1w}	1813a	ond þā siðfrome	C ^{1w}
993b	þe þæt winreced	C ^{1w}	1823a	þinre mōdlufan	C ^{1w}
1007a	þær his lichoma	C ^{1w}	1841a	þē þā wordcwidas	C ^{1w}
1012a	ymb hyra sincgyfan	C ^{1w}	1845a	wīs wordcwida	D ²
1033b	þonne scyldfreca	C ^{1w}	1853b	mē þin mōdsefa	C ^{1w}
1062a	on ðyssum windagum	C ^{1w}	1862a	sceal hringnaca	C ^{1w}
1070a	in Frēswæle	C ^{1w}	1894a	cwað þæt wilcuman	C ^{1w}
1073b	æt þām lindplegan	C ^{1w}	1895a	scaþan scīrhame	D ²
1102a	ðeah hie hira bēaggyfan	C ^{1w}	1907a	nō þær wegflotan	C ^{1w}
1138b	he to gyrnwræce	C ^{1w}	1928a	under burhlocan	C ^{1w}
1146a	swylce ferhðfrecan	C ^{1w}	1948a	gyfen goldhroden	D ²
1213a	æfter gūðsceare	C ^{1w}	1954a	hiold hēahlufan	D ²
1258a	æfter gūðceare	C ^{1w}	1963b	mid his hondscle	C ^{1w}
1262a	tō ecgbanan	C ^{1w}	1981a	geond þæt [heal]reced	C ^{1w}
1311b	samod ærdæge	D ²	1992b	ic ðæs mōdceare	C ^{1w}

2012a	syððan he mōdsefan	C ^{1w}	2528a	þæt ic wið þone gūðflogan	C ^{1w}
2018b	oft hīo bēahwriðan	C ^{1w}	2561a	ðā wæs hringbogan	C ^{1w}
2025a	geong goldhroden	D ²	2563a	gōd gūðcýning	D ²
2039b	tō ðām lindplegan	C ^{1w}	2579a	þonne his ðiodcýning	C ^{1w}
2042a	eald æscwiga	D ²	2622b	swā his ærfæder	C ^{1w}
2065b	ond him wiðflufan	C ^{1w}	2639a	to ðyssum siðfate	C ^{1w}
2079b	to mūðbonan	C ^{1w}	2642a	hwate helmberend	D ²
2090a	dior dædfuma	D ²	2651b	þæt minne lichaman	C ^{1w}
2093b	hū i[c ð]ām lēodsceaðan	C ^{1w}	2652a	mid minne goldgyfan	C ^{1w}
2112a	gomel gūðwiga	D ²	2677b	þā gēn gūðcýning	C ^{1w}
2118a	gearo gyrnwæce	D ²	2688a	þā wæs þēodsceaða	C ^{1w}
2130a	þāra þe lēodfruman	C ^{1w}	2712a	þe him se eorðdraca	C ^{1w}
2144a	swā se ðēodcýning	C ^{1w}	2718a	hū ðā stānbogan	C ^{1w}
2148a	ðā ic ðē, beorncýning	C ^{1w}	2733b	næs se folccýning	C ^{1w}
2176a	æfter bēahðege	C ^{1w}	2735a	þe mec gūðwinum	C ^{1w}
2226a	secg synbysig	D ²	2747b	þæt ic ærwelan	C ^{1w}
2233a	swā hý on geārdagum	C ^{1w}	2753a	æfter wordcwýdum	C ^{1w}
2261a	æfter wīgfruman	C ^{1w}	2798a	ær swýltdæge	C ^{1w}
2271a	eald ūhtsceaða	D ²	2827a	wyrm wōhbogen	D ²
2273a	nacod niðdraca	D ²	2830a	þæt se wiðfloga	C ^{1w}
2278a	swā se ðēodsceaða	C ^{1w}	2835a	for ðæs hildfruman	C ^{1w}
2311a	on hyra sincgifan	C ^{1w}	2846a	þæt ðā hildlatan	C ^{1w}
2315a	lāð lyftfloga	D ²	2873a	nealles folccýning	C ^{1w}
2318a	hū se gūðsceaða	C ^{1w}	2877a	ic him lifwraðe	C ^{1w}
2321a	hæfde landwara	C ^{1w}	2893b	þær þæt eorlweorod	C ^{1w}
2333a	hæfde ligdraca	C ^{1w}	2896b	ond eftcymes	C ^{1w}
2335b	him ðæs gūðcýning	C ^{1w}	2900a	nū is wilgeofa	C ^{1w}
2341b	sceolde lændaga	C ^{1w}	2918a	þæt se byrnwiga	C ^{1w}
2344a	þēah ðe hordwelan	C ^{1w}	2942b	somod ærdæge	D ²
2346a	þæt he þone wiðflogan	C ^{1w}	2963a	þæt se þēodcýning	C ^{1w}
2366a	fram þām hildfreca	C ^{1w}	2970a	syððan ðēodcýning	C ^{1w}
2368a	earm ānhaga	D ²	3008a	þæt wē þēodcýning	C ^{1w}
2391a	se ðæs lēodhryres	C ^{1w}	3010a	on ādfære	C ^{1w}
2407a	se ðæs orleges	C ^{1w}	3036b	þæt se gūðcýning	C ^{1w}
2414a	gearo gūðfreca	D ²	3040b	wæs se lēgdraca	C ^{1w}
2437b	of hornbogan	C ^{1w}	3046a	hæfde eorðscrafa	C ^{1w}
2455a	gesyhð sorhcearig	D ²	3100a	þenden he burhwelan	C ^{1w}
2465a	on ðām feorhbonan	C ^{1w}	3152a	song sorgcearig	D ²
2476a	frome fyrðhwate	D ²	3177a	of lichaman	C ^{1w}
2479a	þæt mægwine	C ^{1w}			
2502a	tō handbonan	C ^{1w}	Violating		
2514b	gif mec se mānsceaða	C ^{1w}	77b	þæt hit wearð ealgearo	C ^{1w}
2517a	hwate helmberend	D ²	84a	þæt se ecghete	C ^{1w}

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230a	se þe holmc lifu	C ^{1w}	1339a	mihtig mǎnscaða	D*
486a	eal bencþelu	C ^{1w}	1348a	micle mearcstapan	D*
771b	þæt se wīnsele	C ^{1w}	1426a	sellice sǣdracan	D*
820b	under fenhleoðu	C ^{1w}	1440a	wundorlic wǣgbora	D*
1192b	ond frēondlaþu	C ^{1w}	1468a	sēlan sweordfrecan	D*
1230b	þēod ealgearo	D ²	1513a	þæt he (in) niðsele	C ^{1w}
1253a	siþðan goldsele	C ^{1w}	1515a	ne him for hrōfsele	C ^{1w}
1409a	stēap stānhliðu	D ²	1568a	fǣgne flǣschoman	D*
1810a	cwæð he þone gūðwine	C ^{1w}	1639a	tō þām goldsele	C ^{1w}
2241b	beorh eallgears	D ²	1678a	hārum hildfruman	D*
2340a	þæt him holtwudu	C ^{1w}	1793a	rōfne randwigan	D*
2410a	tō þæs ðe hē eorðsele	C ^{1w}	1938a	æfter mundgripe	C ^{1w}
2438a	his frēawine	C ^{1w}	1969a	geongne gūðcýning	D*
2540a	under stāncleofu	C ^{1w}	2010a	tō ðām hringsele	C ^{1w}
2840a	oððe hringsele	C ^{1w}	2030a	æfter lēodhryre	C ^{1w}
2884a	nū sceal sincþego	C ^{1w}	2083a	of ðām goldsele	C ^{1w}
2884b	ond swyrdgifu	C ^{1w}	2123a	frōdan fyrnwitan	D*
2946a	wæs sio swātswaðu	C ^{1w}	2139a	in ðām [gūð]sele	C ^{1w}
3112b	þæt hie bēlwudu	C ^{1w}	2205a	hearde hildefrecan	D*
Possibly Conforming			2496a	wýrsan wígfrecan	D*
103a	mǣre mearcstapa	D*	2515a	of eorðsele	C ^{1w}
263a	æþele ordfruma	D*	2545a	sto(n)dan stānbogan	D*
275a	dēogol dǣdhata	D*	2591a	ālǣtan lǣndagas	D*
380b	on his mundgripe	C ^{1w}	2603a	lēoflic lindwiga	D*
443a	in þām gūðsele	C ^{1w}	2635a	in biorsele	C ^{1w}
482a	þæt hie in bēorsele	C ^{1w}	2649a	helpan hildfruman	D*
492a	on bēorsele	C ^{1w}	2674a	geongum gārwigan	D*
606a	sunne swelwered	D*	2689a	frēcne fyrdraca	D*
614a	grētte goldhroden	D*	2719a	ēce eorðreced	D*
647a	tō þām hēahsele	C ^{1w}	2760a	ealdes ūhtflogan	D*
695a	in þām wīnsele	C ^{1w}	2786a	in ðām wongstede	C ^{1w}
818a	burston bānlocan	D*	2811a	geonum gārwigan	D*
839a	fērdon folctogan	D*	2825a	egeslic eorðdraca	D*
965a	þæt he for mundgripe	C ^{1w}	2847a	týdre trēowlogan	D*
966a	licgean lifbýsig	D*	3053a	þæt ðām hringsele	C ^{1w}
976a	in nidgripe	C ^{1w}	3055a	sigora sōðcýning	D*
1082b	on þām meðelstede	C ^{1w}	3097a	in bēlstede	C ^{1w}
1094a	on bēorsele	C ^{1w}	Ambivalent		
1162a	wīn of wunderfatum	D*	851a	in fenfreoðu	C ^{1w}
1212a	wýrsan wígfrecan	D*	2462a	wongas on wicstede	D*
1231a	druncne dryhtguman	D*	3075a	nǣshe goldhwæte	C ^{1w}
1298a	rice randwiga	D*			
1326b	ðonne wē on orlege	C ^{1w}			

Suspension Elsewhere

Conforming

2a	þeodcýninga	D ¹	376a	hider hēr cumen	D ²
11b	þæt wæs gōd cyning	C ^{2w}	399b	ymb hine rinc manig	C ^{2w}
15a	þe hīe ær drugon	C ^{2w}	400b	sume þær bidon	C ^{2w}
20a	swā sceal (geong g)uma	C ^{2w}	406a	searnoet seowed	A2k
23b	þonne wīg cume	C ^{2w}	424a	forgrand gramum	C ^{2w}
35b	on bearm scipes	C ^{2w}	437a	þæt ic sweord bere	C ^{2w}
44b	þon þā dydon	C ^{2w}	439b	ond ymb feorh sacan	C ^{2w}
48b	lēton holm beran	C ^{2w}	441b	se þe hine dēað nimeð	C ^{2w}
64b	herespēd gyfen	C ^{2w}	444b	swā he oft dyde	C ^{2w}
67a	magodriht micel	A2k	447b	gif mec dēað nimeð	C ^{2w}
69a	medoærn micel	A2k	452b	gif mec hild nime	C ^{2w}
78b	scōp him Heort naman	C ^{2w}	453b	þæt mīne brēost wereð	C ^{2w}
90a	swutol sang scopes	A2k	507b	ymb sund flite	C ^{2w}
120a	wonsceaft wera	A2k	509b	on dēop wæter	C ^{2w}
124b	tō hām faran	C ^{2w}	535b	cnihtwesende	D ¹
136b	ond nō mearn fore	C ^{2w}	539a	hæfdon swurd nacod	C ^{2w}
146b	wæs seo hwil micel	C ^{2w}	573b	wyrd oft nereð	D ²
170a	þæt wæs wræc micel	C ^{2w}	594b	swā þū self talast	C ^{2w}
178b	swylc wæs þēaw hyra	C ^{2w}	599b	ac he lust wigeð	C ^{2w}
190b	ne mihte snotor hæleð	C ^{2w}	619b	sigerōf kyning	A2k
197a	on þām dæge	C ^{2w}	623b	bēaghroden cwēn	E
212a	on stefn stigon	C ^{2w}	629a	wælreow wiga	A2k
214a	on bearm nacan	C ^{2w}	643a	þrȳðword sprecen	A2k
215b	guman ūt scufon	D ²	671a	þā he him of dyde	C ^{2w}
223b	þā wæs sund liden	C ^{2w}	676b	ær he on bed stige	C ^{2w}
224b	þanon up hraðe	C ^{2w}	683b	ac wit on niht sculon	C ^{2w}
225b	on wang stigon	C ^{2w}	689b	ond hine ymb monig	C ^{2w}
252a	frumcyn witan	A2k	698b	þæt hīe fēond heora	C ^{2w}
252b	ær gē fyr heonan	C ^{2w}	740a	ac he gefeng hraðe	C ^{2w}
281b	bōt eft cuman	D ²	748b	he onfeng hraþe	C ^{2w}
284a	þrēanȳd þolað	A2k	763b	ond on weg þanon	C ^{2w}
284b	þenden þær wunað	C ^{2w}	776a	medubenc monig	A2k
288b	gescād witan	C ^{2w}	783b	Norðdenum stōd	E
290b	þæt þis is hold weorod	C ^{2w}	786a	gryrelēoð galan	A2k
291b	gewitaþ forð beran	C ^{2w}	790a	on þām dæge	C ^{2w}
296b	oþ ðæt eft byreð	C ^{2w}	798b	þā hīe gewin drugon	C ^{2w}
303b	eoforlic scionon	A2k	806a	on þām dæge	C ^{2w}
319a	wið wrāð werod	C ^{2w}	817a	syndolh sweotol	A2k
331b	þā ðær wlonc hæleð	C ^{2w}	831b	þe hīe ær drugon	C ^{2w}
372b	cnihtwesende	D ¹	835b	þær wæs eal geador	C ^{2w}
			838b	gūðrinc monig	A2k
			844b	on weg þanon	C ^{2w}
			854a	swylce geong manig	C ^{2w}

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863b	ac þæt wæs gōd cyning	C ^{2w}	1238b	swā hīe oft ær dydon	C ^{2w}
865a	on geflit faran	C ^{2w}	1246b	wæs þēaw hyra	C ^{2w}
873a	ond on spēd wrecan	C ^{2w}	1256a	wīdcūþ werum	A2k
908b	snotor ceorl monig	A2k	1278b	sunu dēoð wrecan	A2k
918b	ēode scealc monig	C ^{2w}	1287b	andweard scireð	A2k
920b	swylce self cyning	C ^{2w}	1288b	heardecg togen	A2k
939b	nū scealc hafað	C ^{2w}	1289b	sīdrand manig	A2k
944b	gyf heo gýt lyfað	C ^{2w}	1292b	wolde ūt þanon	C ^{2w}
947a	secg betesta	D ¹	1306b	þā wæs frōd cyning	C ^{2w}
948b	heald forð tela	C ^{2w}	1310b	Bēowulf fetod	A2k
953b	þū þē self hafast	C ^{2w}	1328b	swy(lc) scolde eorl wesan	C ^{2w}
954b	þæt þīn [dōm] lyfað	C ^{2w}	1331b	ic ne wāt hwæder	C ^{2w}
956b	swā he nū gýt dyde	C ^{2w}	1339b	wolde hyre mæg wrecan	C ^{2w}
966b	butan his lice swice	C ^{2w}	1340a	gē feor hafað	C ^{2w}
973a	fēasceaft guma	A2k	1343b	nū seo hand ligeð	C ^{2w}
974a	nō þý leng leofað	C ^{2w}	1361b	nis þæt feor heonon	C ^{2w}
975b	ac hyne sār hafað	C ^{2w}	1366b	nō þæs frōd leofað	C ^{2w}
979a	hū him scīr metod	C ^{2w}	1370b	ær he feorh seleð	C ^{2w}
994b	goldfæg scinon	A2k	1374b	þonne wind styrep	C ^{2w}
996b	þāra þe on swylc starað	C ^{2w}	1381b	swā ic ær dyde	C ^{2w}
1004b	sāwlberendra	D ¹	1382b	gyf þū on weg cymest	C ^{2w}
1009b	Healfdenes sunu	E	1385a	þæt he his frēond wrece	C ^{2w}
1010a	wolde self cyning	C ^{2w}	1392b	nō he on helm losaþ	C ^{2w}
1015a	medoful manig	A2k	1395b	geþyld hafa	C ^{2w}
1024a	beforan beorn beran	C ^{2w}	1430b	hīe on weg hruron	C ^{2w}
1034a	ongēan gramum	C ^{2w}	1432a	gūðhorn galan	A2k
1039b	hēahcyninges	D ¹	1439b	on on næs togen	C ^{2w}
1065b	gid oft wecen	D ²	1457b	Hrunting nama	A2k
1074b	hīe on gebyrd hruron	C ^{2w}	1458a	þæt wæs ān foran	C ^{2w}
1112b	æþeling manig	A2k	1481b	gif mec hild nime	C ^{2w}
1124b	wæs hira blæd scacen	C ^{2w}	1485b	þonne he on þæt sinc starað	C ^{2w}
1144b	on bearm dyde	C ^{2w}	1491b	oþðe mec dēað nimeð	C ^{2w}
1151b	ðā wæs heal roden	C ^{2w}	1495b	dā wæs hwīl dæges	C ^{2w}
1152b	swilce Fin slægen	C ^{2w}	1510b	sædēor monig	A2k
1153b	ond seo cwēn numen	C ^{2w}	1536b	nā ymb his lif cearað	C ^{2w}
1155b	eorðcyninges	D ¹	1541a	heo him eft hraþe	C ^{2w}
1174b	þū nū hafast	C ^{2w}	1546b	wolde hire bearn wrecan	C ^{2w}
1192a	him wæs ful boren	C ^{2w}	1575b	næs seo ecg fracod	C ^{2w}
1210b	feorh cyninges	D ¹	1592b	on holm wliton	C ^{2w}
1211b	ond se bēah somod	C ^{2w}	1600a	ðā cōm nōn dæges	C ^{2w}
1218b	ond geþēoh tela	C ^{2w}	1601b	gwāt him hām þonon	C ^{2w}
1225b	ic þē an tela	C ^{2w}	1610b	se gewæld hafað	C ^{2w}
1233a	druncon wīn weras	C ^{2w}	1611b	þæt is sōð metod	C ^{2w}

APPENDIX A. KALUZA'S LAW IN *BĒOWULF*

1614b	on þā hilt somod	C ^{2w}	2043b	him bið grim (se)fa	C ^{2w}
1647b	on flet boren	C ^{2w}	2058b	oð ðæt sæl cymeð	C ^{2w}
1668b	ic þæt hilt þanan	C ^{2w}	2060b	blōdfāg swefeð	A2k
1672a	sorhlēas swefan	A2k	2062b	con him land geare	C ^{2w}
1676b	swā þū ær dydest	C ^{2w}	2069b	ic sceal forð sprecan	C ^{2w}
1678b	on hand gyfen	C ^{2w}	2099b	ond he hēan þonan	C ^{2w}
1682a	gromheort guma	A2k	2110b	rūmheort cyning	A2k
1688b	on ðām wæs ōr writen	C ^{2w}	2117b	þā wæs eft hraðe	C ^{2w}
1731b	hlēoburh wera	A2k	2126b	ne on bēl hlanan	C ^{2w}
1735b	nō hine with dweleð	C ^{2w}	2152a	hēt ðā in beran	C ^{2w}
1738b	ac him eal worold	C ^{2w}	2158b	Hiorogār cyning	A2k
1741b	þonbe se weard swefeð	C ^{2w}	2174b	þrīo wicg somod	A2k
1745b	under helm drepen	C ^{2w}	2180b	næs him hrēoh sefa	C ^{2w}
1749b	nallas on gylp seleð	C ^{2w}	2191a	headorōf cyning	A2k
1759a	secg betesta	D ¹	2196b	him wæs (b)ām samod	C ^{2w}
1801a	oþ þæt hrefn blaca	C ^{2w}	2208b	he gehēold tela	C ^{2w}
1805b	wolde feor þanon	C ^{2w}	2209b	wæs ðā frōd cyning	C ^{2w}
1807b	Hrunting beran	A2k	2252b	nāh hwā sweord wege	C ^{2w}
1808b	heht his sweord niman	C ^{2w}	2256b	feormynd swefað	A2k
1814b	ēode weorð Denum	C ^{2w}	2263b	ne gōd hafoc	C ^{2w}
1820b	wæron hēr tela	C ^{2w}	2265b	bealocwealm hafað	A2k
1824b	ðonne ic gýt dyde	C ^{2w}	2306b	þā wæs dæg sceacen	C ^{2w}
1834b	gārholt bere	A2k	2314b	nō ðær āht cwices	C ^{2w}
1846b	þæt ðe gār nymeð	C ^{2w}	2334b	eorðweard ðone	A2k
1849b	ond þū þin feorh hafast	C ^{2w}	2343b	ond se wyrm somod	C ^{2w}
1858b	þe hīe ær drugon	C ^{2w}	2348b	for wiht dyde	C ^{2w}
1869b	snūde eft cuman	D ²	2382b	sācyninga	D ¹
1871b	ðegn betestan	D ¹	2390b	þæt wæs gōd cyning	C ^{2w}
1885b	þæt wæs ān cyning	C ^{2w}	2408b	sceolde hēan ðonon	C ^{2w}
1891b	swā he ær dyde	C ^{2w}	2417b	niðheard cyning	A2k
1896b	sāgēap naca	A2k	2446b	þonne he gyd wrece	C ^{2w}
1903b	gewāt him on naca	C ^{2w}	2453b	þonne se ān hafað	C ^{2w}
1920a	hēt þā ūp beran	C ^{2w}	2457b	riðend swefað	A2k
1921b	næs him feor þanon	C ^{2w}	2460b	sorhlēoð gæleð	A2k
1923b	þær æt hām wunað	C ^{2w}	2473a	ofer wīd wæter	C ^{2w}
1925b	bregorōf cyning	A2k	2499b	þenden þis sweord þolað	C ^{2w}
1930a	ne tō gnēað gifa	C ^{2w}	2503b	Frēscyninga	D ¹
1935a	þæt hire ān dāges	C ^{2w}	2506b	ne wæs ecg bona	C ^{2w}
1964b	sāwong tredan	A2k	2518b	nolde ic sweord beran	C ^{2w}
1966b	hī sið drugon	C ^{2w}	2536b	oððe gūð nimeð	C ^{2w}
1989b	ofer sealt wæter	C ^{2w}	2545b	strēam ūt þanon	A2k
2007b	ūhthlem þone	A2k	2551b	word ūt faran	D ²
2027b	ond þæt rād talað	C ^{2w}	2588a	grundwong þone	A2k

