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Language change and metrics —

versification in the Middle High German and Early New High German Nibelungen tradition¹

• For Iván Horváth on the occasion of his 60th birthday

Abstract

This paper suggests a direct relation between metrics and language rhythm on the basis of the evolution of meters. It focuses on the manifestation of language rhythm in German epics. This major type of folk verse guarantees a long-term evaluation process by both collective authorship and the audience. The consequences of language change for metrical systems are exemplified by the metrical change from the Middle High German Nibelungenlied (13th century) to the Early New High German Lied vom huernen Seyfrid (16th century). In addition, Hans Sachs' tragedy Der huernen Seufrid (1557) exemplifies the Knittelvers, which evolved from the Germanic tradition. The prosodic change from Middle High German accent-based quantity to New High German quantity-insensitivity is reflected in the adaptation of the old metrical system to the new prosodic basis. Thus changes in metrical patterns provide evidence for the prosodic foundation of metrical systems.

1. The interface between phonological and metrical systems

Meters are more than just a condition the poet has to meet. There has been extensive debate beginning in ancient times on the relationship between metrical and prosodic systems. Opinions with respect to this relationship range from no interaction at all (e.g. Magnusson/Ryder 1970) to a preference for natural versification (e.g. Miller 1902, Allen 1973). Natural versification means that meters, which are not forced from the outside upon the speech community but developed over long periods of time, only stylise linguistic properties which are part of everyday language (Vennemann 1995). But how does adaptation work?

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This paper explores to what extent natural meters are the outcome of a conscious decision by poets or performers. It is argued that the evolution of meters is the test case for the question of the connection between the prosodic and the metrical system. The evolution of a new meter is an instance of "phonologie créative" (cf. Horváth 1985: 213). The phonological system is made use of whenever a new meter is created; it is the limiting force which constrains the range of choices in a language-specific way.

The restructuring of a metrical system results either from an extensive integration of borrowed meters or from language-internal change. In both cases the speech community alters the traditional forms in order to meet the new requirements. But while in the former case the prosodic system remains unaffected, in the latter case it is the prosodic system itself which transforms the metrical patterns.

For native patterns, the default assumption is that the resulting meter conforms to the new linguistic situation in a natural way. If there is a direct relation between prosodic and metrical systems, a change in the prosodic system exerts an influence on the inventory of metrical feet. It is to be expected that native patterns are re-organized when the old metrical patterns no longer have a foundation in everyday speech. Since oral poetry is likely to show an immediate effect, this analysis concentrates on folk verse.

2. Folk verse as data for rhythm in sentences

Folk verse provides exceptional data in terms of research in prosody, since it offers a representative amount of performance data which reflect linguistic competence. Folk verse meters are "long-term studies" of rhythm, because they emerged over centuries