APPENDIX A. KALUZA'S LAW IN *BĒOWULF*

2598b	ac hȳ on holt bugon	C ^{2w}	3019b	elland tredan	A2k
2613b	Wēohstān bana	A2k	3021b	forðon sceall gār wesān	C ^{2w}
2646b	nū is se dæg cumen	C ^{2w}	3028a	swā se secg hwata	C ^{2w}
2656b	ic wāt geare	C ^{2w}	3070b	þā ðæt þær dydon	C ^{2w}
2663b	læst eall tela	A2k	3073b	se ðone wong strude	C ^{2w}
2694b	þēodcyniges	D ¹	3077a	oft sceal eorl monig	C ^{2w}
2702b	þā gēn sylf cyning	C ^{2w}	3081b	goldweard þone	A2k
2708b	swylc sceolde secg wesān	C ^{2w}	3106b	þonne wē ūt cymen	C ^{2w}
2727b	ðā wæs eall sceacen	C ^{2w}	3114b	nū sceal glēd fretan	C ^{2w}
2737b	hēold mīn tela	C ^{2w}	3126b	hwā þæt hord strude	C ^{2w}
2742b	þonne mīn sceaceð	C ^{2w}	3131b	dracan ēc scufun	D ²
2745b	nū se wyrm ligeð	C ^{2w}	3132b	lēton wēg niman	C ^{2w}
2754b	hringnet beran	A2k	3134b	on wæn hladen	C ^{2w}
2762b	þær wæs helm monig	C ^{2w}	3135b	æþeling boren	A2k
2775a	him on bearm hladon	C ^{2w}	3159b	on tȳn dagum	C ^{2w}
2779b	mundbora wæs	E	3163a	hī on beorg dydon	C ^{2w}
2795a	wuldorcyninge	D ¹	3167b	þær hit nū gēn lifað	C ^{2w}
2801b	ne mæg ic hēr leng wesān	C ^{2w}	3169a	þā ymbe hlāw riodan	C ^{2w}
2818b	ær he bæl cure	C ^{2w}	3172a	wordgyd wrecan	A2k
2858a	wolde dōm godes	C ^{2w}	3172b	ond ymb w[er] sprecan	C ^{2w}
2864b	se ðe wyle sōð specan	C ^{2w}			
2903a	him on efn ligeð	C ^{2w}	Violating		
2906b	Wiglāf siteð	A2k	1109b	wæs on bæl gearu	C ^{2w}
2912b	fyll cyniges	D ¹	1250b	wæs seo þēod tilu	C ^{2w}
2913b	wæs sio wrōht scepen	C ^{2w}	1914b	hȳðweard geara	A2k
2945b	on lāst faran	C ^{2w}	2150b	ic lȳt hafo	C ^{2w}
2947a	wælraes weora	A2k	2523b	forðon ic mē on hafu	C ^{2w}
2956b	bēah eft þonan	A2k	3000b	ðæs ðe ic [wēn] hafo	C ^{2w}
2957b	þā wæs æht boden	C ^{2w}	3105b	sīe sio bær gearo	C ^{2w}
2959a	freoðowong þone	A2k			
2962b	on bid wrecen	C ^{2w}	Possibly Conforming		
2968b	ac forgeald hraðe	C ^{2w}	463b	Sūðden(ig)a folc	E
2969b	wælhlem þone	A2k	1681a	wundorsmiþa geweorc	E
2972b	ondslyht giofan	A2k			
2976b	þēah ðe him wund hrine	C ^{2w}	Ambivalent		
2980b	ðā gebēah cyning	C ^{2w}	489b	ond onsæl meoto	C ^{2w}
2981b	wæs in feorh dropen	C ^{2w}	530a	hwæt þū worn fela	C ^{2w}
2982b	þe his mæg wriðon	C ^{2w}	589b	þēah þīn wit duge	C ^{2w}
2987b	ond his helm somod	C ^{2w}	680b	þēah ic eal mæge	C ^{2w}
3000a	wælnið wera	A2k	869a	se ðe eal fela	C ^{2w}
3007b	nū is ofost betost	C ^{2w}	883a	hæfdon eal fela	C ^{2w}
3014b	þā sceall brond fretan	C ^{2w}	1179b	þonne ðū forð scyle	C ^{2w}
3015b	nalles eorl wegan	C ^{2w}	1265b	þanon wōc fela	C ^{2w}

APPENDIX A. KALUZA'S LAW IN *BĒOWULF*

1367b	þæt þone grund wite	C ^{2w}	2530b	hwæðer sēl mæge	C ^{2w}
1525b	ðolode ær fela	A2k	2738b	ne mē swōr fela	C ^{2w}
1783b	unc sceal worn fela	C ^{2w}	2749b	þæt ic ðȳ sēft mæge	C ^{2w}
1837b	he mæg þær fela	C ^{2w}	3029b	he ne lēag fela	C ^{2w}
2031b	þēah seo brȳd dūge	C ^{2w}	3176b	þonne he forð scile	C ^{2w}
2349b	forðon hē ær fela	C ^{2w}			

Kaluza's Law Totals

ENVIRONMENT	CONF.	VIOL.	CONF?	AMB.	PERC. VIOL.
Resolution	100	3	20	4	2.9% (2.4-6.5)
Defooting	198	21	60	3	9.6% (7.4-10.8)
Suspension	318	7	2	19	2.2% (2-7.7)

Appendix B

Resolution in Fornyrðislag

This appendix presents data for the arguments concerning resolution in fornyrðislag given in chapter 3. The first portion gives a list of all A2k verses, with a note about the property of the second position that justifies suspension of resolution in the third position. Verses where a suspended sequence involves potential vowel contraction are marked with an asterisk.

This is followed by lists of all verses which end with S^w , S^ww , or S^ws , illustrating the possibility of resolution even in non-initial feet (§3.3.1.1). I first give those verses ending with S^w , namely Sw/S^w , $Sw.../S^w$, and $ww.../S^w$ verses. Since these verses have often been taken as suspended ($Sw\check{S}w$, $Sw...\check{S}w$, and $ww.../\check{S}w$), I accompany these verses with lists of verses showing the same patterns but where the final lift is a monosyllable (Sw/S , $Sw.../S$, and $ww.../S$): the existence of such non-resolved variants, in all cases more numerous, provides an important justification for seeing resolution in the verses with a light penultimate.

After these S^w -final verses, I give half-lines ending with S^ws or S^ww , distinguishing between types A and A3. I do not provide examples of plain A2b and A3 verses, since these types are widely recognized and well-known. As noted in §3.3.1.2, these verses mostly show bracketing mismatches, as is typical for resolved lifts in general, and end with $S^w.s$ sequences.

The final section presents the evidence for unconditioned suspension of *konungom*-type words, as discussed in §3.3.1.3. I separate out the complex evidence concerning the name *Sigurðr*, and refer again to §3.3.1.3 for a discussion of the problems surrounding this name. It is important to remember that the relatively small number of verses in this final section is supported by a great deal of negative evidence, with there being no clear evidence of *konungom*-type words ever having the scansion S^ww .

A2k Verses

Vsp 1.7	forn spiqll fira	Independent stressed word
Vsp 11.4	Alþjófr, Dvalinn	Deuterotheme of proper name
Vsp 12.2	Vindálfr, Þráinn	Deuterotheme of proper name
Vsp 13.7	Aurvangr, Iari	Deuterotheme of proper name
Vsp 15.4	Hlévangr, Glói	Deuterotheme of proper name
Vsp 15.6	Skáfiðr, Ái	Deuterotheme of proper name
Vsp 32.8	einnættir vega	Second element of compound
Vsp 37.7	biórsalr iqtuns	Second element of compound
Vsp 42.7	fagrrauðr hani	Second element of compound
Vsp 43.7	sótrauðr hani	Second element of compound
Vsp 45.6	hórdómr mikill	Second element of compound
Vsp 50.2	hefiz lind fyrir	Independent stressed word
Vsp 52.5	griótbiörg gnata	Second element of compound
Vsp 55.3	Víðarr, vega	Deuterotheme of proper name
Vsp 59.6	flýgr qrn yfir	Independent stressed word
Vsp 66.3	naðr fránn, neðan	Independent stressed word
Vsp 66.7	Níðhoggr, nái	Deuterotheme of proper name
Vsp H 11.6	Nípingr, Dáinn	Deuterotheme of proper name
Vsp H 30.2	vígbönd snúa	Second element of compound
Hym 2.3	miok glíkr megi	Independent stressed word
Hym 4.7	ástráð mikit	Second element of compound
Hym 5.3	hundvís Hymir	Second element of compound
Hym 5.6	móðugr, ketil	Long derivational syllable
Hym 8.4	hundroð nío	Long derivational syllable
Hym 8.7	brúnhvít, bera	Second element of compound
Hym 10.3	harðráðr Hymir	Second element of compound
Hym 15.8	øxn tvá Hymis	Independent stressed word
Hym 16.8	vér þrír lifa	Independent stressed word
Hym 19.3	hátún ofan	Second element of compound
Hym 20.3	áttrunn apa	Second element of compound
Hym 21.2	móðugr, hvali	Long derivational syllable
Hym 22.7	umgiqrð, neðan	Second element of compound
Hym 23.7	ofliótt, ofan	Second element of compound
Hym 24.4	fold ql saman	Independent stressed word
Hym 25.1	óteitr iqtunn	Second element of compound
Hym 30.3	ástráð mikit	Second element of compound
Hym 30.7	kostmóðs iqtuns	Second element of compound
Hym 33.8	hverr kyrr fyrir	Independent stressed word
Hym 34.2	fekk á fremi	Independent word of uncertain stress
Hym 35.7	fólkdrott fara	Second element of compound
Hym 38.8	börn sín fyrir	Independent word of uncertain stress

Þrk 3.6	fiaðrhams léa*	Second element of compound
Þrk 6.4	gullbǫnd snøri	Second element of compound
Þrk 18.6	ásgarð búa	Second element of compound
Þrk 20.4	ambótt vera	Second element of compound
Þrk 21.6	brann iqrð loga	Independent stressed word
Þrk 24.10	sáld þríú miaðar	Independent stressed word
Þrk 26.2	ambótt fyrir	Second element of compound
Þrk 28.2	ambótt fyrir	Second element of compound
Þrk 30.3	berið inn hamar	Independent word of uncertain stress
Vkv 2.3	fǫgr mæf fira	Independent stressed word
Vkv 4.2	veðeygr skyti	Second element of compound
Vkv 8.6	veðreygr skyti	Second element of compound
HH 1.7	Borghildr borit	Deuterotheme of proper name
HH 6.3	dógrs eins gamall	Independent stressed word
HH 7.2	dǫglingr vera	Long derivational syllable
HH 7.4	góð ár komin	Independent stressed word
HH 7.8	ítrlauk grami	Second element of compound
HH 8.7	blóðorm búinn	Second element of compound
HH 10.6	Hunding veginn	Long derivational syllable
HH 11.4	Hundings synir	Long derivational syllable
HH 11.7	fiárnám mikit	Second element of compound
HH 12.4	nefgiǫld fáa*	Second element of compound
HH 14.6	Hundings sono	Long derivational syllable
HH 16.7	þá nótt fara	Independent stressed word
HH 18.4	Granmars syni	Deuterotheme of proper name
HH 18.6	Hǫðbrodd kveðinn	Deuterotheme of proper name
HH 20.2	Ísungs bana	Long derivational syllable
HH 21.2	allvaldr þaðan	Second element of compound
HH 25.5	víglið konungs	Second element of compound
HH 26.6	dagsbrún séa*	Second element of compound
HH 27.7	lofðungs floti	Long derivational syllable
HH 29.2	há segl ofar	Independent stressed word
HH 30.2	Sigrún ofan	Deuterotheme of proper name
HH 30.7	giálfrdýr konungs	Second element of compound
HH 36.12	hvarleiðr skriðit	Second element of compound
HH 37.3	skollvís kona	Second element of compound
HH 38.7	svévís kona	Second element of compound
HH 42.6	mart skeið riðit	Independent stressed word
HH 43.2	siðlauss vera	Second element of compound
HH 46.2	Granmars syni	Deuterotheme of proper name
HH 50.12	hiqrþing dvala	Second element of compound
HH 52.8	viðrnám fáa*	Second element of compound
HH 53.6	Hundings bana	Long derivational syllable

APPENDIX B. RESOLUTION IN FORNYRÐISLAG

HH 53.10	alltrauðr flugar	Second element of compound
HH 54.2	hiálmvitr ofan	Second element of compound
HH 54.6	sárvitr flugo	Second element of compound
HHv 1.6	Hiqrvarz konor	Deuterotheme of proper name
HHv 5.6	Sæmorn vaða	Deuterotheme of proper name
HHv 9.8	verpr naðr hala	Independent stressed word
HHv 10.2	heilráðr, konungr	Second element of compound
HHv 33.3	qlmál, Heðinn	Second element of compound
HHv 38.2	Hiqrvarz syni	Deuterotheme of proper name
HHv 40.4	hinztr fundr vera	Independent stressed word
HHv 43.6	Hiqrvarz sonar	Deuterotheme of proper name
HH II 1.8	Hundingr konungr	Long derivational syllable
HH II 2.6	stökkur lúðr fyrir	Independent stressed word
HH II 3.2	hildingr þegit	Long derivational syllable
HH II 7.8	hrátt kiqt eta	Independent stressed word
HH II 9.4	lítt steikt etit	Independent stressed word
HH II 10.3	Hundingr konungr	Long derivational syllable
HH II 11.6	hildings synir	Long derivational syllable
HH II 12.8	vígspíql segir	Second element of compound
HH II 14.2	sikling glaðan	Long derivational syllable
HH II 16.8	munráð brotit	Second element of compound
HH II 24.2	Granmars synir	Deuterotheme of proper name
HH II 25.3	Hqðbroddr konungr	Deuterotheme of proper name
HH II 25.8	Granmars sona	Deuterotheme of proper name
HH II 26.2	alvitr, gefit	Second element of compound
HH II 27.2	Starkaðr konungr	Deuterotheme of proper name
HH II 27.4	Hrollaugs synir	Deuterotheme of proper name
HH II 36.8	vígblær þinig	Deuterotheme of proper name
HH II 39.3	fótlaug geta	Second element of compound
HH II 40.8	heimfqr gefin	Second element of compound
HH II 41.8	heimfqr gefin	Second element of compound
HH II 43.8	dagsbrún séa*	Second element of compound
HH II 44.8	valdogg sleginn	Second element of compound
HH II 45.4	harmdogg sleginn	Second element of compound
HH II 46.6	angrlióð kveða	Second element of compound
HH II 48.2	ørvænt vera	Second element of compound
HH II 49.4	flugstig troða	Second element of compound
HH II 49.6	vindhíalms brúar	Second element of compound
HH II 49.8	sigrþíóð veki	Second element of compound
Grp 4.4	ókuðr, kominn	Second element of compound
Grp 4.8	fund þinn hafa	Independent word of uncertain stress
Grp 9.4	allz harms reka	Independent stressed word
Grp 9.6	Hundings sono	Long derivational syllable

Grp 10.6	snqr brögð fyrir	Independent stressed word
Grp 14.3	framlyndr iðfurr	Second element of compound
Grp 21.3	liósast fyrir	Long derivational syllable
Grp 21.6	ráðspakr taliðr	Second element of compound
Grp 23.4	qðlingr! nemaz!	Long derivational syllable
Grp 23.7	naddéls boði	Second element of compound
Grp 23.8	nafn þitt vera	Independent word of uncertain stress
Grp 28.8	ørlog fyrir	Second element of compound
Grp 41.8	þitt nafn vera	Independent stressed word
Grp 42.7	snarlynd, sofit	Second element of compound
Grp 46.2	brúðr sú taka	Independent word of uncertain stress
Grp 48.6	lofsæl kona	Second element of compound
Grp 49.4	allvel skipa	Second element of compound
Rm 11.8	þíns harms reka	Independent stressed word
Rm 15.2	Hundings synir	Long derivational syllable
Rm 16.5	seglvigg ero	Second element of compound
Rm 17.7	hlunnvigg hrapa	Second element of compound
Fm 33.6	röng orð saman	Independent stressed word
Fm 35.3	ástráð mikit	Second element of compound
Fm 43.2	fólkvitr sofa	Second element of compound
Fm 43.7	hørgefn, hali	Second element of compound
Sd 5.2	brynþings apaldr	Second element of compound
Br 11.7	Heiptgiarns hugar	Second element of compound
Br 12.4	vilmál talit	Second element of compound
Br 19.3	margdýrr konungr	Second element of compound
Gðr I 4.6	forspell beðit	Second element of compound
Gðr I 12.6	annspiql bera	Second element of compound
Gðr I 14.7	hugborg iðfurs	Second element of compound
Gðr I 26.4	ormbeðs litom	Second element of compound
Sg 2.6	dógr mart saman	Independent stressed word
Sg 13.14	søknuð mikinn	Long derivational syllable
Sg 18.6	herbaldr lifir	Second element of compound
Sg 22.7	kynbirt éarn*	Second element of compound
Sg 31.4	heiptgiørn kona	Second element of compound
Sg 34.7	fullgódd féi*	Second element of compound
Sg 37.8	þióðkunt vera	Second element of compound
Sg 41.2	þunngæð kona	Second element of compound
Sg 44.8	morðfqr kono	Second element of compound
Sg 51.2	hørskrýdd kona	Second element of compound
Sg 55.5	Svanhildr, vera	Deuterotheme of proper name
Sg 56.6	versæl, gefin	Second element of compound
Sg 59.4	ormgarð lagiðr	Second element of compound
Sg 63.2	Iónakrs sonom	Deuterotheme of proper name

APPENDIX B. RESOLUTION IN FORNYRÐISLAG

Sg 64.4	óþarft lifir	Second element of compound
Sg 65.4	hinzt bôn vera	Independent stressed word
Sg 65.8	iafnrúmt síc*	Second element of compound
Sg 68.3	egghvast éarn*	Second element of compound
Sg 69.6	ferð mín heðan	Independent word of uncertain stress
Hlr 2.3	hvarfúst hqfuð	Second element of compound
Hlr 2.8	mannz blóð þvegir	Independent stressed word
Hlr 6.2	hugfullr konungr	Second element of compound
Hlr 11.7	víkingr Dana	Long derivational syllable
Gðr II 7.7	Gothorms bani	Deuterotheme of proper name
Gðr III 8.6	slíks harms reka	Independent stressed word
Gðr II 9.7	víð lönð yfir	Independent stressed word
Gðr II 12.2	niðmyrkr vera	Second element of compound
Gðr II 13.2	fimm dógr talið	Independent stressed word
Gðr II 17.2	gotnesk kona	Long derivational syllable
Gðr II 19.1	Valdarr Dqnom	Deuterotheme of proper name
Gðr II 19.3	Eymóðr þriði	Deuterotheme of proper name
Gðr II 19.7	Langbarz liðar	Deuterotheme of proper name
Gðr II 22.2	hvers kyns stafir	Independent stressed word
Gðr II 23.2	bql mrg saman	Independent stressed word
Gðr II 23.5	umdogg arins	Second element of compound
Gðr II 23.7	svíns lifr soðin	Independent stressed word
Gðr II 25.3	fiqlð allaz féar*	Independent stressed word
Gðr II 25.6	Hlqðvés sali	Deuterotheme of proper name
Gðr II 29.7	hrægiðr, Huginn	Second element of compound
Gðr II 29.8	hiartblóð saman	Second element of compound
Gðr II 30.7	verlaus vera	Second element of compound
Gðr II 31.11	eggleiks hvqtuð	Second element of compound
Gðr II 34.4	nauðig hafa	Long derivational syllable
Gðr II 35.2	hverr drengr litinn	Independent stressed word
Gðr II 35.6	svalt land riðom	Independent stressed word
Gðr II 35.10	þurt land stigom	Independent stressed word
Gðr II 41.7	sorgmóðs sefa	Second element of compound
Gðr II 42.7	nauðigr nái	Long derivational syllable
Od 13.2	sorgmóð kona	Second element of compound
Od 19.6	hvert land fara	Independent stressed word
Od 21.7	hliðarm Grana	Second element of compound
Od 29.9	kynríkr konungr	Second element of compound
Ghv 1.3	trauð mál, talið	Independent stressed word
Ghv 1.8	Guðrún, sono	Deuterotheme of proper name
Ghv 8.5	Geir-Niqrðr, hniginn	Second element of compound
Bdr 4.6	valgaldr kveða	Second element of compound
Bdr 9.2	hróðrbarm þinig	Second element of compound

Bdr 11.4	einnættir vega	Second element of compound
Bdr 14.8	riúfendr koma	Long derivational syllable
Rþ 6.2	þriár nætr saman	Independent stressed word
Rþ 6.6	mánoðr nío	Long derivational syllable
Rþ 20.2	þriár nætr saman	Independent stressed word
Rþ 20.6	mánoðr nío	Long derivational syllable
Rþ 33.6	þriár nættir saman	Independent stressed word
Rþ 33.10	mánoðr nío	Long derivational syllable
Rþ 38.2	átían búom*	Second element of compound
Hdl 5.6	goðveg troða	Second element of compound
Hdl 9.7	fǫðurleifð hafi	Second element of compound
Hdl 15.8	átían sono	Second element of compound
Hdl 20.4	mágr þíns fǫður	Independent word of uncertain stress
Hdl 21.2	Qlmóðs synir	Deuterotheme of proper name
Hdl 24.3	Arngríms synir	Deuterotheme of proper name
Hdl 28.8	Randvés faðir	Deuterotheme of proper name
Hdl 30.9	skautgiarn iǫtunn	Second element of compound
Hdl 32.4	Hiqrvarðr faðir	Deuterotheme of proper name
Hdl 40.8	Býleists komit	Deuterotheme of proper name
Hdl 41.4	hugstein kono	Second element of compound
Hdl 46.8	Heiðrún fari	Deuterotheme of proper name
Hdl 47.8	Heiðrún fari	Deuterotheme of proper name
Hdl 48.4	ábraut heðan	Independent stressed word
Hdl 49.4	fiqrlausn þola	Second element of compound
Hdl 50.8	qll goð duga	Independent stressed word
Grt 1.6	Friðleifs sonar	Deuterotheme of proper name
Grt 7.6	lióð eitt kveðak	Independent stressed word
Grt 19.3	vígspiqll vaka	Second element of compound
Grt 21.1	mól míns fǫður	Independent word of uncertain stress
Grt 23.6	skauts lúðr ofan	Independent stressed word
Her 3.8	ámátt firom	Second element of compound
Her 9.2	Arngríms synir	Deuterotheme of proper name
Her 15.6	muntún hugar	Second element of compound
Her 17.3	Tyrfinq bera	Deuterotheme of proper name
Her 20.8	Hiálmars bana	Deuterotheme of proper name
Her 21.2	Hiálmars bani	Deuterotheme of proper name
Her 24.6	buðlungr, hafa	Long derivational syllable
Her 27.4	Hiálmars bana	Deuterotheme of proper name
HerPr 2.4	faðir þinn taliðr	Independent word of uncertain stress

Final -S^w**Sw/S^w**

Vsp 11.1	Nýi ok Niði
Vsp 12.3	Þekkr ok Þorinn
Vsp H 11.5	Nár ok Náinn
Vsp H 12.5	Þrár ok Þráinn
Hym 28.7	kröpturligan
Þrk 5.1	fló þá Loki
Þrk 9.1	fló þá Loki
Grp 12.5	leið at huga
Grp 18.5	leið at huga
Rþ 8.5	kropnir knúar
Rþ 16.1	sat þar kona
Rþ 41.3	Ióð ok Aðal
Hdl 19.8	Álfr um getinn

Sw/S

Vsp 31.8	mistilteinn
Hym 7.2	dag þann fram
Þrk 17.2	þrúðugr áss
Vkv 5.7	svá beið hann
Vkv 11.4	vilia lauss
Vkv 31.2	vilia lauss
Rm 5.3	bróðrum tveim
Fm 36.2	hildimeißr
Gðr I 6.6	sunnan lands
Gðr I 7.2	fiórir bróðr
Gðr I 9.7	hersis kván
Gðr I 17.4	vindr of lék
Gðr I 17.9	systir mín
Gðr I 18.7	iarknasteinn
Gðr I 24.12	vífa mest
Gðr I 25.6	bróðir minn
Sg 5.4	ekki grand
Sg 6.2	aptan dags
Sg 8.2	illz um fyld
Sg 8.4	aptan hvern
Sg 13.1	vinna bezt
Sg 13.8	vinna sómst
Sg 14.4	árar títt
Sg 23.6	apt í stað
Sg 24.3	sorga laus

Sg 24.6	vilia firð
Sg 25.2	sínar hendr
Sg 26.6	svart ok dátt
Sg 26.8	nýlig ráð
Sg 27.3	systir sonr
Sg 30.7	giallan grát
Sg 32.6	blóðukt sár
Sg 39.6	yðr um líkr
Sg 43.2	heim þar sér
Sg 56.1	bróðir minn
Sg 61.6	góðra ráð
Sg 63.5	sína mey
Sg 64.2	Bikka ráð
Sg 71.5	ómon þverr
Gðr II 3.2	mínir bróðr
Gðr III 8.4	svása bróðr
Od 4.4	Húnalanz
Ghv 4.6	svefni ór
Ghv 9.7	móðug spíql
Bdr 2.2	alda gautr
Bdr 12.8	ollom lengr
Bdr 13.4	aldinn gautr
Rþ 4.2	økkvinn hleif
Rþ 4.8	krása beztr
Rþ 7.4	héto þræll
Rþ 8.4	hrokkit skinn
Rþ 10.6	nefndisk Þír
Rþ 11.7	Þræll ok Þír
Rþ 11.8	þrungin dógr
Rþ 12.14	grófo torf
Rþ 16.1	átto hús
Rþ 16.2	sveigði rokk
Rþ 16.3	breiddi faðm
Rþ 23.7	biuggo hión
Rþ 27.2	gólf var strát
Rþ 27.3	sáto hión
Rþ 29.1	keisti fald
Rþ 31.2	merktan dúk
Rþ 31.4	hulði bióð
Rþ 34.5	bleikt var hár
Rþ 37.2	myrkan við
Rþ 37.3	hélug fiql
Rþ 37.6	skelfði lind

Rþ 39.5	motti hann	Sg 31.3	hlæraðu af því
Rþ 41.4	Arfi, Mqgr	Sg 60.8	grýmir á beð
Rþ 41.7	Sonr ok Sveinn	Sg 65.1	biðia mun ek þik
Rþ 41.8	sund ok tafl	Sg 66.1	tialdi þar um þá borg
Rþ 41.9	Kundr hét einn	Gðr III 9.1	brá hon til bots
Hdl 7.9	dvergar tveir	Od 10.1	hnékat ek af því
Hdl 17.3	svávo barn	Ghv 14.5	ól ek mér ióð
Hdl 25.9	fólkcom grimmis	Rþ 6.1	þar var hann at þat
Hdl 29.3	Baldr er hné	Rþ 20.1	þar var hann at þat
Hdl 44.5	fár siá nú	Rþ 21.3	kolloðo Karl
Bdr 11.5	hond um þvær[a?]	Rþ 33.5	þar var hann at þat
Þrk 5.1	fló þá Liki	Hdl 14.1	Áli var áðr
Þrk 9.1	fló þá Liki	Hdl 20.5	fyrnd er sú mægð
Grp 12.5	leið at huga		
Grp 18.5	leið at huga	ww/S^w	
Rþ 16.1	sat þar kona	Þrk 18.1	þá kvað þat Loki
Rþ 41.3	Ióð ok Aðal	Þrk 20.1	þá kvað þat Loki
Hdl 19.8	Álfr um getinn	HH II 43.1	nú em ek svá fegin
		Fm 33.1	þar liggr Reginn
Sw.../S^w		Sg 4.5	né hann kono
Þrk 30.7	vígið okkr saman	Sg 37.3	hvárt ek skylda vega
Grp 18.1	nú er því lokit	Gðr III 11.2	hverr er þat saát
Gðr I 22.4	söðlaði Grana		
Hdl 1.6	ríða vit skolom	ww/S	
Hdl 8.2	sitia vit skolom	Vsp 33.1	þó hann æva hendr
		Þrk 18.3	Þegi þú, Þórr
Sw.../S		Vkv 7.5	sá þeir á bast
Vsp 29.2	hringa ok men	Vkv 16.7	era sá nú hýrr
Þrk 8.8	Freyio at kvæn	Vkv 20.3	vél görði hann heldr
Þrk 9.7	mótti hann Þór	Vkv 22.3	ykkir læt ek þat gull
Þrk 11.8	Freyio at kván	Vkv 37.5	erat svá maðr hár
Þrk 22.6	Freyio at kván	HH 16.5	ef þær vildi heim
Vkv 19.3	bíðka ek þess bót	HH II 11.1	hvat vissir þú
Vkv 31.3	sofna ek minnzt	HH II 19.5	þykkia mér friðr
Vkv 31.7	vilnomk ek þess nú	HH II 33.5	þá væri þér hefnt
Vkv 33.1	eiða skaltu mér áðr	HH II 48.9	ok ertu kvik
Vkv 37.1	mæltira þú þat mál	Rm 5.1	þat skal gull
HH II 32.1	skríðiat þat skip	Rm 11.3	ef þú getrat son
HH II 32.5	rennia sá marr	Fm 36.1	erat svá horskr
HH II 33.1	bítia þér þat sverð	Gðr I 26.5	þess hefi ek gangs
Sg 7.2	iðromk eptir þess	Sg 34.5	varðkat ek til ung
Sg 8.6	ganga á beð	Gðr II 17.9	hverr vildi son
Sg 29.6	kálkar í vá	Gðr III 11.5	leiddo þá mey

Od 4.1	hvat er frægst	Rþ 26.3	kom hann at sal
Ghv 14.1	gekk ek á beð	Hdl 25.3	vóro þeir í hirð
Ghv 19.3	þá er vit á beð	Grt 15.1	fram heldom því

Final ...S^ws and ...S^ww

Type A

Vsp 26.7	mál ǫll meginlig
Hym 34.5	hóf sér hǫfuð upp
Vkv 41.5	eina ǫgurstund
Br 14.5	hvetið mik eða letið mik
Hdl 13.1	móður átti faðir þinn
Hdl 17.7	varðar, at viti svá
Hdl 18.7	Ámr ok lǫsurmarr
Hdl 18.9	varðar, at viti svá
Hdl 31.3	vǫromz, at viti svá
Hdl 34.3	vǫromz, at viti svá
Hdl 36.3	vǫromz, at viti svá
Hdl 39.3	vǫromz, at viti svá

Type A3

Vsp 6.1	þá gengo regin ǫll
Vsp 9.1	þá gengo regin ǫll
Vsp 23.1	þá gengo regin ǫll
Vsp 23.7	eða skyldo goðin ǫll
Vsp 25.1	þá gengo regin ǫll
Vsp 48.3	gnýr allr iǫtunheimr
Þrk 12.7	vit skolom aka tvau
Þrk 20.5	vit skolom aka tvau
HH II 9.3	því var á legi mér
Fm 40.3	era konunglikt
Sg 14.5	at frá konungdóm
Gðr II 4.5	ǫll váro sǫðuldýr
Gðr II 5.5	hnipnaði Grani þá
Her 12.1	grófat mik faðir niðr

Uncertain

Od 12.5	slíks dǫmi kvaðattu
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Suspension of Ššw Words

w/Ššw Verses

Vkv 3.5	en inn níunda
Gðr I 20.2	ok í sæingo
Sg 16.5	ok unandi
Sg 24.2	í sæingo
Sg 54.4	við konungi
Gðr II 4.8	<i>und</i> vegondom
Gðr II 34.2	af konungom

Ambiguous

Þrk 10.1	hefir þú ørindi
Þrk 11.2	ok ørindi
Vkv 9.6	fyr Vqlundi
HHv 5.2	ok ekki ørindi
Sg 70.6	ok faðerni

Gðr I 27.8	á Sigurði
Gðr I 7.3	frá Sigurðar
Gðr II 11.10	um Sigurði
Gðr II 12.4	yfir Sigurði
Od 19.8	at Sigurði

Ambiguous

Grp 6.7	hvé mun Sigurði
Grp 10.5	sér þú Sigurðar
Grp 25.1	nú skal Sigurði
Br 11.6	gøtvað Sigurðar

Resolved forms

Grp 16.6	við Sigurð mæla
Ghv 4.5	þá er Sigurð vøkþo

With Heavy Initial Syllable

The Name *Sigurðr*

With Light Initial Syllable

Suspended obliques

Gðr I 1.4	yfir Sigurði
Gðr I 13.2	af Sigurði
Gðr I 17.10	nema hía Sigurði
Gðr I 21.9	er þú Sigurði

Type C

Sg 24.4	hía Sigurði
Sg 63.6	ok Sigurðar
Sg 65.10	með Sigurði
Hlr 13.3	at ek Sigurði

Type A

Vkv 23.1	Sigurðr Grana
Sg 2.7	Sigurðr ungi
Hlr 14.7	Sigurðr saman

Appendix C

Lióðaháttir Full-verses

This appendix is intended to provide a systematic presentation of the corpus of lióðaháttir full-verses according to the principles argued for in chapter 4. In the first portion, I give the verses by type. The initial division is into verses with the shorter (or lighter) foot first, and those with the longer (or heavier) foot first. The few problematic verses that do not fit into these categories are given at the end.

Within the SHORT-LONG verses, the order of categories is by the initial foot (in order of increasing weight, ww, S, Sw), and then by the second foot (the two most frequent endings, Sws and Ssw, are given first, followed by the two remaining long endings Ssww and Sww). Verses with the Ss ending, which is heavy but not long, are given as a group at the end of this category. Verses which appear to have a ‘B2’ pattern, but which may be reducible to type B1, are given separately immediately after normal B1 (cf. §4.2.2.2).

The LONG-SHORT verses are arranged along similar lines. The initial feet are in the order: Sws, Ssw, Ssww, Ssws, Sww, Ss. The final foot is always S^w (or Šw). In general, I do not separate out verses with extrametrical syllables, except to list Sws/Šw and Sws/(w)S^w verses separately, since the presence or absence of an extra unstressed syllable is relevant for the resolution of the final foot.

I have arranged the OTHER/PROBLEMATIC verses into five categories: those violating Bugge’s rule; those with an overheavy foot of the shape Swws, SswS, or Ssšw; those with two long feet; those with two short feet; and those showing single alliteration.

In all categories, verses with alliteration on a stressed element other than the head of a foot – including verses with triple alliteration – are marked with an asterisk. Where possible, I also give each category a Sievers label (along with a basic foot structure notation). Some of these are adapted slightly from Sievers’

own uses: Da*-long and E-long resemble Da* and E, but with a Ssww foot instead of Ssw; Eb refers to Sws/Šw verses, and Eb* to the same type with an extrametrical syllable before the second foot (Sws/(w)S^w); Af indicates that the first foot is Ssws, resembling a type A verse; and A- covers SwwS verses, which have the appearance of a type A verse missing the final dip (this, along with B2 and B3, are given in scare quotes to emphasize how unlike A and B1 these (w)Sww/S verses are).

The second part of this appendix is a CATALOGUE of full-verses, giving the corpus arranged line by line (following the standard order of the poems). This is meant as an aid to anyone who would like to know how I have scanned a specific verse. The text of each line is followed by an indicator of which category in the first section it falls under. This is usually the Sieversian label, as described in the previous paragraph, but when no such label seemed close enough to adopt or adapt I just give the foot structure notation, or an indication of a problematic feature. For a few verses, I indicate that I scan them as an on- or off-verse rather than a full-verse, as discussed in chapter 4.

Full-verse Types

Short-Long

ww/Sws (Type B)

Hav 1.4	um skygnaz skyli	Hav 69.6	sumar af verkom vel
Hav 2.3	hvar skal sitia síá	Hav 70.6	en úti var dauðr fyr durom
Hav 2.6	síns um freista frama	Hav 72.3	ept genginn guma
Hav 5.3	dælt er heima hvat	Hav 72.6	nema reisi niðr at nið
Hav 5.6	ok með snotrom sitr	Hav 75.6	skylit þann vitka vár
Hav 6.6	sialdan verðr víti vðrom	Hav 76.3	deyr siálfr it sama
Hav 10.6	slíkt er válaðs vera	Hav 76.6	hveim er sér góðan getr
Hav 14.3	at ins fróða Fialars	Hav 77.3	deyr siálfr it sama
Hav 16.6	þótt hánom geirar gefi	Hav 78.3	nú bera þeir vánar vðl
Hav 18.3	ok hefir fiqlð um farit	Hav 78.6	hann er valtastr vina
Hav 22.6	at hann era vamma vanr	Hav 79.6	fram gengr hann driúgt í dul
Hav 23.6	allt er vil, sem var	Hav 88.3	né til snemma syni
Hav 24.6	ef hann með snotrom sitr	Hav 91.6	þat tælir horska hugi
Hav 26.6	ef hans freista firar	Hav 92.6	sá fær, er fríar
Hav 28.6	því er gengr um guma	Hav 94.6	sá inn mátki munr
Hav 29.6	opt sér ógott um gelr	Hav 95.3	einn er hann sér um sefa
Hav 30.3	þótt til kynnis komi	Hav 97.6	nema við þat lík at lifa
Hav 32.3	en at virði vrekaz	Hav 98.3	ef þú vilt þér mæla man
Hav 32.6	órir gestr við gest	Hav 102.6	teygða ek á flærðir flið
Hav 33.3	nema til kynnis komi	Hav 102.9	ok hafða ek þess vetki vífs
Hav 34.3	þótt á brauto búí	Hav 105.6	síns ins heila hugar
Hav 39.3	at ei væri þiggia þegit	Hav 105.7	síns ins svára sefa
Hav 40.6	mart gengr verr, en varir	Hav 110.3	hvat skal hans tryggðom trúa
Hav 41.3	þat er á siálfom sýnst	Hav 111.11	heyrða ek segia svá
Hav 41.6	ef þat bíðr at verða vel	Hav 111.6	hlýdda ek á manna mál
Hav 48.6	sýtir æ glöggr við giðfom	Hav 113.7	svá at hon lyki þik liðom
Hav 50.3	hlýrat henni þqrkr né barr	Hav 116.7	fástu at virði vel
Hav 50.6	hvat skal hann lengi lifa	Hav 118.6	ok þeygi um sanna sök
Hav 52.3	opt kaupir sér í lítlo lof	Hav 125.7	opt inn betri bilar
Hav 57.6	en til dólscr af dul	Hav 125.8	þá er inn verri vegr
Hav 61.3	þótt hann sét væddr til vel	Hav 127.7	ok gefat þínom fiándom frið
Hav 63.3	sá er vill heitinn horskr	Hav 128.7	en lát þér at góðo getit
Hav 64.3	í hófi hafa	Hav 129.9	siðr þik um heilli halir
Hav 65.6	opt hann giðld um getr	Hav 130.1	leiðiz manngi gott, ef getr
Hav 66.3	en til sið í suma	Hav 133.3	hvers þeir ro kyns, er koma
Hav 66.6	sialdan hittir leiðr í líð	Hav 138.9	hvers hann af rútom renn
Hav 68.3	ok sólar sýn	Hav 142.3	miðk stóra stafi
Hav 68.6	án við lqst at lifa	Hav 142.4	miðk stinna stafi
		Hav 145.3	ey sér til gildis giðf
		Hav 146.3	ok mannskis mqrgr
		Hav 147.3	þeir er vilia lækna lifa
		Hav 148.6	bítat þeim vápn né velir
		Hav 149.6	sprettr mér af fótom fiqturr

APPENDIX C. LIÓÐAHÁTTTR FULL-VERSES

Hav 149.7	en af hǫndom hapt	Grm 4.6	unz um riúfaz regin
Hav 152.6	þann kann ek galdr at gala	Grm 13.3	kveða valda véom
Hav 153.6	þat má ek bóta brátt	Grm 14.6	en hálfan Óðinn á
Hav 156.8	koma þeir heilir hvaðan	Grm 20.6	þó síámk meirr um Muninn
Hav 163.6	þat fylgir lióða lokom	Grm 22.6	hvé hon er í lás um lokin
Hav 163.9	eða min systir sé	Grm 25.3	ok bítr af Læraðs limom
Vm 2.3	í gǫrðom goða	Grm 26.3	ok bítr af Læraðs limom
Vm 3.3	fiqlð ek reynda regin	Grm 28.12	en falla til heliar heðan
Vm 4.3	heill þú á sinnom sér	Grm 30.6	þeim ríða æsir íóm
Vm 6.3	á þik síálfan síá	Grm 31.6	þriðio mennzkir menn
Vm 7.3	verpomk orði á	Grm 38.6	ef hann fellr í frá
Vm 9.3	farðu í sess í sal	Grm 39.3	til varna-viðar
Vm 11.3	þíns um freista frama	Grm 40.3	en ór sveita sær
Vm 12.6	ey lýsir mǫn af mari	Grm 40.6	en ór hausi himinn
Vm 13.3	þíns um freista frama	Grm 42.3	hverr er tekr fyrstr á funa
Vm 14.6	þaðan kǫmr dǫgg um dala	Grm 48.7	síz ek með fólkom fórr
Vm 15.3	þíns um freista frama	Grm 50.3	ok dulða ek þann inn aldna iǫtun
Vm 16.6	verðrat íss á á	Grm 52.3	of þik véla vinir
Vm 17.3	þíns um freista frama	Grm 52.6	allan í dreyra drifinn
Vm 19.3	ok mælomk í sessi saman	Grm 53.3	þitt veit ek líf um liðit
Vm 21.3	en ór beinom biǫrg	Grm 54.3	hétomk þundr fyr þat
Vm 21.6	en ór sveita siór	Skm 1.3	okkarn mála mǫg
Vm 22.6	eða sól it sama	Skm 3.3	ok ek vilia vita
Vm 24.6	eða nótt með niðom	Skm 4.6	ok þeygi at mínom munom
Vm 32.6	er hann hafðit gýgiar gaman	Skm 5.3	at þú mér, seggr, ne segir
Vm 35.6	var á lúðr um lagiðr	Skm 6.6	allt lopt ok lǫgr
Vm 38.8	ok varðat hann ásom alinn	Skm 8.6	við iǫtna ætt
Vm 39.6	heim með vísom vǫnom	Skm 9.6	ef sá er horskr, er hefir
Vm 43.3	ek kann segia satt	Skm 11.6	fyr greyiom Gymis
Vm 44.3	fiqlð ek reynda regin	Skm 13.3	hveim er fúss er fara
Vm 45.6	þaðan af aldir alaz	Skm 13.6	ok allt líf um lagit
Vm 46.3	fiqlð ek reynda regin	Skm 14.6	skiálfa garðar Gymis
Vm 46.6	þá er þessa hefir Fenrir farit	Skm 16.3	ok drekka inn mæra miǫð
Vm 47.3	áðr hana Fenrir fari	Skm 16.6	minn bróðurbani
Vm 48.3	fiqlð ek reynda regin	Skm 17.3	né víssa vana
Vm 49.6	þó þær með iǫtnom alaz	Skm 18.3	né víssa vana
Vm 50.3	fiqlð ek reynda regin	Skm 20.3	at mannzkis munom
Vm 52.3	fiqlð ek reynda regin	Skm 23.3	er ek hefi í hendi hér
Vm 52.6	þá er riúfaz regin	Skm 24.3	at mannzkis munom
Vm 53.3	þess mun Víðarr vrekka	Skm 25.3	er ek hefi í hendi hér
Vm 54.3	fiqlð ek reynda regin	Skm 29.3	vaxi þér tár með trega
Vm 55.6	ok um ragna rǫk	Skm 29.7	ok tvennan trega
Vm 55.9	þú ert æ vísastr vera	Skm 30.1	ok leiða með tárom trega

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Skm 36.7	ef gøraz þarfar þess	Alv 20.6	kalla í helio hviðuð
Skm 42.3	hvé um þreyiak þriár	Alv 26.6	kalla í helio hröðuð
Ls 2.6	manngi er þér í vorði vinr	Alv 32.6	kalla í helio hnipinn
Ls 3.3	á þat sumbl at síá	Alv 35.6	uppi ertu, dvergr, um dagaðr
Ls 3.6	ok blend ek þeim svá meini mið	Alv 35.7	nú skinn sól í sali
Ls 4.3	á þat sumbl at síá	HHv 13.6	knegot oss fálör fara
Ls 4.6	á þér muno þau þerra þat	HHv 14.3	hvé þik kalla konir
Ls 9.6	nema okkr væri báðom borit	HHv 15.3	miðk em ek gífom gramastr
Ls 17.6	um þinn bróðurbana	HHv 16.3	nefndu þinn, fála, fōður
Ls 22.3	deila víg með verom	HHv 16.6	ok vaxi þér á baðmi barr
Ls 24.3	ok draptu á vétt sem volor	HHv 17.6	unz hann Helgi hió
Ls 27.6	ok væri þá at þér vreiðom vegit	HHv 19.3	síga lætr þú brýnn fyr brár
Ls 29.6	þótt hon síálgi segi	HHv 20.6	þótt þú hafir reina rödd
Ls 30.3	era þér vamma vant	HHv 21.3	ok stíga ek á land af legi
Ls 31.3	ógott um gala	HHv 22.6	ef þú mér í krummor kōmr
Ls 32.6	ok myndir þú þá, Freyia, frata	HHv 23.3	ok halda of vísa vōrð
Ls 33.6	ok hefir sá bōrn of borit	HHv 24.3	er þú létst hōggvinn Hata
Ls 35.6	ok þikkir sá ása iaðarr	HHv 24.6	þá hefir hon bōlva bōtr
Ls 36.3	munka ek því leyna lengr	HHv 25.6	sá er þér maligr maðr
Ls 36.6	ok era þó (v)óro verr	HHv 26.6	hér sté hon land af legi
Ls 37.6	ok leysir ór hōptom hvern	HHv 28.8	þaðan kōmr með ǫldom ár
Ls 38.3	bera tilt með tveim	Rm 1.3	kannat sér við víti varaz
Ls 38.6	er þér sleit Fenrir frá	Rm 1.6	finn mér lindar loga
Ls 39.6	bíða ragna rōkkrs	Rm 2.3	margan hefi ek fors um farit
Ls 40.3	at hon átti mōg við mér	Rm 2.6	at ek sylða í vatni vaða
Ls 41.3	unz riúfaz regin	Rm 3.6	ef þeir hōggvaz orðom á
Ls 43.3	ok svá sællikt setr	Rm 6.6	þat verðr ykkarr beggia bani
Ls 44.6	ok und kvernom klaka	Rm 7.3	gaftattu af heilom hug
Ls 46.3	deila með mōnnom mat	Rm 12.6	kveðia Fáfni fiár
Ls 46.6	þá er vōgo verar	Rm 19.6	heill, at sverða svipon
Ls 50.6	þars vér á Þiaza þrifom	Rm 20.3	heill, at sverða svipon
Ls 51.3	þár er ér á Þiaza þrifoð	Rm 22.6	ef þú sér þá fyrri fara
Ls 52.6	telia vōmmin vór	Rm 24.3	þars þú at vígi verðr
Ls 56.6	ǫll ertu, deigia, dritin	Rm 24.6	ok vilia þik sáran síá
Ls 62.6	ok máttira þú þá nesti ná	Rm 25.3	ok at morni mettr
Ls 62.7	ok svaltstu þá hungri heill	Rm 25.6	illt er fyr heill at hrapa
Ls 64.3	þats mik hvatti hugr	Fm 1.3	hverra ertu manna mōgr
Alv 1.3	heim í sinni snúaz	Fm 1.6	stōndomk til hiarta hiqrr
Alv 2.3	vartu í nótt með ná	Fm 3.3	af hverio vartu undri alinn
Alv 2.6	ertattu til brúðar borinn	Fm 4.6	er hefk þik vāpnom vegit
Alv 3.3	á ek und steini stað	Fm 5.6	aburnno skior a skeið
Alv 4.6	at sá einn er giqfer með goðom	Fm 6.3	ok minn inn hvassi hiorr
Alv 5.6	hverr hefir þik baugom borit	Fm 7.3	sæt maðr þik vreiðan vega

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Fm 10.6	fara til heliar heðan	Sd 33.3	hvars þú á foldo finnr
Fm 12.6	ok kíosa móðr frá mōgom	Sd 34.3	þvá hendr ok hōfuð
Fm 15.6	ok svima í móðo marir	Sd 34.6	ok biðia sælan sofa
Fm 16.6	fannka ek (svá) marga mōgo	Sd 35.4	hvártstu ert bróður bani
Fm 17.3	hvars skolo vreiðr vega	Sd 35.5	eða hafir þú feldan fōður
Fm 19.3	ok gatst harðan hug	Sd 35.7	þótt hann sé gulli gladdr
Fm 21.3	þess er í lyngvi liggr	Sd 36.3	né harm in heldr
Fm 22.6	þitt varð nú meira megin	Sd 36.6	þeim er skal fremstr með firom
Fm 25.3	er þú þerrir Gram á grasi	Sd 37.3	hvern veg at vegi
Fm 27.6	ept þenna dreyra drykk	Gg 1.3	vak ek þik dauðra dura
Fm 28.3	minn inn hvassa hiqr	Gg 2.3	hverio ertu nú bōlvi borinn
Fm 28.6	meðan þú í lyngvi látt	Gg 4.3	langir ro manna munir
Fm 29.3	inn aldna iqtun	Gg 5.3	biarg þú, móðir, megi
Fm 29.6	ok þíns ins hvassa hiqrs	Gg 6.3	þann gól Rindi Rani
Fm 34.3	fara til heliar heðan	Gg 7.6	er þú á sinnom sér
Fm 38.3	ok af baugom búa	Gg 10.6	ok stōkkr þá láss af limom
Fm 39.6	fara til Heliar heðan	Gg 12.6	ok haldiz (æ) lík at liðom
Sd 3.3	heill nótt ok nipt	Gg 15.3	ok standit þér mein fyr munom
Sd 6.3	ok rísta á hialti hiqrs	Gg 15.6	meðan ek þér galdra gól
Sd 6.6	ok nefna tysvar Tý	Gg 16.3	ok lát þér í briósti búa
Sd 7.6	ok merkia á nagli Nauð	Fi 4.6	ok dríf þú nú vargr af vegi
Sd 9.3	ok leysa kind frá konom	Fi 5.3	hvar hann getr svást at síá
Sd 9.6	ok biðia þá dísir duga	Fi 5.6	hér mynda ek øðli una
Sd 10.9	þó kōmztu heill af hafi	Fi 6.3	eða hverra ertu manna mōgr
Sd 11.3	ok kunna sár at síá	Fi 7.3	ok ek vilia vita
Sd 13.6	þær um hugði Hroptr	Fi 9.3	ok ek vilia vita
Sd 18.4	ok sendar á víða vego	Fi 10.6	er hana hefr frá hliði
Sd 18.7	sumar með vísom vōnom	Fi 11.3	ok ek vilia vita
Sd 18.8	sumar hafa menzkir menn	Fi 13.3	ok ek vilia vita
Sd 19.7	sér at heillom hafa	Fi 14.3	ef þú vilt þat vita
Sd 19.9	unz riúfaz regin	Fi 14.6	unz riúfaz regin
Sd 20.6	qll ero mein of metin	Fi 15.3	ok ek vilia vita
Sd 21.3	emka ek með bleyði borinn	Fi 16.3	siðans þeim var varzla vitoð
Sd 22.6	þat kveða dauðom duga	Fi 17.3	ok ek vilia vita
Sd 23.6	armr er vára vargr	Fi 18.3	ef þú vilt þat vita
Sd 24.3	deilit við heimska hali	Fi 19.3	ok ek vilia vita
Sd 25.3	þá þikkir þú með bleyði borinn	Fi 20.3	af hveriom rōtom renn
Sd 25.4	eða sōnno sagðr	Fi 20.6	flærat hann eldr né iárn
Sd 25.6	nema sér góðan geti	Fi 21.3	ok ek vilia vita
Sd 26.6	þótt þik nótt um nemi	Fi 21.6	er hann flær ei eldr né iárn
Sd 27.3	hvars skolo vreiðr vega	Fi 22.6	sá er hann með mōnnom miqtuðr
Sd 27.6	þær er deyfa sverð ok sefa	Fi 23.3	ok ek vilia vita
Sd 28.6	teygiattu þér at kossi konor	Fi 25.3	ok ek vilia vita

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Fi 27.3	ok ek vilía vita	Hav 135.4	þér muno góð, ef þú getr
Fi 29.3	ok ek vilía vita	Hav 137.4	þér muno góð, ef þú getr
Fi 31.3	ok ek vilía vita	Hav 162.7	þó sé þer góð, ef þú getr
Fi 33.3	ok ek vilía vita	Grm 23.6	þá er þeir fara at vitni at vega
Fi 35.3	ok ek vilía vita	Grm 42.6	þá er hefia af hvera
Fi 37.3	ok ek vilía vita	Grm 53.6	nálgastu mik, ef þú megir
Fi 39.3	ok ek vilía vita	Ls 20.3	er þik glapþi at geði
Fi 39.6	ef gøraz þarfar þess	Ls 47.3	hví ne letskaðu, Loki
Fi 40.6	hvern þær ór nauðom nema	Ls 57.6	ok verðr þá þíno fiqrvi um farir
Fi 41.3	ok ek vilía vita	Ls 64.6	þvíat ek veit at þú vegr
Fi 42.6	at kván of kveðin	HHv 28.9	allt var mér þat leitt, er ek leitik
Fi 46.3	hvé þik héto hiú	Fm 5.3	míno fiqrvi at fara
Fi 46.6	er ek var þér kván of kveðin	Fm 23.3	ok Fáfni um farit
Fi 48.3	fylgia skal kveðio koss	Fm 30.3	hvars vreiðir skolo vega
Fi 48.6	hverrs hefir við annan ást	Fm 37.6	kannat hann við slíko at síá
Fi 49.3	beið ek þín dógr ok daga	Sd 7.3	vélit þikk í tryggð, ef þú trúr
		Sd 8.3	ok verpa lauki í lög
		Sd 10.6	ok leggja eld(i) í ár
ww/Sw(w)s (Reducible to Type B)		ww/Ssw (Type C)	
Hav 19.6	at þú gangir snemma at sofa	Hav 3.3	ok á kné kalinn
Hav 28.3	ok segia it sama	Hav 3.6	þeim er hefir um fiáll farit
Hav 33.6	ok kann fregna at fá	Hav 12.6	síns til geðs gumi
Hav 36.6	þat er þó betra en bön	Hav 14.6	hverr sitt geð gumi
Hav 59.3	ok ganga síns verka á vit	Hav 15.6	unz sinn bíðr bana
Hav 95.6	en sér øngo at una	Hav 16.3	ef hann við víg varaz
Hav 112.4	þér muno góð, ef þú getr	Hav 17.6	uppi er þá geð guma
Hav 113.4	þér muno góð, ef þú getr	Hav 21.6	síns um mál maga
Hav 115.4	þér muno góð, ef þú getr	Hav 26.3	ef hann á sér í vá vero
Hav 116.4	þér muno góð, ef þú getr	Hav 34.6	þótt hann sé firr farin
Hav 117.4	þér muno góð, ef þú getr	Hav 40.3	skylit maðr þorð þola
Hav 119.4	þér muno góð, ef þú getr	Hav 44.3	ok vill þú af hánom gott geta
Hav 120.4	þér muno góð, ef þú getr	Hav 45.3	vildu af hánom þó gott geta
Hav 121.4	þér muno góð, ef þú getr	Hav 47.3	þá varð ek villr vega
Hav 122.4	þér muno góð, ef þú getr	Hav 53.3	lítil ero geð guma
Hav 125.4	þér muno góð, ef þú getr	Hav 54.3	æva til snotr séi
Hav 126.4	þér muno góð, ef þú getr	Hav 55.3	æva til snotr séi
Hav 126.7	nema þú síálfom þér sér	Hav 56.3	æva til snotr séi
Hav 127.4	þér muno góð, ef þú getr	Hav 67.6	þars ek hafða eitt etit
Hav 128.4	þér muno góð, ef þú getr	Hav 84.3	né því er kveðr kona
Hav 129.4	þér muno góð, ef þú getr	Hav 94.3	þess er um margan gengr guma
Hav 130.4	þér muno góð, ef þú getr	Hav 96.3	ok vættak míns munar
Hav 131.4	þér muno góð, ef þú getr	Hav 96.6	þeygi ek hana at heldr hefik
Hav 132.4	þér muno góð, ef þú getr		
Hav 134.4	þér muno góð, ef þú getr		

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Hav 103.6	opt skal góðs geta	Rm 10.3	mart er, þat er þorð þéar
Hav 106.3	ok um griót gnaga	Rm 21.3	ok ert á braut búinn
Hav 108.6	þeirar er lögðomk arm yfir	Fm 8.6	þú fannt, at ek lauss lifi
Hav 126.1	þá er þér þols beðit	Fm 11.6	allt er feigs forað
Hav 143.5	er reist siálfr sumar	Fm 13.6	sumar dótr Dvalins
Hav 155.6	sinna heim hama	Fm 19.6	at þann hiálm hafi
Hav 155.7	sinna heim huga	Fm 20.3	ok rið heim heðan
Hav 157.6	at sá gengr gumi	Fm 21.6	þar er þik Hel hafi
Hav 162.6	lengi vanr vera	Fm 25.6	ok veld ek þó siálfr sumo
Vm 18.6	sá er þeim völlr vitaðr	Fm 26.6	nema þú frýðir mér hvats hugar
Grm 1.3	gongomk firr, funi	Sd 23.3	nema þann er saðr síe
Grm 1.6	brennomk felldr fyrir	Sd 29.6	margan stelr vín viti
Grm 3.6	betri giöld geta	Gg 5.6	þikkiomk ek til ungr afi
Grm 10.6	ok drúpir qrn yfir	Fi 3.6	ok haltu heim heðan
Grm 25.6	knáat sú veig vanaz	Fi 4.3	þeygi em ek míns mildr matar
Skv 5.6	vel mættim tveir trúazk	Fi 23.6	allr hann við gull glóar
Skv 7.6	at vit samt séim	Fi 27.6	ok vill þann tein taka
Skv 19.3	þau mun ek þér, Gerðr, gefa	Fi 28.3	ok vill þann tein taka
Skv 22.6	at deila fé fður	Fi 36.6	ef þat klífr, kona
Skv 23.6	nema þú mér sætt segir	Fi 47.6	þótt þat sé við lqst lagit
Skv 25.6	verðr þinn feigr faðir	Fi 50.3	en þú til míns munar
Skv 31.4	þik geð grípi		
Skv 31.5	þitt morn morni	S/Sws (Type Db)	
Skv 33.3	þik skal Freyr fíask	Hav 12.3	ql alda sonom
Skv 38.3	áðr ek riða heim heðan	Hav 118.3	orð illrar kono
Skv 40.6	þíns eða míns munar	Hav 130.7	ok fá fognuð af
Ls 13.6	þú ert við víg varastr	Hav 138.6	siálfr siálfom mér
Ls 23.7	ok hefir þú þar þorn borit	Hav 143.3	Dvalinn dvergom fyrir
Ls 23.8	ok hugða ek þat args aðal	Grm 21.3	fiskr flóði í
Ls 24.6	ok hugða ek þat args aðal	Grm 49.6	Þróf þingom at
Ls 34.6	ok þér í munn migo	Ls 11.6	Bragi, bekkíom á
Alv 8.6	allt, þat er ek vil vita		
Alv 24.3	kalla vág vanir	S/Ssw (Type Da)	
Alv 26.3	kalla vág vanir	Hav 43.6	vinar vinr vera*
Alv 28.6	kalla vqnd vanir	Hav 49.3	tveim trémqnnom
Alv 32.3	kalla vqxt vanir	Hav 51.3	friðr fimm daga
Alv 34.3	kalla veig vanir	Hav 142.7	ok reist hroptr roqna*
HHv 13.3	vinna grand grami	Skv 4.3	mikinn móðtrega
HHv 18.6	ef þér kómit í þverst þvari	Skv 39.3	lundr lognfara
HHv 22.3	ok hittomk í vík Varins	Skv 41.3	lundr lognfara
HHv 27.3	segðu gørr grami	Skv 31.8	í qnn ofanverða
Rm 7.6	ef ek vissa þat fár fyrir	Ls 15.3	Bragi, bekkskrautuðr
Rm 8.6	er þat er til hatrs hugat	Ls 48.6	ok vaka vqðr goða

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Alv 10.6	kalla aur uppregin	Hav 164.4	óþqrf iqtina sonom
Rm 6.3	mikil míns hqfuðs	Vm 8.3	þyrstr til þinna sala
Sw/Sws (Type Db*)		Vm 9.6	gestr eða inn gamli þulr
Hav 35.3	ey í einom stað	Vm 17.6	Surtr ok in sváso goð
Hav 36.3	halr er heima hverr*	Vm 18.3	Surtr ok in sváso goð
Hav 37.3	halr er heima hverr*	Vm 20.6	fyrst in fróði iqtunn
Hav 42.3	ok gialda giqf við giqf*	Vm 25.3	en Nótt var Nqrvi borin
Hav 44.6	fara at finna opt	Vm 30.6	fyrst in fróði iqtunn
Hav 49.6	neiss er nøkkviðr halr	Vm 31.3	svá óx, unz ór varð iqtunn*
Hav 62.3	qrn á aldinn mar	Vm 37.3	iqtunn í arnar ham
Hav 64.6	at engi er einna hvatastr	Vm 40.3	hoggvaz hverian dag
Hav 77.6	dómr um dauðan hvern	Vm 40.6	sitia meirr um sáttir saman*
Hav 80.5	ok fáði fimbulþulr	Vm 41.3	hoggvaz hverian dag
Hav 84.6	brigð í brióst um lagið	Vm 41.6	sitia meirr um sáttir saman*
Hav 88.6	hætt er þeira hvárt*	Vm 43.4	þvíat hvern hefi ek heim um komit
Hav 99.3	vísom vilia frá	Vm 43.7	hinig deya ór helio halir*
Hav 101.6	bundit beðiom á	Vm 50.6	þá er slokna Surta logi
Hav 105.3	drykk ins dýra miaðar	Vm 51.3	þá er slokna Surta logi
Hav 106.6	svá hætta ek hqfði til	Vm 53.6	vitnis vígi at
Hav 107.3	fás er fróðom vant	Vm 54.6	siálfr í eyra syni*
Hav 114.3	þings né þióðans máls	Vm 55.3	sagðir í eyra syni*
Hav 117.1	giqld ins góða hugar	Grm 2.3	svá at mér manngi mat ne bauð
Hav 119.1	vergr er vetki trøðr	Grm 4.3	ásom ok álfom nær
Hav 119.7	farðu at finna opt	Grm 7.6	gløð ór gullnom kerom
Hav 124.3	einom allan hug	Grm 8.3	Valholl víð of þrumir
Hav 134.7	opt er gott, þat er gamlir kveða	Grm 9.6	bryniom um bekki strát
Hav 137.15	fold skal við flóði taka	Grm 13.6	glaðr inn glóða miqð
Hav 140.3	Bolþors, Bestlo fqður	Grm 15.6	ok svæfir allar sakir*
Hav 142.5	er fáði fimbulþulr	Grm 17.6	frókn, at hefna fqður*
Hav 143.4	Ásviðr iqtnom fyrir	Grm 19.3	hróðigr Heriafqðr
Hav 150.3	flein í folki vaða	Grm 22.3	heillog fyr helgom durom
Hav 155.3	leika lopti á	Grm 27.4	Fiqrm ok Fimbulþul
Hav 156.6	heilir hildar til	Grm 33.5	Duneyrr ok Dýraþró
Hav 156.7	heilir hildar frá	Grm 36.6	Gqll ok Geirahqð
Hav 157.3	váfa virgilná	Grm 37.6	æsir ísarn kól
Hav 158.3	verpa vatni á	Grm 41.3	miðgarð manna sonom
Hav 158.6	hnígra sá halr fyr hiqrom*	Grm 43.6	nýtom Niarðar bur
Hav 159.3	telia tíva fyrir	Grm 54.9	allir af einom mér
Hav 160.3	dvergr, fyr Dellings durom*	Skm 11.3	ok varðar alla vega*
Hav 160.6	hyggio Hroptatý	Skm 15.3	ió lætr til iarðar taka
Hav 161.6	ok sný ek hennar qllom sefa*	Skm 20.6	byggjom bæði saman
Hav 164.3	allþqrf ýta sonom	Skm 21.3	með ungom Óðins syni
		Skm 22.3	með ungom Óðins syni

APPENDIX C. LIÓÐAHÁTTTR FULL-VERSES

Skm 26.3	mær, at mínom munom*	Sd 14.5	fróðlikt it fyrsta orð
Skm 28.7	gapi þú grindom frá	Sd 14.6	ok sagði sanna stafi
Skm 30.6	kranga kosta laus	Sd 18.3	ok hverfðar við inn helga mið
Skm 30.7	kranga kosta vön	Sd 25.5	hættir er heimiskviðr
Skm 35.1	mær, at mínom munom*	Sd 25.9	ok launa svá lýðom lygi*
Skm 35.9	mær, at þínom munom*	Sd 28.3	brúðir bekkíom á
Skm 38.6	nenna Niarðar syni	Sd 32.3	ok firraz flærðarstafi
Ls 6.3	Loptr, um langan veg	Sd 35.6	úlfr er í ungom syni
Ls 9.3	blendom blóði saman	Sd 37.6	romm ero róg of risin*
Ls 10.3	sítia sumbli at	Gg 4.6	ok skeikar þá skuld at sköpom*
Ls 12.3	ok bótir þér svá baugi Bragi*	Gg 6.6	siálfr leið þú siálfan þik
Ls 12.6	gremðu eigi goð at þér	Gg 9.6	ok snúiz þeim til sátta sefi*
Ls 18.6	vilkat ek, at it vreiðir vegiz*	Gg 12.3	frost á fialli há
Ls 25.3	segia seggiom frá	Fi 1.3	þursa þjóðar siqt
Ls 26.6	báða í baðm um tekít	Fi 1.6	ok hvarflar um hættan loga
Ls 39.3	böl er beggia þrá	Fi 9.6	menn it meira forað
Ls 41.6	bundinn bólvasmiðr	Fi 11.6	menn it meira forað
Ls 49.3	leika lausom hala	Fi 25.6	hníga á Heliar siqt
Ls 59.6	síðan þik manngi sér	Fi 30.6	vápn til vígs at liá
Ls 60.3	segia seggiom frá	Fi 36.3	siúkom ok sárom gaman
Ls 61.6	svá at þér brotnar beina hvat	Fi 37.6	sítia sáttar saman*
Ls 62.3	þóttu hótir hamri mér	Fi 45.3	slíta siónir ór
Ls 65.3	síðan sumbl um göra	Fi 45.6	mögr til minna sala
Alv 12.6	dvergar driúpan sal	Fi 49.6	at þú ert kominn, mögr, til minna sala
Alv 16.6	alskír ása synir	Fi 50.6	ævi ok aldri saman
Alv 24.6	kalla dvergar díúpan mar		
Alv 34.6	kalla sumbl Suttungs synir*	Sw/Ssw (Type Da*)	
Alv 35.3	fleiri forna stafi	Hav 4.3	þerro ok þjóðlaðar
HHv 27.6	eða fóro þær fleiri saman	Hav 4.6	orz ok endrþogo
HHv 28.3	hvít und hiálmi mær	Hav 8.3	lof ok líknstafi
HHv 28.6	dogg í díupa dali*	Hav 13.6	í garði Gunnlaðar
HHv 28.7	hagl í háva viðo	Hav 20.3	etr sér aldrtrega
Rm 3.3	líf í lýða sölom	Hav 22.3	hlær at hvívetna
Rm 4.6	of lengi leiða limar*	Hav 23.3	ok hyggr at hvívetna
Rm 10.6	hefna hlýra harms*	Hav 31.3	gestr at gest hæðinn
Rm 12.3	arfs ok óðra hugar	Hav 46.6	glík skolo giöld giðfom
Fm 10.3	æ til ins eina dags	Hav 47.6	maðr er mannz gaman
Fm 16.3	meðan ek um meniom lák	Hav 48.3	sialdan sút ala
Fm 17.6	at engi er einna hvatastr	Hav 52.6	fekk ek mér félag
Fm 31.6	hvat sem at hendi kóm	Hav 58.3	fé eða fiqr hafa
Fm 34.6	fiqlð því er und Fáfni lá	Hav 60.6	mál ok misseri
Sd 2.3	lqng ero lýða læ*	Hav 63.6	þjóð veit, ef þrír ero
Sd 14.3	hafði sér á hofði hiálm*	Hav 74.4	hverf er haustgríma

APPENDIX C. LIÓÐAHÁTTTR FULL-VERSES

Hav 79.3	fé eða flióðs munoð	Grm 27.8	þær hverfa um hodd goða
Hav 80.4	þeim er gørðo ginnregin	Grm 28.3	þriðia Þiódnuma
Hav 103.3	sviðr skal um sik vera	Grm 29.3	þær skal Þórr vaða
Hav 110.6	ok gróttta Gunnlóðo	Grm 29.6	at aski Yggdrasils
Hav 112.7	eða þú leitir þér innan út staðar	Grm 30.9	at aski Yggdrasils
Hav 121.7	fyrri at flaumslitom	Grm 31.3	undan aski Yggdrasils
Hav 132.7	gest né ganganda	Grm 32.3	at aski Yggdrasils
Hav 134.12	ok váfir með vilmögom	Grm 34.6	Grábakr ok Grafvölluðr
Hav 136.3	qlom at upploki	Grm 35.3	meira en menn viti
Hav 140.6	ausinn Óðrøri	Grm 37.3	svangir, sól draga
Hav 141.3	ok vaxa ok vel hafaz	Grm 46.3	Herian ok Hiálmberi
Hav 142.6	ok gørðo ginnregin	Grm 49.3	en Iálk at Ásmundar
Hav 148.3	haptis við mína heptmogo	Grm 50.6	orðinn einbani
Hav 149.3	bönd at boglimom	Skm 7.3	ungom, í árdaga
Hav 151.3	á rótom rás viðar	Skm 8.3	vísan vafrlöga
Hav 152.3	sal um sessmögom	Skm 9.3	vísan vafrlöga
Hav 156.3	leiða langvini	Skm 10.4	þursa þióð yfir
Hav 163.3	mey né mannz kono	Skm 29.6	sváran súsbreka
Vm 1.3	at vitia Vafþrúðnis	Skm 37.3	fullom forns miaðar
Vm 5.6	inn gekk Yggr þegar	Ls 15.6	hyggz vætr hvatr fyrir
Vm 11.6	dag of dróttmogo	Ls 16.3	ok allra óskmaga
Vm 12.3	dag um dróttmogo	Ls 20.6	ok þú lagðir lær yfir
Vm 13.6	nótt of nýt regin	Ls 28.3	mína meistafi
Vm 14.3	nótt of nýt regin	Ls 29.3	lióta leiðstafi
Vm 19.6	gestr um geðspeki	Ls 30.6	hverr hefir þinn hór verit
Vm 23.6	qldom at ártali	Ls 31.6	hryggr munu heim fara
Vm 25.6	qldom at ártali	Ls 45.6	allir ql saman
Vm 26.6	fyrst með fróð regin	Ls 53.3	fullom forns miaðar
Vm 28.6	yrði í árdaga	Ls 54.6	hór ok af Hlórriða
Vm 33.3	mey ok móg saman	Ls 55.3	heiman Hlórriða
Vm 42.6	segir þú it sannasta	Ls 58.6	ok svelgr hann allan Sigföður
Vm 45.3	í holti Hoddmimis	Ls 60.6	ok þóttiska þú þá Þórr vera
Vm 49.3	meyia Møgþrasis	Alv 1.6	heima skalat hvíld nema
Vm 51.6	Vingnis at vígþroti	Alv 5.3	flióðs ins fagrglóa
Grm 5.6	tívar at tannféi	Alv 6.3	sonr em ek Síðgrana
Grm 6.6	áss í árdaga	Alv 14.6	kalla álfar ártala
Grm 7.3	unnir yfir glymia	Alv 16.3	kalla dvergar Dvalins leika
Grm 12.6	fæsta feiknstafi	Alv 18.6	kalla í helio hiálm huliz*
Grm 19.6	Óðinn æ lifir	Alv 20.3	kalla gneggiuð ginnregin
Grm 24.6	míns veit ek mest magar*	Alv 22.6	kalla dvergar dags vero
Grm 27.11	Gráð ok Gunnþorin	Alv 30.3	kalla grímo ginnregin
Grm 27.5	Rín ok Rennandi	Alv 30.6	kalla dvergar draumniqrun
Grm 27.7	Gömul ok Geirvimul	HHv 15.6	ok kvalðar kveldriðor

APPENDIX C. LIÓÐAHÁTTR FULL-VERSES

HHv 29.3	Helgi helstofom
HHv 30.3	Atli til aldraga
Rm 9.6	ok haldið heim heðan
Rm 22.3	úlfi und asklimom
Fm 2.6	[æ] geng ek einn saman
Fm 8.3	mínim feðrmunom*
Fm 13.3	eigot þær ætt saman
Fm 18.3	miklom míns fofður
Fm 37.3	fiánda inn fólkskáa
Sd 2.6	bregða blunnstofom
Sd 10.3	á sundi seglmorom
Sd 13.1	ok ór horni Hoddrofnis
Sd 13.9	ór hausi Heiðdraupnis
Sd 14.4	þá mælti Míms hofuð
Sd 19.3	ok allar qlrúnar
Sd 19.4	ok mætar meginrúnar
Sd 30.3	morgom at móðtrega
Sd 31.6	inni auðstofom
Sd 32.6	né eggia ofgamans
Sd 35.3	várom vargdropa
Gg 3.6	móti Menglōðo
Gg 8.3	falla at fiqlotom
Gg 9.3	gorvir á gálgevgi
Gg 10.3	borinn at boglimom
Gg 11.3	meira en menn viti
Gg 13.3	nótt á niðlvegi
Fi 7.6	eign ok auðsölom
Fi 8.6	eign ok auðsölom
Fi 12.6	æ meðan qld lifir
Fi 24.6	Surtar Sinmoro
Fi 28.6	eiri aurglasis
Fi 31.6	vísom vafrloga
Fi 33.6	innan ásmaga
Fi 34.3	Varr ok Vegdrasill
Fi 38.3	þriðia Þiódvarta
Fi 38.6	Eir ok Aurboða
Fi 43.6	Menglōð mitt gaman
Fi 44.3	gakk þú á gest sía

Sw/Ssww (Type Da*-long)

Ls 57.3	Miqllnir mál fyrnema
Ls 59.3	Miqllnir mál fyrnema
Ls 61.3	Miqllnir mál fyrnema

Ls 63.3	Miqllnir mál fyrnema
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Sw/Sww (Type D*)

Hav 74.6	en meira á mánaði
Hav 93.3	annan aldregi
Ls 8.3	æsir aldregi

ww/Ss

Hav 1.3	um skoðaz skyli
Hav 1.7	sitia á fleti fyrir
Hav 13.3	hann stelr geði guma
Hav 31.6	þótt hann með grōmōm glami
Hav 60.3	þess kann maðr miqt
Hav 70.3	ey getr kvikr kú
Hav 159.6	fár kann ósnotr svá
Skm 40.3	ok þú stígir feti framarr
Alv 10.3	kalla vega vanir

S/Ss

Skm 42.6	en síá hálf hýnótt
HHv 21.6	ok sveigia þinn hala, Hríngerðr (?)

Sw/Ss (Type A2b)

Hav 43.3	þeim ok þess vin
Hav 51.6	ok versnar allr vinskapr
Hav 69.3	sumr er af sonom sæll*
Hav 74.3	skammar ro skips rár
Grm 27.3	Svql ok Gunnþro*
Ls 42.3	ok seldir þitt svá sverð*
Sd 30.6	fiolð er, þat er fira tregr

Long-Short

Sws/Šw (Type Eb)

Hav 38.6	geirs um þorfr guma
Hav 53.6	hálf er qld hvar
Hav 91.3	brigðr er karla hugr konom
Hav 98.6	slíkan lōst saman
Vm 37.6	alla menn yfir
Grm 17.3	Víðars land, viði
Grm 20.3	iormungrund yfir
Grm 29.9	heillog vōtn hlóa
Skm 10.3	úrig fiql yfir

Skm 34.7	manna glaum mani	Rm 8.3	niðia stríð um nept
Skm 34.8	manna nýt mani	Sd 4.6	ok læknishendr, meðan lifom
Skm 35.6	geita hland gefi	Sd 24.6	verri orð, en viti
Ls 6.6	mæran drykk miaðar	Sd 26.3	vammafull, á vegi
Ls 13.3	beggia vanr, Bragi	Gg 7.3	vilia lauss á vegom
Ls 58.3	hví þrasir þú svá, Þórr	Gg 8.6	ok þverri æ fyr þér
Ls 65.6	leidi yfir logi	Fi 16.6	ok kómz þá vætr, ef þar kom
HHv 12.7	kennið mér nafn konungs	Fi 17.6	ok hlaupi inn, meðan þeir eta (?)
Fm 26.3	heilög fiqll hinig	Fi 18.6	ok hlaupa inn, meðan þeir eta (?)
Fm 31.3	í hildileik hafaz		
Sd 11.6	þess er lúti austr limar	Ssw/S^w (Type E)	
Sd 22.3	vammalaus verir	Hav 11.6	en sé ofdrykkia qls
Gg 13.6	kristin dauð kona	Hav 18.6	sá er vitandi er vits
Fi 2.6	áttattu hér, verndar vanr, vero*	Hav 24.3	viðhlæiendr vini
Fi 29.6	ok verðr því in fqlva gýgr fegin	Hav 25.3	viðhlæiendr vini
		Hav 25.6	at hann á formælendr fá
Sws/(w)S^w (Type Eb*)		Hav 29.3	staðlauso stafi
Hav 9.3	lof ok vit, meðan lifir	Hav 38.3	geti ganga framarr
Hav 17.3	þylsk hann um eða þrumir	Hav 42.6	en lausung við lygi
Hav 27.3	þar er batst, at hann þegi	Hav 45.6	ok gialda lausung við lygi
Hav 59.6	hálfir er auðr und hvqtom	Hav 55.6	ef sá er alsnotr, er á
Hav 100.3	vígdrótt ql um vakin	Hav 57.3	funi kveykiz af funa
Hav 114.6	ferr þú sorgafullr at sofa	Hav 58.6	ne sofandi maðr sigr
Hav 120.7	ok nem líknargaldr, meðan þú lifir	Hav 62.6	ok á formælendr fá
Vm 44.6	fimbulvetr með firom	Hav 67.3	ef þyrptak at málungi mat
Grm 15.3	ok silfri þakþr it sama	Hav 71.3	daufr vegr ok dugir
Grm 30.3	Silfrintoppr ok Sinir	Hav 71.6	nýtr manngi nás
Grm 54.6	Gautr ok lálkr með goðom	Hav 75.3	margr verðr aflqðrom api
SkM 27.7	inn fráni ormr með firom	Hav 93.6	lostfagrir litir
SkM 32.3	gambabtein at geta	Hav 97.3	sólhvíta, sofa
SkM 32.4	gambantein ek gat	Hav 100.6	svá var mér vilstígr of vitaðr
Ls 8.6	gambansumbl um geta	Hav 101.3	þá var saldrótt um sofin
Ls 14.6	lít ek þér þat fyr lygi (?)	Hav 102.3	hugbrigð við hali
Ls 28.6	síðan Baldr at sölom	Hav 104.3	fátt gat ek þegiandi þar
Ls 34.3	gíls um sendr at goðom	Hav 109.7	eða hefði hánom Suttungr of sóit
Ls 35.3	gísl um sendr at goðom	Hav 122.7	við ósvinna apa
Ls 48.3	it lióta líf um lagit	Hav 123.3	góðs laun um geta
Ls 54.3	vqr ok grqm at veri	Hav 123.6	líknfastan at lofi
Ls 65.7	ok brenni þér á baki	Hav 136.6	þér læs hvers á lido
Alv 4.3	flest um ráð sem faðir	Hav 138.3	nætr allar nío
Alv 8.3	vísi gestr, of varit	Hav 151.6	þann eta mein heldr en mik
HHv 26.3	fyrri nótt með firom	Hav 153.3	nytsamlikt at nema
HHv 26.7	ok festi svá yðarn flota	Hav 154.3	at biarga fari míno á floti

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Hav 161.3	hafa geð allt ok gaman	Grm 47.3	Herteitr ok Hnikarr
Hav 162.3	it manunga man	Skm 1.6	ofreiði afi
Vm 1.6	við þann inn alsvinna iqtun	Skm 2.6	ofreiði afi
Vm 2.6	sem Vafþrúðni vera	Skm 6.3	mér tíða mey
Vm 3.6	salakynni sé	Skm 10.7	sá inn ámatki iqtunn
Vm 5.3	þess ins alsvinna iqtuns	Skm 17.6	ór salkynni at sía
Vm 8.6	ok þinna andfanga, iqtunn	Skm 18.6	yðor salkynni at sía
Vm 20.3	ok þú, Vafþrúðnir, vitir	Skm 19.6	óleiðastan lifa
Vm 22.3	ok þú, Vafþrúðnir, vitir	Skm 21.6	ina níundo hveria nótt
Vm 24.3	ok þú, Vafþrúðnir, vitir	Skm 37.6	unna vaningia vel
Vm 26.3	ok þú, Vafþrúðnir, vitir	Skm 39.6	Gerðr unna gamans
Vm 28.3	ok þú, Vafþrúðnir, vitir	Skm 41.6	Gerðr unna gamans
Vm 29.3	þá var Berglemir borinn	Ls 1.3	feti gangir framarr
Vm 29.6	en Aurgelmir afi	Ls 1.6	sigtíva synir
Vm 30.3	ok þú, Vafþrúðnir, vitir	Ls 2.3	sigtíva synir
Vm 31.6	því er þat æ allt til atalt*	Ls 5.3	saryrðom sakaz
Vm 32.3	ok þú, Vafþrúðnir, vitir	Ls 11.3	ok qll ginnheilög goð
Vm 34.3	ok þú, Vafþrúðnir, vitir	Ls 13.7	ok skiarrastr við skot
Vm 35.3	þá var Bergelmir borinn	Ls 17.3	vergiarnasta vera
Vm 36.3	ok þú, Vafþrúðnir, vitir	Ls 19.3	sáryrðom sakaz
Vm 38.3	qll, Vafþrúðnir, vitir	Ls 21.6	iafngqrla sem ek
Vm 39.3	ok seldo at gíslingo goðom	Ls 40.6	vanréttis, vesall
Vm 42.3	qll, Vafþrúðnir, vitir	Ls 45.3	goð qll ok gumar
Vm 42.7	inn alsvinni iqtunn	Ls 54.7	ok var þat sá inn lævisi Loki
Grm 8.6	vápndauða vera	Ls 55.6	goð qll ok guma
Grm 9.3	salkynni at síá	Alv 7.6	þat it miallhvíta man
Grm 10.3	salkynni at síá	Alv 9.3	vqromk, dvergr, at vitir
Grm 11.3	sá inn ámatki iqtunn	Alv 11.3	vqromk, dvergr, at vitir
Grm 18.3	Sæhrímni soðinn	Alv 12.3	kalla vindofni vanir
Grm 18.6	við hvat einheriar alaz	Alv 13.3	vqromk, dvergr, at vitir
Grm 21.6	valglaumnir at vaða	Alv 15.3	vqromk, dvergr, at vitir
Grm 23.3	svá hygg ek at Valhöllo vera	Alv 17.3	vqromk, dvergr, at vitir
Grm 24.3	svá hygg ek Bilskírni með bugom	Alv 19.3	vqromk, dvergr, at vitir
Grm 32.6	ok segia Níðhoggi niðr	Alv 21.3	vqromk, dvergr, at vitir
Grm 33.3	gaghálsir gnaga	Alv 23.3	vqromk, dvergr, at vitir
Grm 34.3	en þats of hyggi hverr ósviðra apa	Alv 25.3	vqromk, dvergr, at vitir
Grm 34.9	neiðs kvisto má	Alv 27.3	vqromk, dvergr, at vitir
Grm 36.3	Skeggiqlld ok Skogul	Alv 29.3	vqromk, dvergr, at vitir
Grm 36.9	þær bera einheriom ql	Alv 31.3	vqromk, dvergr, at vitir
Grm 41.6	ský qll of skopoð	Alv 33.3	vqromk, dvergr, at vitir
Grm 43.3	Skíðblaðni at skapa	HHv 14.6	beits stafni búa
Grm 44.3	en Skíðblaðnir skipa	HHv 23.6	skass upp und skipi
Grm 46.6	Helblindi ok Hár	HHv 25.3	sá býr í Þolleyio þurs

APPENDIX C. LIÓÐAHÁTTR FULL-VERSES

Skm 14.3	ossom rǫnnom í	Fi 41.6	svásom armi sofa
Skm 26.6	síðan æva sé	Fi 42.3	svásom armi sofa
Skm 30.3	iǫtna gǫrðom í		
Skm 33.6	gambanreiði goða		
Ls 10.6	Ægis hǫllo í	Sww/S^w (Types ‘A-’, ‘B2’, and ‘B3’)	
Ls 16.6	Ægis hǫllo í	Hav 6.3	heldr gætinn at geði
Ls 18.3	Ægis hǫllo í	Hav 7.6	svá nýsiz fróðra hverr fyrir
Ls 27.3	Baldri líkan bur	Hav 19.3	mæli þarft eða þegi
Ls 32.3	ok meini blandin miǫk	Hav 21.3	ok ganga þá af grasi
Ls 37.3	ása gǫrðom í	Hav 27.6	nema hann mæli til mart
Ls 43.6	ok lemða alla í liðo	Hav 27.9	þótt hann mæli til mart
Ls 49.6	gǫrnom binda goð	Hav 46.3	ok þér er grunr at hans geði
Ls 50.3	gǫrnom binda goð	Hav 134.1	þeim er hangir með hám
Ls 53.6	vammalausá vera	Hav 134.11	ok skollir með skrá
Ls 56.3	ok meini blandin miǫk	Hav 135.7	get þú váloðom vel
Alv 3.6	bregði engi fǫsto heiti fira	Hav 139.3	nýsta ek niðr
Alv 9.6	heimi hveriom í*	Hav 150.6	ef ek hann síonom of sék
Alv 11.6	heimi hveriom í*	Hav 157.7	ok mælir við mik
Alv 13.6	heimi hveriom í*	Hav 162.8	nýt, ef þú nemr
Alv 15.6	heimi hveriom í*	Hav 162.9	þorð, ef þú þiggr
Alv 17.6	heimi hveriom í*	Hav 164.7	nióti, sá er nam
Alv 19.6	heimi hveriom í*	Vm 7.6	nema þú inn snotrari sér
Alv 21.6	heimi hveriom í*	Vm 10.3	mæli þarft, eða þegi
Alv 23.6	heimi hveriom í*	Vm 15.6	grund ok með goðom
Alv 25.6	heimi hveriom í*	Vm 16.3	grund ok með goðom
Alv 27.6	heimi hveriom í*	Vm 23.3	ok svá Sólar it sama
Alv 29.6	heimi hveriom í*	Vm 36.6	æ maðr hann siálfan um sér
Alv 31.6	heimi hveriom í*	Skm 2.3	ef ek geng at mæla við mǫg
Alv 33.6	heimi hveriom í*	Skm 3.6	minn dróttinn, um daga
HHv 18.3	ok látt í fiarðar mynni fyrir	Ls 5.6	ef þú mælir til mart
HHv 26.1	buðlungs mǫnnom bana	Ls 7.3	at þér mæla ne megoð
HHv 29.6	ok siklings mǫnnom it sama	Ls 7.6	eða heitið mik heðan
Rm 20.6	at hrottameiði hrafns	Ls 21.3	er þú fær þér Gefion at gremi
Fm 2.3	inn móðurlausi mǫgr	Ls 22.6	inom slævorom, sigr
Fm 14.6	Surtr ok æsir saman	Ls 23.3	inom slævorom, sigr
Fm 15.3	geirom leika goð	Ls 33.3	hós eða hvárs
Fm 24.7	annars brióstom í	Ls 47.6	er sína mælgí ne manat
Fm 27.3	ok halt Fáfnis hirta við funa	Rm 9.3	svá lengi sem ek lifi
Fm 30.6	með slævo sverði sigr	Fm 4.3	ok mik siálfan it sama
Sd 12.3	heiptom gíaldi harm	Fm 9.6	þér verða þeir baugar at bana
Sd 12.9	í fulla dóma fara	Fm 20.6	þér verða þeir baugar at bana
Sd 20.3	hvassa vápna hlynr	Fm 22.3	han mun ok verða báðom at bana
Gg 14.3	orðom skiptir iǫtun	Sd 19.8	nióttu, ef þú namt
		Sd 21.6	svá lengi, sem ek lifi

Gg 3.3 sú er faðmaði minn fǫður
Gg 14.6 gnóga of gefit

Ss/Šw (Type A2k)

Hav 6.9 en manvit mikit
Hav 10.3 en sé manvit mikit
Hav 11.3 en sé manvit mikit
Hav 15.3 ok vígdjarft vera
Hav 30.6 ok nái hann þurrfiallr þruma
Hav 37.6 sér í mál hvert matar
Hav 54.6 er vel mart vito
Hav 92.3 sá er vill flióðs ást fáa
Hav 103.9 þat er ósnotr s aðal
Hav 104.6 í Suttungs sǫlom
Vm 6.6 eða alsviðr, iqtunn
Vm 27.3 en Svásuðr Sumars
Vm 34.6 þú ert alsviðr, iqtunn
Grm 3.3 Veratýr vera
Grm 26.6 þaðan eigo vǫtn ǫll vega
Grm 35.6 skerðir Níðhoggr neðan
Grm 45.3 við þat skal vilbiörg vaka
Skm 31.3 eð- verlaus vera
Skm 35.3 fyr nágrindr neðan
Ls 19.6 ok hann fiorgvall fría
Ls 25.6 firriz æ forn rǫk firar
Ls 26.3 ok hefir æ vergiǫrn verit
Ls 44.3 ok snapvíst snapir
Ls 51.6 þér æ kǫld ráð koma
Ls 52.3 þár er þú léts mér á beð þinn boðit
Ls 63.6 fyr nágrindr neðan
Alv 6.6 ok þat giaf-orð geta
Alv 7.3 ok þat giaf-orð geta
Alv 18.3 kalla vindflot vanir
Alv 22.3 kalla vindslot vanir
Alv 28.3 kalla hlíðþang halir
HHv 20.3 brettir sinn Hrímgreðr hala
Fm 9.3 en ek þér satt eitt segik
Fm 11.3 ok ósvinnz apa
Fm 12.3 ok vel mart vita
Fm 14.3 ok vel mart vita
Fm 39.3 mitt banorð bera

Fi 2.3 eða hvat viltu, vinlauss, vita
Fi 6.6 þess var Fiǫlkaldr faðir
Fi 19.6 lǫnd ǫll limar
Fi 26.3 fyr nágrindr neðan
Fi 34.6 Liðskiálfr, Loki
Fi 43.3 hér máttu Svipdag sía
Fi 44.6 hygg ek at Svipdagr sé

Other/Problematic**Violating Bugge's Rule**

Hav 39.6 at leið sé laun, ef þægi
Hav 107.6 á alda vés iarðar
Hav 164.8 heilir, þeirs hlýddo
Grm 49.7 Viðurr at vígom

Overheavy Foot

Hav 99.6 geð hennar allt ok gaman
Hav 133.6 né svá illr, at einugi dugi
Grm 38.3 skiǫldr, skínanda goði
Grm 49.1 Gǫndlir ok Hárbarðr með goðom
Ls 42.6 veitsta þú þá, vesall, hvé þú vegr
HHv 19.6 ek drekþa Hlǫðvarz sonom í hafi

Two Long Feet

Hav 121.1 einhveriom allan hug
Grm 16.6 hátimbroðom hǫrgi ræðr
Skm 21.6 ina níundo hveria nótt
Ls 14.3 Ægis hǫll um kominn
Alv 14.3 kalla hverfanda hvél helio í

Two Short Feet

Grm 27.6 Gipul ok Gǫpul
Grm 33.4 Dáinn ok Dvalinn

Single Alliteration

Hav 80.3 inom reginkunnom
Hav 109.3 Háva ráðs at fregna
Hav 117.7 óhopp at þér vita
Hav 139.6 fell ek apr þaðan

Catalogue of Full-verses

Hav		
1.3	um skoðaz skyli	ww/Ss
1.4	um skygnaz skyli	B1
1.7	sitia á fleti fyrir	ww/Ss
2.3	hvar skal sitia síá	B1
2.6	síns um freista frama	B1
3.3	ok á kné kalinn	C
3.6	þeim er hefir um fiáll farit	C
4.3	þerro ok þjóðlaðar	Da*
4.6	orz ok endrþogo	Da*
5.3	dælt er heima hvat	B1
5.6	ok með snotrom sitr	B1
6.3	heldr gætinn at geði	A-
6.6	sialdan verðr víti vðrom	B1
6.9	en manvit mikit	A2k
7.3	þunno hlióði þegir	Af
7.6	svá nýsiz fróðra hverr fyrir	A-
8.3	lof ok líknstafi	Da*
8.6	annars brióstom í	Af
9.3	lof ok vit, meðan lifir	Eb*
9.6	annars brióstom ór	Af
10.3	en sé manvit mikit	A2k
10.6	slíkt er válaðs vera	B1
11.3	en sé manvit mikit	A2k
11.6	en sé ofdrykkia ǫls	E
12.3	ǫl alda sonom	Db
12.6	síns til geðs gumi	C
13.3	hann stelr geði guma	ww/Ss
13.6	í garði Gunnlaðar	Da*
14.3	at ins fróða Fialars	B1
14.6	hverr sitt geð gumi	C
15.3	ok vígdíarft vera	A2k
15.6	unz sinn bíðr bana	C
16.3	ef hann við víg varaz	C

16.6	þótt hánom geirar gefi	B1
17.3	þylsk hann um eða þrumir	Eb*
17.6	uppi er þá geð guma	C
18.3	ok hefir fiqlð um farit	B1
18.6	sá er vitandi er vits	E
19.3	mæli þarft eða þegi	A-
19.6	at þú gangir snemma at sofa	B2 (red.)
20.3	etr sér aldrtega	Da*
20.6	manni heimskom magi	Af
21.3	ok ganga þá af grasi	A-
21.6	síns um mál maga	C
22.3	hlær at hvívetna	Da*
22.6	at hann era vamma vanr	B1
23.3	ok hyggr at hvívetna	Da*
23.6	allt er vil, sem var	B1
24.3	viðhlæiendr vini	E
24.6	ef hann með snotrom sitr	B1
25.3	viðhlæiendr vini	E
25.6	at hann á formælendr fá	E
26.3	ef hann á sér í vá vero	C
26.6	ef hans freista firar	B1
27.3	þar er batst, at hann þegi	Eb*
27.6	nema hann mæli til mart	A-
27.9	þótt hann mæli til mart	A-
28.3	ok segia it sama	B2 (red.)
28.6	því er gengr um guma	B1
29.3	staðlauso stafi	E
29.6	opt sér ógott um gelr	B1
30.3	þótt til kynnis komi	B1
30.6	ok nái hann þurrfiállr þruma	A2k
31.3	gestr at gest hæðinn	Da*
31.6	þótt hann með gròmom glami	ww/Ss
32.3	en at virði vrekaz	B1
32.6	órir gestr við gest	B1
33.3	nema til kynnis komi	B1
33.6	ok kann fregna at fá	B2 (red.)

APPENDIX C. LIÓÐAHÁTTTR FULL-VERSES

34.3	þótt á brauto búi	B1
34.6	þótt hann sé firr farin	C
35.3	ey í einom stað	Db*
35.6	annars fletiom á	Af
36.3	halr er heima hverr*	Db*
36.6	þat er þó betra en bön	B2 (red.)
37.3	halr er heima hverr*	Db*
37.6	sér í mál hvert matar	A2k
38.3	geti ganga framarr	E
38.6	geirs um þorð guma	Eb
39.3	at ei væri þiggia þegit	B1
39.6	at leið sé laun, ef þægi	(Violates Bugge's Rule)
40.3	skylit maðr þorð þola	C
40.6	mart gengr verr, en varir	B1
41.3	þat er á siálfom sýnst	B1
41.6	ef þat bíðr at verða vel	B1
42.3	ok gialda giðf við giðf*	Db*
42.6	en lausung við lygi	E
43.3	þeim ok þess vin	A2b
43.6	vinar vinr vera*	Da
44.3	ok vill þú af hánom gott geta	C
44.6	fara at finna opt	Db*
45.3	vildu af hánom þó gott geta	C
45.6	ok gialda lausung við lygi	E
46.3	ok þér er grunr at hans geði	A-
46.6	glík skolo giðld giðfom	Da*
47.3	þá varð ek villr vega	C
47.6	maðr er mannz gaman	Da*
48.3	sialdan sút ala	Da*
48.6	sýtir æ glöggr við giðfom	B1
49.3	tveim trémönnom	Da
49.6	neiss er nøkkviðr halr	Db*
50.3	hlýrat henni þorðr né barr	B1
50.6	hvat skal hann lengi lifa	B1
51.3	friðr fimm daga	Da
51.6	ok versnar allr vinskapr	A2b

52.3	opt kaupir sér í lítlo lof	B1
52.6	fekk ek mér féлага	Da*
53.3	lítil ero geð guma	C
53.6	hálf er ǫld hvar	Eb
54.3	æva til snotr séi	C
54.6	er vel mart vito	A2k
55.3	æva til snotr séi	C
55.6	ef sá er alsnotr, er á	E
56.3	æva til snotr séi	C
56.6	þeim er sorgalausastr sefi	Af
57.3	funi kveykiz af funa	E
57.6	en til dǫlskr af dul	B1
58.3	fé eða fiqr hafa	Da*
58.6	ne sofandi maðr sigr	E
59.3	ok ganga síns verka á vit	B2 (red.)
59.6	hálf er auðr und hvǫtom	Eb*
60.3	þess kann maðr miqt	ww/Ss
60.6	mál ok misseri	Da*
61.3	þótt hann sét væddr til vel	B1
62.3	qrn á aldinn mar	Db*
62.6	ok á formælendr fá	E
63.3	sá er vill heitinn horskr	B1
63.6	þióð veit, ef þrír ero	Da*
64.3	í hófi hafa	B1
64.6	at engi er einna hvatastr	Db*
65.6	opt hann giǫld um getr	B1
66.3	en til síð í suma	B1
66.6	sialdan hittir leiðr í líð	B1
67.3	ef þyrptak at málungi mat	E
67.6	þars ek hafða eitt etit	C
68.3	ok sólar sýn	B1
68.6	án við lǫst at lifa	B1
69.3	sumr er af sonom sæll*	A2b
69.6	sumar af verkom vel	B1
70.3	ey getr kvíkr kú	ww/Ss
70.6	en úti var dauðr fyr durom	B1

APPENDIX C. LIÓÐAHÁTTR FULL-VERSES

71.3	daufr vegr ok dugir	E
71.6	nýtr manngi nás	E
72.3	ept genginn guma	B1
72.6	nema reisi niðr at nið	B1
74.3	skammar ro skips rár	A2b
74.4	hverf er haustgríma	Da*
74.6	en meira á mánaði	D*
75.3	margr verðr aflöðrom api	E
75.6	skylit þann vitka vár	B1
76.3	deyr siálfr it sama	B1
76.6	hveim er sér góðan getr	B1
77.3	deyr siálfr it sama	B1
77.6	dómr um dauðan hvern	Db*
78.3	nú bera þeir vánar vö	B1
78.6	hann er valtastr vina	B1
79.3	fé eða flióðs munoð	Da*
79.6	fram gengr hann driúgt í dul	B1
80.3	inom reginkunnum	(Single Alliteration)
80.4	þeim er gørðo ginnregin	Da*
80.5	ok fáði fimbulþulr	Db*
84.3	né því er kveðr kona	C
84.6	brigð í brióst um lagið	Db*
88.3	né til snemma syni	B1
88.6	hætt er þeira hvárt*	Db*
91.3	brigðr er karla hugr konom	Eb
91.6	þat tælir horska hugi	B1
92.3	sá er vill flióðs ást fáa	A2k
92.6	sá fær, er fríar	B1
93.3	annan aldregi	D*
93.6	lostfagrir litir	E
94.3	þess er um margan gengr guma	C
94.6	sá inn mátki munr	B1
95.3	einn er hann sér um sefa	B1
95.6	en sér øngo at una	B2 (red.)
96.3	ok vættak míns munar	C
96.6	þeygi ek hana at heldr hefik	C

97.3	sólhvíta, sofa	E
97.6	nema við þat lík at lifa	B1
98.3	ef þú vilt þér mæla man	B1
98.6	slíkan lqst saman	Eb
99.3	vísom vilia frá	Db*
99.6	geð hennar allt ok gaman	(Swws Foot)
100.3	vígdrótt ql um vakin	Eb*
100.6	svá var mér vilstígr of vitaðr	E
101.3	þá var saldrótt um sofin	E
101.6	bundit beðiom á	Db*
102.3	hugbrigð við hali	E
102.6	teygða ek á flærðir flióð	B1
102.9	ok hafða ek þess vetki vífs	B1
103.3	sviðr skal um sik vera	Da*
103.6	opt skal góðs geta	C
103.9	þat er ósnotrs aðal	A2k
104.3	fátt gat ek þegiandi þar	E
104.6	í Suttungs sqlom	A2k
105.3	drykk ins dýra miaðar	Db*
105.6	síns ins heila hugar	B1
105.7	síns ins svára sefa	B1
106.3	ok um griót gnaga	C
106.6	svá hætta ek hqfði til	Db*
107.3	fás er fróðom vant	Db*
107.6	á alda vés iarðar	(Violates Bugge's Rule)
108.3	iqtua gqrðom ór	Af
108.6	þeirar er lqgðomk arm yfir	C
109.3	Háva ráds at fregna	(Single Alliteration)
109.4	háva hqllo í*	(Off-verse)
109.7	eða hefði hánom Suttungr of sóit	E
110.3	hvat skal hans tryggðom trúa	B1
110.6	ok gróttu Gunnlqðo	Da*
111.3	Urðar brunni at	Af
111.6	hlýdda ek á manna mál	B1
111.9	háva hqllo at*	(On-verse)
111.10	háva hqllo í*	(Off-verse)

APPENDIX C. LIÓÐAHÁTTTR FULL-VERSES

111.11	heyrðaða ek segja svá	B1
112.3	nióta mundo, ef þú nemr	Af
112.4	þér muno góð, ef þú getr	B2 (red.)
112.7	eða þú leitir þér innan út staðar	Da*
113.3	nióta mundo, ef þú nemr	Af
113.4	þér muno góð, ef þú getr	B2 (red.)
113.7	svá at hon lyki þik liðom	B1
114.3	þings né þjóðans máls	Db*
114.6	ferr þú sorgafullr at sofa	Eb*
115.3	nióta mundo, ef þú nemr	Af
115.4	þér muno góð, ef þú getr	B2 (red.)
115.7	eyrarúno at	Af
116.3	nióta mundo, ef þú nemr	Af
116.4	þér muno góð, ef þú getr	B2 (red.)
116.7	fástu at virði vel	B1
117.3	nióta mundo, ef þú nemr	Af
117.4	þér muno góð, ef þú getr	B2 (red.)
117.7	óhopp at þér vita	(Single Alliteration)
117.10	giöld ins góða hugar	Db*
118.3	orð illrar kono	Db
118.6	ok þeygi um sanna sök	B1
119.3	nióta mundo, ef þú nemr	Af
119.4	þér muno góð, ef þú getr	B2 (red.)
119.7	farðu at finna opt	Db*
119.10	vergr er vetki trøðr	Db*
120.3	nióta mundo, ef þú nemr	Af
120.4	þér muno góð, ef þú getr	B2 (red.)
120.7	ok nem líknargaldr, meðan þú lifir	Eb*
121.3	nióta mundo, ef þú nemr	Af
121.4	þér muno góð, ef þú getr	B2 (red.)
121.7	fyrri at flaumslitom	Da*
121.10	einhveriom allan hug	(Two Long Feet)
122.3	nióta mundo, ef þú nemr	Af
122.4	þér muno góð, ef þú getr	B2 (red.)
122.7	við ósvinna apa	E
123.3	góðs laun um geta	E

123.6	líknfastan at lofi	E
124.3	einom allan hug	Db*
125.3	nióta mundo, ef þú nemr	Af
125.4	þér muno góð, ef þú getr	B2 (red.)
125.7	opt inn betri bilar	B1
125.8	þá er inn verri vegr	B1
126.3	nióta mundo, ef þú nemr	Af
126.4	þér muno góð, ef þú getr	B2 (red.)
126.7	nema þú siálfom þér sér	B2 (red.)
126.10	þá er þér bqls beðit	C
127.3	nióta mundo, ef þú nemr	Af
127.4	þér muno góð, ef þú getr	B2 (red.)
127.7	ok gefat þínom fiáðom frið	B1
128.3	nióta mundo, ef þú nemr	Af
128.4	þér muno góð, ef þú getr	B2 (red.)
128.7	en lát þér at góðo getit	B1
129.3	nióta mundo, ef þú nemr	Af
129.4	þér muno góð, ef þú getr	B2 (red.)
129.9	síðr þik um heilli halir	B1
130.3	nióta mundo, ef þú nemr	Af
130.4	þér muno góð, ef þú getr	B2 (red.)
130.7	ok fá fognuð af	Db
130.10	leiðiz manngi gott, ef getr	B1
131.3	nióta mundo, ef þú nemr	Af
131.4	þér muno góð, ef þú getr	B2 (red.)
132.3	nióta mundo, ef þú nemr	Af
132.4	þér muno góð, ef þú getr	B2 (red.)
132.7	gest né ganganda	Da*
133.3	hvers þeir ro kyns, er koma	B1
133.6	né svá illr, at einugi dugi	(Swws Foot)
134.3	nióta mundo, ef þú nemr	Af
134.4	þér muno góð, ef þú getr	B2 (red.)
134.7	opt er gott, þat er gamlir kveða	Db*
134.10	þeim er hangir með hám	A-
134.11	ok skollir með skráð	A-
134.12	ok váfir með vilmqgom	Da*

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135.3	nióta mundo, ef þú nemr	Af
135.4	þér muno góð, ef þú getr	B2 (red.)
135.7	get þú váloðom vel	A-
136.3	ollom at upploki	Da*
136.6	þér læs hvers á lido	E
137.15	fold skal við flóði taka	Db*
137.3	nióta mundo, ef þú nemr	Af
137.4	þér muno góð, ef þú getr	B2 (red.)
138.3	nætr allar nío	E
138.6	siálfr siálfom mér	Db
138.9	hvers hann af rótom renn	B1
139.3	nýsta ek niðr	A-
139.6	fell ek aptr þaðan	(Single Alliteration)
140.3	Bolþors, Bestlo fœður	Db*
140.6	ausinn Óðrøri	Da*
141.3	ok vaxa ok vel hafaz	Da*
142.3	miok stóra stafi	B1
142.4	miok stinna stafi	B1
142.5	er fáði fimbulpulr	Db*
142.6	ok gœrðo ginnregin	Da*
142.7	ok reist hroptr rœgna*	Da
143.3	Dvalinn dvergom fyrir	Db
143.4	Ásviðr iotnom fyrir	Db*
143.5	er reist siálfr sumar	C
145.3	ey sér til gildis giöf	B1
146.3	ok mannskis mögr	B1
147.3	þeir er vilia lækna lifa	B1
148.3	hapt við mína heptmœgo	Da*
148.6	bítat þeim vápn né velir	B1
149.3	bœnd at boglimom	Da*
149.6	sprettr mér af fótom fiqturr	B1
149.7	en af hœndom hapt	B1
150.3	flein í folki vaða	Db*
150.6	ef ek hann siónom of sék	A-
151.3	á rótom rás viðar	Da*
151.6	þann eta mein heldr en mik	E

152.3	sal um sessmögum	Da*
152.6	þann kann ek galdr at gala	B1
153.3	nytsamlikt at nema	E
153.6	þat má ek bóta brátt	B1
154.3	at biarga fari míno á floti	E
154.6	ok svæfik allan sæ	Af
155.3	leika lopti á	Db*
155.6	sinna heim hama	C
155.7	sinna heim huga	C
156.3	leiða langvini	Da*
156.6	heilir hildar til	Db*
156.7	heilir hildar frá	Db*
156.8	koma þeir heilir hvaðan	B1
157.3	váfa virgilná	Db*
157.6	at sá gengr gumi	C
157.7	ok mælir við mik	A-
158.3	verpa vatni á	Db*
158.6	hnígra sá halr fyr hiðrom*	Db*
159.3	telia tíva fyrir	Db*
159.6	fár kann ósnotr svá	ww/Ss
160.3	dvergr, fyr Dellings durom*	Db*
160.6	hyggio Hroptatý	Db*
161.3	hafa geð allt ok gaman	E
161.6	ok sný ek hennar ǫllom sefa*	Db*
162.3	it manunga man	E
162.6	lengi vanr vera	C
162.7	þó sé þer góð, ef þú getr	B2 (red.)
162.8	nýt, ef þú nemr	A-
162.9	þorð, ef þú þiggr	A-
163.3	mey né mannz kono	Da*
163.6	þat fylgir lióða lokom	B1
163.9	eða min systir sé	B1
164.2	háva hǫllo í	(Off-verse)
164.3	allþorð ýta sonom	Db*
164.4	óþorð iðtna sonom	Db*
164.7	nióti, sá er nam	A-

164.8 heilir, þeirs hlýddo (Violates Bugge's Rule)

Vm)

1.3	at vitia Vafþrúðnis	Da*
1.6	við þann inn alsvinna iqtun	E
2.3	í gorrðom goða	B1
2.6	sem Vafþúðni vera	E
3.3	fiqlð ek reynda regin	B1
3.6	salakynni sé	E
4.3	heill þú á sinnom sér	B1
4.6	orðom mæla iqtun	Af
5.3	þess ins alsvinna iqtuns	E
5.6	inn gekk Yggr þegar	Da*
6.3	á þik siálfan siá	B1
6.6	eða alsviðr, iqtunn	A2k
7.3	verpomk orði á	B1
7.6	nema þú inn snotrari sér	A-
8.3	þyrstr til þinna sala	Db*
8.6	ok þinna andfanga, iqtunn	E
9.3	farðu í sess í sal	B1
9.6	gestr eða inn gamli þulr	Db*
10.3	mæli þarft, eða þegi	A-
10.6	hveim er við kaldrifiaðan kømr	E-long
11.3	þíns um freista frama	B1
11.6	dag of dróttmogo	Da*
12.3	dag um dróttmogo	Da*
12.6	ey lýsir mōn af mari	B1
13.3	þíns um freista frama	B1
13.6	nótt of nýt regin	Da*
14.3	nótt of nýt regin	Da*
14.6	þaðan kømr dōgg um dala	B1
15.3	þíns um freista frama	B1
15.6	grund ok með goðom	A-
16.3	grund ok með goðom	A-
16.6	verðrat íss á á	B1
17.3	þíns um freista frama	B1

17.6	Surtr ok in sváso goð	Db*
18.3	Surtr ok in sváso goð	Db*
18.6	sá er þeim völlr vitaðr	C
19.3	ok mælomk í sessi saman	B1
19.6	gestr um geðspeki	Da*
20.3	ok þú, Vafprúðnir, vitir	E
20.6	fyrst in fróði iqtunn	Db*
21.3	en ór beinom biqrg	B1
21.6	en ór sveita siór	B1
22.3	ok þú, Vafprúðnir, vitir	E
22.6	eða sól it sama	B1
23.3	ok svá Sólar it sama	A-
23.6	qldom at ártali	Da*
24.3	ok þú, Vafprúðnir, vitir	E
24.6	eða nótt með niðom	B1
25.3	en Nótt var Nqrvi borin	Db*
25.6	qldom at ártali	Da*
26.3	ok þú, Vafprúðnir, vitir	E
26.6	fyrst með fróð regin	Da*
27.3	en Svásuðr Sumars	A2k
28.3	ok þú, Vafprúðnir, vitir	E
28.6	yrði í árdaga	Da*
29.3	þá var Berglemir borinn	E
29.6	en Aurgelmir afi	E
30.3	ok þú, Vafprúðnir, vitir	E
30.6	fyrst in fróði iqtunn	Db*
31.3	svá óx, unz ór varð iqtunn*	Db*
31.6	því er þat æ allt til atalt*	E
32.3	ok þú, Vafprúðnir, vitir	E
32.6	er hann hafðit gýgiar gaman	B1
33.3	mey ok mōg saman	Da*
33.6	sexhōfðaðan son	E-long
34.3	ok þú, Vafprúðnir, vitir	E
34.6	þú ert alsviðr, iqtunn	A2k
35.3	þá var Bergelmir borinn	E
35.6	var á lúðr um lagiðr	B1

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36.3	ok þú, Vafþrúðnir, vitir	E
36.6	æ maðr hann siálfan um sér	A-
37.3	iqtunn í arnar ham	Db*
37.6	alla menn yfir	Eb
38.3	qll, Vafþrúðnir, vitir	E
38.8	ok varðat hann ásom alinn	B1
39.3	ok selo at gíslingo goðom	E
39.6	heim með vísom vqnom	B1
40.3	hoggvaz hverian dag	Db*
40.6	sitia meirr um sáttir saman*	Db*
41.3	hoggvaz hverian dag	Db*
41.6	sitia meirr um sáttir saman*	Db*
42.3	qll, Vafþrúðnir, vitir	E
42.6	segir þú it sannasta	Da*
42.7	inn alsvinni iqtunn	E
43.3	ek kann segia satt	B1
43.4	þvíat hvern hefi ek heim um komit	Db*
43.7	hinig deya ór helio halir*	Db*
44.3	fiqlð ek reynda regin	B1
44.6	fimbulvetr með firom	Eb*
45.3	í holti Hoddmimis	Da*
45.6	þaðan af aldir alaz	B1
46.3	fiqlð ek reynda regin	B1
46.6	þá er þessa hefir Fenrir farit	B1
47.3	áðr hana Fenrir fari	B1
47.6	móður brautir, mæ	Af
48.3	fiqlð ek reynda regin	B1
48.6	fróðgeðiaðar farar	E-long
49.3	meyia Mqgþrasis	Da*
49.6	þó þær með iqtnom alaz	B1
50.3	fiqlð ek reynda regin	B1
50.6	þá er slokna Surta logi	Db*
51.3	þá er slokna Surta logi	Db*
51.6	Vingnis at vígþroti	Da*
52.3	fiqlð ek reynda regin	B1
52.6	þá er riúfaz regin	B1

53.3	þess mun Víðarr vreaka	B1
53.6	vitnis vígi at	Db*
54.3	fiqlð ek reynda regin	B1
54.6	siálfr í eyra syni*	Db*
55.3	sagðir í eyra syni*	Db*
55.6	ok um ragna røk	B1
55.9	þú ert æ vísastr vera	B1

Grm)

1.3	gongomk firr, funi	C
1.6	brennomk feldr fyrir	C
2.3	svá at mér manngi mat ne bauð	Db*
3.3	Veratýr vera	A2k
3.6	betri giqlð geta	C
4.3	ásom ok álfom nær	Db*
4.6	unz um riúfaz regin	B1
5.3	sér um gqrva sali	Af
5.6	tívar at tannféi	Da*
6.3	silfri þokþo sali	Af
6.6	áss í árdaga	Da*
7.3	unnir yfir glymia	Da*
7.6	glqð ór gullnom kerom	Db*
8.3	Valhql víð of þrumir	Db*
8.6	vápndauða vera	E
9.3	salkynni at siá	E
9.6	bryniom um bekki strát	Db*
10.3	salkynni at siá	E
10.6	ok drúpir qrn yfir	C
11.3	sá inn ámatki iqtunn	E
11.6	fornar tóptir fqður	Af
12.3	sér um gqrva sali	Af
12.6	fæsta feiknstafi	Da*
13.3	kveða valda véom	B1
13.6	glaðr inn glóða miqð	Db*
14.3	sessu kostom í sal	Af
14.6	en hálfan Óðinn á	B1

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15.3	ok silfri þakþr it sama	Eb*
15.6	ok svæfir allar sakir*	Db*
16.3	sér um gǫrva sali	Af
16.6	hátimbroðom hǫrgi ræðr	(Two Long Feet)
17.3	Víðars land, viði	Eb
17.6	frókn, at hefna fǫður*	Db*
18.3	Sæhrímni soðinn	E
18.6	við hvat einheriar alaz	E
19.3	hróðigr Heriafǫðr	Db*
19.6	Óðinn æ lifir	Da*
20.3	iǫrmungrund yfir	Eb
20.6	þó síámk meirr um Muninn	B1
21.3	fiskr flóði í	Db
21.6	valglaumnir at vaða	E
22.3	heilög fyr helgom durom	Db*
22.6	hvé hon er í lás um lokin	B
23.3	svá hygg ek at Valhǫllo vera	E
23.6	þá er þeir fara at vitni at vega	B2 (red.)
24.3	svá hygg ek Bilskírni með bugom	E
24.6	míns veit ek mest magar*	Da*
25.3	ok bítr af Læraðs limom	B1
25.6	knáat sú veig vanaz	C
26.3	ok bítr af Læraðs limom	B1
26.6	þaðan eigo vǫtn ǫll vega	A2k
27.11	Gráð ok Gunnþorin	Da*
27.3	Svǫl ok Gunnþro*	A2b
27.4	Fiǫrm ok Fimbulþul	Db*
27.5	Rín ok Rennandi	Da*
27.6	Gipul ok Gǫpul	(Two Short Feet)
27.7	Gǫmul ok Geirvimul	Da*
27.8	þær hverfa um hodd goða	Da*
28.12	en falla til heliar heðan	B1
28.3	þriðia Þióðnuma	Da*
29.3	þær skal Þórr vaða	Da*
29.6	at aski Yggdrasils	Da*
29.9	heilög vǫtn hlóa	Eb

30.3	Silfrintoppr ok Sinir	Eb*
30.6	þeim ríða æsir íóm	B1
30.9	at aski Yggdrasils	Da*
31.3	undan aski Yggdrasils	Da*
31.6	þriðio mennzkir menn	B1
32.3	at aski Yggdrasils	Da*
32.6	ok segia Níðhoggvi niðr	E
33.3	gaghálsir gnaga	E
33.4	Dáinn ok Dvalinn	(Two Short Feet)
33.5	Duneyrr ok Dýraþrór	Db*
34.3	en þats of hyggi hverr ósviðra apa	E
34.6	Grábakr ok Grafvölluðr	Da*
34.9	neiðs kvisto má	E
35.3	meira en menn viti	Da*
35.6	skerðir Níðhoggr neðan	A2k
36.3	Skeggiöld ok Skögul	E
36.6	Göll ok Geirahöð	Db*
36.9	þær bera einheriom ǫl	E
37.3	svangir, sól draga	Da*
37.6	æsir ísarn kól	Db*
38.3	skiöldr, skínanda goði	(SswS Foot)
38.6	ef hann fellr í frá	B1
39.3	til varna-viðar	B1
39.6	sá skal fyr heiða brúði himins	Af
40.3	en ór sveita sær	B1
40.6	en ór hausi himinn	B1
41.3	miðgarð manna sonom	Db*
41.6	ský ǫll of sköpoð	E
42.3	hverr er tekr fyrstr á funa	B1
42.6	þá er hefia af hvera	B2 (red.)
43.3	Skíðblaðni at skapa	E
43.6	nýtom Niarðar bur	Db*
44.3	en Skíðblaðnir skipa	E
45.3	við þat skal vilbiörg vaka	A2k
45.6	Ægis bekki á	Af
45.7	Ægis drekko at	Af

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46.3	Herian ok Hiálmbæri	Da*
46.6	Helblindi ok Hár	E
47.3	Herteitr ok Hnikarr	E
48.7	síz ek með fólkom fór	B1
49.3	en Iálk at Ásmundar	Da*
49.6	Þrór þingom at	Db
49.7	Viðurr at vígom	(Violates Bugge's Rule)
49.10	Göndlir ok Hárbarðr með goðom	(Swws Foot)
50.3	ok dulða ek þann inn aldna iqtun	B1
50.6	orðinn einbani	Da*
52.3	of þik véla vinir	B1
52.6	allan í dreyra drifinn	B1
53.3	þitt veit ek líf um liðit	B1
53.6	nálgastu mik, ef þú megir	B2 (red.)
54.3	hétomk þundr fyr þat	B1
54.6	Gautr ok Iálkr með goðom	Eb*
54.9	allir af einom mér	Db*

Skm)

1.3	okkarn mála mög	B1
1.6	ofreiði afi	E
2.3	ef ek geng at mæla við mög	A-
2.6	ofreiði afi	E
3.3	ok ek vilia vita	B1
3.6	minn dróttinn, um daga	A-
4.3	mikinn móðtrega	Da
4.6	ok þeygi at mínom munom	B1
5.3	at þú mér, seggr, ne segir	B1
5.6	vel mættim tveir trúazk	C
6.3	mér tíða mey	E
6.6	allt lopt ok loqr	B1
7.3	ungom, í árdaga	Da*
7.6	at vit samt séim	C
8.3	vísan vafrloga	Da*
8.6	við iqtina ætt	B1
9.3	vísan vafrloga	Da*

9.6	ef sá er horskr, er hefir	B1
10.3	úrig fiöll yfir	Eb
10.4	þursa þjóð yfir	Da*
10.7	sá inn ámatki iqtunn	E
11.3	ok varðar alla vega*	Db*
11.6	fyr greyiom Gymis	B1
12.6	góðrar meylar Gymis	Af
13.3	hveim er fúss er fara	B1
13.6	ok allt líf um lagit	B1
14.3	ossom ronnóm í	Af
14.6	skiálfa garðar Gymis	B1
15.3	ió lætr til iarðar taka	Db*
16.3	ok drekka inn mæra miqð	B1
16.6	minn bróðurbani	B1
17.3	né víssa vana	B1
17.6	ór salkynni at sía	E
18.3	né víssa vana	B1
18.6	yðor salkynni at sía	E
19.3	þau mun ek þér, Gerðr, gefa	C
19.6	óleiðastan lifa	E
20.3	at manzkis munom	B1
20.6	byggjom bæði saman	Db*
21.3	með ungom Óðins syni	Db*
21.6	ina níundo hveria nótt	(Two Long Feet)
22.3	með ungom Óðins syni	Db*
22.6	at deila fé fǫður	C
23.3	er ek hefi í hendi hér	B1
23.6	nema þú mér sætt segir	C
24.3	at manzkis munom	B1
25.3	er ek hefi í hendi hér	B1
25.6	verðr þinn feigr faðir	C
26.3	mær, at mínóm munom*	Db*
26.6	síðan æva sé	Af
27.7	inn fráni ormr með firom	Eb*
28.7	gapi þú grindom frá	Db*
29.3	vaxi þér tár með trega	B1

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29.6	sváran súsbreka	Da*
29.7	ok tvennan trega	B1
30.3	iqtina gørdom í	Af
30.6	kranga kosta laus	Db*
30.7	kranga kosta vøn	Db*
30.10	ok leiða með tárom trega	B1
31.3	eð{a} verlaus vera	A2k
31.4	þik geð grípi	C
31.5	þitt morn morni	C
31.8	í qnn ofanverða	Da
32.3	gambabtein at geta	Eb*
32.4	gambantein ek gat	Eb*
33.3	þik skal Freyr fíask	C
33.6	gambanreiði goða	Af
34.7	manna glaum mani	Eb
34.8	manna nyt mani	Eb
35.3	fyr nágrindr neðan	A2k
35.6	geita hland gefi	Eb
35.9	mær, at þínom munom*	Db*
35.10	mær, at mínom munom*	Db*
36.7	ef gøraz þarfar þess	B1
37.3	fullom forns miaðar	Da*
37.6	unna vaningia vel	E
38.3	áðr ek ríða heim heðan	C
38.6	nenna Niarðar syni	Db*
39.3	lundr lognfara	Da
39.6	Gerðr unna gamans	E
40.3	ok þú stígir feti framarr	ww/Ss
40.6	þíns eða míns munar	C
41.3	lundr lognfara	Da
41.6	Gerðr unna gamans	E
42.3	hvé um þreyiak þriár	B1
42.6	en síá hálf hýnótt	(ww)S/Ss
Ls)		
1.3	feti gangir framarr	E

1.6	sigtíva synir	E
2.3	sigtíva synir	E
2.6	manngi er þér í vorði vinr	B1
3.3	á þat sumbl at siá	B1
3.6	ok blend ek þeim svá meini mið	B1
4.3	á þat sumbl at siá	B1
4.6	á þér muno þau þerra þat	B1
5.3	saryrðom sakaz	E
5.6	ef þú mælir til mart	A-
6.3	Loptr, um langan veg	Db*
6.6	mæran drykk miaðar	Eb
7.3	at þér mæla ne megoð	A-
7.6	eða heitið mik heðan	A-
8.3	æsir aldregi	D*
8.6	gambansumbl um geta	Eb*
9.3	blendom blóði saman	Db*
9.6	nema okkr væri báðom borit	B1
10.3	sitia sumbli at	Db*
10.6	Ægis hóllo í	Af
11.3	ok qll ginnheilög goð	E
11.6	Bragi, bekkíom á	Db
12.3	ok bótir þér svá baugi Bragi*	Db*
12.6	gremðu eigi goð at þér	Db*
13.3	beggja vanr, Bragi	Eb
13.6	þú ert við víg varastr	C
13.7	ok skiarrastr við skot	E
14.3	Ægis holl um kominn	(Two Long Feet)
14.6	lít ek þér þat fyr lygi	Eb*
15.3	Bragi, bekkskrautuðr	Da
15.6	hyggz vætr hvatr fyrir	Da*
16.3	ok allra óskmaga	Da*
16.6	Ægis hóllo í	Af
17.3	vergiarnasta vera	E
17.6	um þinn bróðurbana	B1
18.3	Ægis hóllo í	Af
18.6	vilkat ek, at it vreiðir vegiz*	Db*

APPENDIX C. LIÓÐAHÁTTTR FULL-VERSES

19.3	sáryrðom sakaz	E
19.6	ok hann fiorgvall fría	A2k
20.3	er þik glapþi at geði	B2 (red.)
20.6	ok þú lagðir lær yfir	Da*
21.3	er þú fær þér Gefion at gremi	A-
21.6	iafngorla sem ek	E
22.3	deila víg með verom	B1
22.6	inom slævorom, sigr	A-
23.3	inom slævorom, sigr	A-
23.6	kýr mólkandi ok kona	E-long
23.7	ok hefir þú þar bõrn borit	C
23.8	ok hugða ek þat args aðal	C
24.3	ok draptu á vétt sem vqlor	B1
24.6	ok hugða ek þat args aðal	C
25.3	segia seggiom frá	Db*
25.6	firriz æ forn røk firar	A2k
26.3	ok hefir æ vergiørn verit	A2k
26.6	báða í baðm um tekit	Db*
27.3	Baldri líkan bur	Af
27.6	ok væri þá at þér vreiðom vegit	B1
28.3	mína meinstafi	Da*
28.6	síðan Baldr at sölom	Eb*
29.3	lióta leiðstafi	Da*
29.6	þótt hon siálfgi segi	B1
30.3	era þér vamma vant	B1
30.6	hverr hefir þinn hór verit	Da*
31.3	ógott um gala	B1
31.6	hryggr munu heim fara	Da*
32.3	ok meini blandin miøk	Af
32.6	ok myndir þú þá, Freyia, frata	B1
33.3	hós eða hvárs	A-
33.6	ok hefir sá bõrn of borit	B1
34.3	gíls um sendr at goðom	Eb*
34.6	ok þér í munn migo	C
35.3	gísl um sendr at goðom	Eb*
35.6	ok þikkir sá ása iaðarr	B1

36.3	munka ek því leyna lengr	B1
36.6	ok era þó (v)óro verr	B1
37.3	ása gǫrðom í	Af
37.6	ok leysir ór hǫptom hvern	B1
38.3	bera tilt með tveim	B1
38.6	er þér sleit Fenrir frá	B1
39.3	bǫl er beggia þrá	Db*
39.6	bíða ragna rökkrs	B1
40.3	at hon átti mǫg við mér	B1
40.6	vanréttis, vesall	E
41.3	unz riúfaz regin	B1
41.6	bundinn bǫlvasmiðr	Db*
42.3	ok seldir þitt svá sverð*	A2b
42.6	veitsta þú þá, vesall, hvé þú vegr	(Swws Foot)
43.3	ok svá sællíkt setr	B1
43.6	ok lemða alla í liðo	Af
44.3	ok snapvíst snapir	A2k
44.6	ok und kvernom klaka	B1
45.3	goð ǫll ok gumar	E
45.6	allir ǫl saman	Da*
46.3	deila með mǫnnom mat	B1
46.6	þá er vógo verar	B1
47.3	hví ne letskaðu, Loki	B2 (red.)
47.6	er sína mælgí ne manat	A-
48.3	it lióta líf um lagit	Eb*
48.6	ok vaka vǫrðr goða	Da
49.3	leika lausom hala	Db*
49.6	gǫrnom binda goð	Af
50.3	gǫrnom binda goð	Af
50.6	þars vér á Þiaza þrifom	B1
51.3	þár er ér á Þiaza þrifoð	B1
51.6	þér æ kǫld ráð koma	A2k
52.3	þár er þú léts mér á beð þinn boðit	A2k
52.6	telia vǫmmin vór	B1
53.3	fullom forns miaðar	Da*
53.6	vammalausa vera	Af

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54.3	vör ok gröm at veri	Eb*
54.6	hór ok af Hlórriða	Da*
54.7	ok var þat sá inn lævisi Loki	E
55.3	heiman Hlórriða	Da*
55.6	goð qll ok guma	E
56.3	ok meini blandin miqk	Af
56.6	qll ertu, deigia, dritin	B1
57.3	Miqllnir, mál fyrnema	Da*-long
57.6	ok verðr þá þíno fiqrvi um farir	B2 (red.)
58.3	hví þrasir þú svá, Þórr	Eb
58.6	ok svelgr hann allan Sigföður	Da*
59.3	Miqllnir, mál fyrnema	Da*-long
59.6	síðan þik manngi sér	Db*
60.3	segia seggiom frá	Db*
60.6	ok þóttiska þú þá Þórr vera	Da*
61.3	Miqllnir, mál fyrnema	Da*-long
61.6	svá at þér brotnar beina hvat	Db*
62.3	þóttu hótir hamri mér	Db*
62.6	ok máttira þú þá nesti ná	B1
62.7	ok svaltstu þá hungri heill	B1
63.3	Miqllnir, mál fyrnema	Da*-long
63.6	fyr nágrindr neðan	A2k
64.3	þats mik hvatti hugr	B1
64.6	þvíat ek veit at þú vegr	B2 (red.)
65.3	síðan sumbl um gøra	Db*
65.6	leidi yfir logi	Eb
65.7	ok brenni þér á baki	Eb*

Alv)

1.3	heim í sinni snúaz	B1
1.6	heima skalat hvíld nema	Da*
2.3	vartu í nótt með ná	B1
2.6	ertattu til brúðar borinn	B1
3.3	á ek und steini stað	B1
3.6	bregði engi fōsto heiti fira	Af
4.3	flest um ráð sem faðir	Eb*

4.6	at sá einn er giöfer með goðom	B1
5.3	flióðs ins fagrglóa	Da*
5.6	hverr hefir þik baugom borit	B1
6.3	sonr em ek Síðgrana	Da*
6.6	ok þat giaf-orð geta	A2k
7.3	ok þat giaf-orð geta	A2k
7.6	þat it miallhvíta man	E
8.3	vísi gestr, of varit	Eb*
8.6	allt, þat er ek vil vita	C
9.3	vqromk, dvergr, at vitir	E
9.6	heimi hveriom í*	Af
10.3	kalla vega vanir	ww/Ss
10.6	kalla aur uppregin	Da
11.3	vqromk, dvergr, at vitir	E
11.6	heimi hveriom í*	Af
12.3	kalla vindofni vanir	E
12.6	dvergar driúpan sal	Db*
13.3	vqromk, dvergr, at vitir	E
13.6	heimi hveriom í*	Af
14.3	kalla hverfanda hvél helio í	(Two Long Feet)
14.6	kalla álfar ártala	Da*
15.3	vqromk, dvergr, at vitir	E
15.6	heimi hveriom í*	Af
16.3	kalla dvergar Dvalins leika	Da*
16.6	alskír ása synir	Db*
17.3	vqromk, dvergr, at vitir	E
17.6	heimi hveriom í*	Af
18.3	kalla vindflot vanir	A2k
18.6	kalla í helio hiálm huliz*	Da*
19.3	vqromk, dvergr, at vitir	E
19.6	heimi hveriom í*	Af
20.3	kalla gneggiuð ginnregin	Da*
20.6	kalla í helio hviðuð	B1
21.3	vqromk, dvergr, at vitir	E
21.6	heimi hveriom í*	Af
22.3	kalla vindslot vanir	A2k

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22.6	kalla dvergar dags vero	Da*
23.3	vǫromk, dvergr, at vitir	E
23.6	heimi hveriom í*	Af
24.3	kalla vág vanir	C
24.6	kalla dvergar diúpan mar	Db*
25.3	vǫromk, dvergr, at vitir	E
25.6	heimi hveriom í*	Af
26.3	kalla vág vanir	C
26.6	kalla í helio hrǫðuð	B1
27.3	vǫromk, dvergr, at vitir	E
27.6	heimi hveriom í*	Af
28.3	kalla hlíðþang halir	A2k
28.6	kalla vǫnd vanir	C
29.3	vǫromk, dvergr, at vitir	E
29.6	heimi hveriom í*	Af
30.3	kalla grímo ginnregin	Da*
30.6	kalla dvergar draumniqrun	Da*
31.3	vǫromk, dvergr, at vitir	E
31.6	heimi hveriom í*	Af
32.3	kalla vǫxt vanir	C
32.6	kalla í helio hnipinn	B1
33.3	vǫromk, dvergr, at vitir	E
33.6	heimi hveriom í*	Af
34.3	kalla veig vanir	C
34.6	kalla sumbl Suttungs synir*	Db
35.3	fleiri forna stafi	Db*
35.6	uppi ertu, dvergr, um dagaðr	B1
35.7	nú skínn sól í sali	B1

HHv)

12.7	kennið mér nafn konungs	Eb
13.3	vinna grand grami	C
13.6	knegot oss fálör fara	B1
14.3	hvé þik kalla konir	B1
14.6	beits stafni búa	E
15.3	miqk em ek gífrom gramastr	B1

15.6	ok kvalðar kveldriðor	Da*
16.3	nefndu þinn, fála, fðður	B1
16.6	ok vaxi þér á baðmi barr	B1
17.3	þann víska ek ámatkastan iqtun	E-long
17.6	unz hann Helgi hió	B1
18.3	ok látt í fiarðar mynni fyrir	Af
18.6	ef þér kómit í þverst þvari	C
19.3	síga lætr þú brýnn fyr brár	B1
19.6	ek drekþa Hlqðvarz sonom í hafi	(Ssšw Foot)
20.3	brettir sinn Hrímgreðr hala	A2k
20.6	þótt þú hafir reina rødd	B1
21.3	ok stíga ek á land af legi	B1
21.6	ok sveigia þinn hala, Hríngerðr	(ww)S/Ss
22.3	ok hittomk í vík Varins	C
22.6	ef þú mér í krummor kømr	B1
23.3	ok halda of vísa vqðð	B1
23.6	skass upp und skipi	E
24.3	er þú létst høggvinn Hata	B1
24.6	þá hefir hon bqlva bøtr	B1
25.3	sá býr í Polleyio þurs	E
25.6	sá er þér maligr maðr	B1
26.3	fyrri nótt með firom	Eb*
26.6	hér sté hon land af legi	B1
26.7	ok festi svá yðarn flota	Eb*
26.10	buðlungs mōnnom bana	Af
27.3	segðu gørr grami	C
27.6	eða fóro þær fleiri saman	Db*
28.3	hvít und hiálmi mæR	Db*
28.6	dogg í diúpa dali*	Db*
28.7	hagl í háva viðo	Db*
28.8	þaðan kømr með qldom ár	B1
28.9	allt var mér þat leitt, er ek leitk	B2 (red.)
29.3	Helgi helstqfom	Da*
29.6	ok siklings mōnnom it sama	Af
30.3	Atli til aldrлага	Da*
30.6	þars þú í steins líki stendr	E

APPENDIX C. LIÓÐAHÁTTTR FULL-VERSES

Rm)

1.3	kannat sér við víti varaz	B1
1.6	finn mér lindar loga	B1
2.3	margan hefi ek fors um farit	B1
2.6	at ek sylða í vatni vaða	B1
3.3	líf í lýða sölom	Db*
3.6	ef þeir hoggvaz orðom á	B1
4.3	þeir er Vaðgelmi vaða	E
4.6	of lengi leiða limar*	Db*
6.3	mikil míns hofuðs	Da
6.6	þat verður ykkarr beggia bani	B1
7.3	gaftattu af heilom hug	B1
7.6	ef ek vissi þat fár fyrir	C
8.3	niðia stríð um nept	Eb*
8.6	er þat er til hatrs hugat	C
9.3	svá lengi sem ek lifi	A-
9.6	ok haldið heim heðan	Da*
10.3	mart er, þat er þorð þéar	C
10.6	hefna hlýra harms*	Db*
12.3	arfs ok óðra hugar	Db*
12.6	kveðia Fáfni fiár	B1
19.3	goða heill ok guma	E
19.6	heill, at sverða svipon	B1
20.3	heill, at sverða svipon	B1
20.6	at hrottameiði hrafns	Af
21.3	ok ert á braut búinn	C
21.6	hróðrfúsa hali	E
22.3	úlfr und asklimom	Da*
22.6	ef þú sér þá fyrri fara	B1
24.3	þars þú at vígi verður	B1
24.6	ok vilia þik sáran siá	B1
25.3	ok at morni mettr	B1
25.6	illt er fyr heill at hrapa	B1

Fm)

1.3	hverra ertu manna mögr	B1
1.6	stöndomk til hiarta hiörr	B1
2.3	inn móðurlausi mögr	Af
2.6	[æ] geng ek einn saman	Da*
3.3	af hverio vartu undri alinn	B1
4.3	ok mik siálfan it sama	A-
4.6	er hefk þik vápnom vegit	B1
5.3	míno fiörvi at fara	B2 (red.)
5.6	aburnno skior a skeið	B1
6.3	ok minn inn hvassi hiorr	B1
6.6	ef í barnósko er blauðr	E
7.3	sæit maðr þik vreiðan vega	B1
7.6	æ kveða bandingia bifaz	E
8.3	mínim feðrmunom*	Da*
8.6	þú fannt, at ek lauss lifi	C
9.3	en ek þér satt eitt segik	A2k
9.6	þér verða þeir baugar at bana	A-
10.3	æ til ins eina dags	Db*
10.6	fara til heliar heðan	B1
11.3	ok ósvinnz apa	A2k
11.6	allt er feigs forað	C
12.3	ok vel mart vita	A2k
12.6	ok kíosa móðr frá mögom	B1
13.3	eigot þær ætt saman	Da*
13.6	sumar dótr Dvalins	C
14.3	ok vel mart vita	A2k
14.6	Surtr ok æsir saman	Af
15.3	geirom leika goð	Af
15.6	ok svima í móðo marir	B1
16.3	meðan ek um meniom lák	Db*
16.6	fannka ek (svá) marga mögo	B1
17.3	hvars skolo vreiðr vega	B1
17.6	at engi er einna hvatastr	Db*
18.3	miklom míns föður	Da*
19.3	ok gatst harðan hug	B1
19.6	at þann hiálm hafi	C

APPENDIX C. LIÓÐAHÁTTTR FULL-VERSES

20.3	ok ríð heim heðan	C
20.6	þér verða þeir baugar at bana	A-
21.3	þess er í lyngvi liggr	B1
21.6	þar er þik Hel hafi	C
22.3	han mun ok verða báðom at bana	A-
22.6	þitt varð nú meira megin	B1
23.3	ok Fáfni um farit	B2 (red.)
23.6	þik kveð ek óblauðastan alinn	E
24.3	sigtíva synir	E
24.4	hverr óblauðastr er alinn	E
24.7	annars brióstom í	Af
25.3	er þú þerrir Gram á grasi	B1
25.6	ok veld ek þó siálfr sumo	C
26.3	heilög fiql hinig	Eb
26.6	nema þú frýðir mér hvats hugar	C
27.3	ok halt Fáfnis hirta við funa	Af
27.6	ept þenna dreyra drykk	B1
28.3	minn inn hvassa hiqr	B1
28.6	meðan þú í lyngvi látt	B1
29.3	inn aldna iqtun	B1
29.6	ok þíns ins hvassa hiqrs	B1
30.3	hvars vreiðir skolo vega	B3 (red.)
30.6	með slævo sverði sigr	Af
31.3	í hildileik hafaz	Eb
31.6	hvat sem at hendi kœmr	Db*
34.3	fara til heliar heðan	B1
34.6	fiqlð því er und Fáfni lá	Db*
37.3	fiánda inn fólkskáa	Da*
37.6	kannat hann við slíko at siá	B2 (red.)
38.3	ok af baugom búa	B1
38.6	einvaldi vera	E
39.3	mitt banorð bera	A2k
39.6	fara til Heliar heðan	B1

Sd)

2.3	lqng ero lýða læ*	Db*
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2.6	bregða blunnstøfom	Da*
3.3	heill nótt ok nipt	B1
3.6	ok gefið sitiondom sigr	E
4.3	heil síá in fiqlnýta fold	E
4.6	ok læknishendr, meðan lifom	Eb*
6.3	ok rísta á hialti hiqrs	B1
6.6	ok nefna tysvar Tý	B1
7.3	vélit þikk í tryggð, ef þú trúr	B2 (red.)
7.6	ok merkia á nagli Nauð	B1
8.3	ok verpa lauki í lög	B2 (red.)
8.6	meinblandinn miqðr	E
9.3	ok leysa kind frá konom	B1
9.6	ok biðia þá dísir duga	B1
10.3	á sundi seglmqrom	Da*
10.6	ok leggja eld(i) í ár	B2 (red.)
10.9	þó kqmztu heill af hafi	B1
11.3	ok kunna sár at síá	B1
11.6	þess er lúti austr limar	Eb
12.3	heiptom gialdi harm	Af
12.6	þær um setr allar saman	E
12.9	í fulla dóma fara	Af
13.6	þær um hugði Hroptr	B1
13.9	ór hausi Heiðdraupnis	Da*
13.10	ok ór horni Hoddrofnis	Da*
14.3	hafði sér á hqfði hiálm*	Db*
14.4	þá mælti Míms hqfuð	Da*
14.5	fróðlikt it fyrsta orð	Db*
14.6	ok sagði sanna stafi	Db*
18.3	ok hverfðar við inn helga miqð	Db*
18.4	ok sendar á víða vego	B1
18.7	sumar með vísom vqnom	B1
18.8	sumar hafa menzkir menn	B1
19.3	ok allar qlrúnar	Da*
19.4	ok mætar meginrúnar	Da*
19.7	sér at heillom hafa	B1
19.8	nióttu, ef þú namt	A-

APPENDIX C. LIÓÐAHÁTTTR FULL-VERSES

19.9	unz riúfaz regin	B1
20.3	hvassa vápna hlynr	Af
20.6	qll ero mein of metin	B1
21.3	emka ek með bleyði borinn	B1
21.6	svá lengi, sem ek lifi	A-
22.3	vammalaus verir	Eb
22.6	þat kveða dauðom duga	B1
23.3	nema þann er saðr síe	C
23.6	armr er vára vargr	B1
24.3	deilit við heimska hali	B1
24.6	verri orð, en viti	Eb*
25.3	þá þikkir þú með bleyði borinn	B1
25.4	eða sonno sagðr	B1
25.5	hættir er heimiskviðr	Db*
25.6	nema sér góðan geti	B1
25.9	ok launa svá lýðom lygi*	Db*
26.3	vammafull, á vegi	Eb*
26.6	þótt þik nótt um nemi	B1
27.3	hvars skolo vreiðr vega	B1
27.6	þær er deyfa sverð ok sefa	B1
28.3	brúðir bekkíom á	Db*
28.6	teygiattu þér at kossi konor	B1
29.3	qlðrmál til qfug	E
29.6	margan stelr vín viti	C
30.3	morgom at móðtrega	Da*
30.6	fiolð er, þat er fira tregr	A2b
31.3	við hugfulla hali	E
31.6	inni auðstqfom	Da*
32.3	ok firraz flærðarstafi	Db*
32.6	né eggia ofgamans	Da*
33.3	hvars þú á foldo finnr	B1
33.6	eða ero vápndauðir verar	E
34.3	þvá hendr ok hqfuð	B1
34.6	ok biðia sælan sofa	B1
35.3	várom vargdropa	Da*
35.4	hvártstu ert bróður bani	B1

35.5	eða hafir þú feldan fǫður	B1
35.6	úlfr er í ungom syni	Db*
35.7	þótt hann sé gulli gladdr	B1
36.3	né harm in heldr	B1
36.6	þeim er skal fremstr með firom	B1
37.3	hvern veg at vegi	B1
37.6	roμμ ero róg of risin*	Db*

Gg)

1.3	vak ek þik dauðra dura	B1
1.6	til kumbldysiar koma	E
2.3	hverio ertu nú bǫlvi borinn	B1
2.6	ok ór lióðheimom liðin	E
3.3	sú er faðmaði minn fǫður	A-
3.6	móti Menglǫðo	Da*
4.3	langir ro manna munir	B1
4.6	ok skeikar þá skuld at skǫpom*	Db*
5.3	biarg þú, móðir, megi	B1
5.6	þikkiomk ek til ungr afi	C
6.3	þann gól Rindi Rani	B1
6.6	siálfr leið þú siálfan þik	Db*
7.3	vilja lauss á vegom	Eb*
7.6	er þú á sinnom sér	B1
8.3	falla at fiqlotom	Da*
8.6	ok þverri æ fyr þér	Eb*
9.3	gǫrvir á gálgegi	Da*
9.6	ok snúiz þeim til sátta sefi*	Db*
10.3	borinn at boglimom	Da*
10.6	ok stǫkkir þá láss af limom	B1
11.3	meira en menn viti	Da*
11.6	ok lé þér æ friðdriúgrar farar	E
12.3	frost á fialli há	Db*
12.6	ok haldiz (æ) lík at liðom	B1
13.3	nótt á niflvegi	Da*
13.6	kristin dauð kona	Eb
14.3	orðom skiptir iqtun	Af

APPENDIX C. LIÓÐAHÁTTTR FULL-VERSES

14.6	gnóga of gefit	A-
15.3	ok standit þér mein fyr munom	B1
15.6	meðan ek þér galdra gól	B1
16.3	ok lát þér í briósti búa	B1
16.6	meðan þú mín orð of mant	E

Fi

1.3	þursa þjóðar siqt	Db*
1.6	ok hvarflar um hættan loga	Db*
2.3	eða hvat viltu, vinlauss, vita	A2k
2.6	áttattu hér, verndar vanr, vero*	Eb
3.3	ok býðrat líðondom lqð	E
3.6	ok haltu heim heðan	C
4.3	þeygi em ek míns mildr matar	C
4.6	ok dríf þú nú vargr af vegi	B1
5.3	hvar hann getr svást at síá	B1
5.6	hér mynda ek øðli una	B1
6.3	eða hverra ertu manna mōgr	B1
6.6	þess var Fiqlkaldr faðir	A2k
7.3	ok ek vilia vita	B1
7.6	eign ok auðsölom	Da*
8.3	við Svafrþorins syni	E
8.6	eign ok auðsölom	Da*
9.3	ok ek vilia vita	B1
9.6	menn it meira forað	Db*
10.3	Sólblinda synir	E
10.6	er hana hefr frá hliði	B1
11.3	ok ek vilia vita	B1
11.6	menn it meira forað	Db*
12.3	ór Leirbrimis limom	E
12.6	æ meðan qld lifir	Da*
13.3	ok ek vilia vita	B1
14.3	ef þú vilt þat vita	B1
14.6	unz riúfaz regin	B1
15.3	ok ek vilia vita	B1
15.6	meðan sókndiarfir sofa	E

16.3	siðans þeim var varzla vitoð	B1
16.6	ok kǫmz þá vætr, ef þar kom	Eb*
17.3	ok ek vilia vita	B1
17.6	ok hlaupi inn, meðan þeir eta (?)	Eb*
18.3	ef þú vilt þat vita	B1
18.6	ok hlaupa inn, meðan þeir eta (?)	Eb*
19.3	ok ek vilia vita	B1
19.6	lǫnd ǫll limar	A2k
20.3	af hveriom rótom renn	B1
20.6	flærat hann eldr né iárn	B1
21.3	ok ek vilia vita	B1
21.6	er hann flær ei eldr né iárn	B1
22.3	fyr kelisiúkar konor	E
22.6	sá er hann með mǫnnom miqtuðr	B1
23.3	ok ek vilia vita	B1
23.6	allr hann við gull glóar	C
24.3	á meiðs kvistom Mima	E
24.6	Surtar Sinmǫro	Da*
25.3	ok ek vilia vita	B1
25.6	hníga á Heliar siqt	Db*
26.3	fyr nágrindr neðan	A2k
26.6	ok halda niarðlásar nío	E
27.3	ok ek vilia vita	B1
27.6	ok vill þann tein taka	C
28.3	ok vill þann tein taka	C
28.6	eiri aurglasis	Da*
29.3	ok ek vilia vita	B1
29.6	ok verðr því in fǫlva gýgr fegin	Eb
30.3	þann er liggr í Víðófnis vǫlom	E
30.6	vápn til vígs at liá	Db*
31.3	ok ek vilia vita	B1
31.6	vísom vafrrloga	Da*
32.3	á brodds oddi bifaz	E
32.6	frétt eina firar	E
33.3	ok ek vilia vita	B1
33.6	innan ásmaga	Da*

APPENDIX C. LIÓÐAHÁTTTR FULL-VERSES

34.3	Varr ok Vegdrasill	Da*
34.6	Liðskiálfr, Loki	A2k
35.3	ok ek vilía vita	B1
35.6	þjóðmæra, þruma	E
36.3	siúkom ok sárom gaman	Db*
36.6	ef þat klífr, kona	C
37.3	ok ek vilía vita	B1
37.6	sitia sáttar saman*	Db*
38.3	þriðia Þjóðvarta	Da*
38.6	Eir ok Aurboða	Da*
39.3	ok ek vilía vita	B1
39.6	ef gøraz þarfar þess	B1
40.3	á stallhelgom stað	E
40.6	hvern þær ór nauðom nema	B1
41.3	ok ek vilía vita	B1
41.6	svásom armi sofa	Af
42.3	svásom armi sofa	Af
42.6	at kván of kveðin	B1
43.3	hér máttu Svipdag sía	A2k
43.6	Mengloð mitt gaman	Da*
44.3	gakk þú á gest sía	Da*
44.6	hygg ek at Svipdagr sé	A2k
45.3	slíta síónir ór	Db*
45.6	møgr til minna sala	Db*
46.3	hvé þik héto hiú	B1
46.6	er ek var þér kván of kveðin	B1
47.3	þaðan rákomk vindkalda vego	E
47.6	þótt þat sé við lōst lagit	C
48.3	fylgia skal kveðio koss	B1
48.6	hverrs hefir við annan ást	B1
49.3	beið ek þín dōgr ok daga	B1
49.6	at þú ert kominn, møgr, til minna sala	Db*
50.3	en þú til míns munar	C
50.6	ævi ok aldri saman	Db*

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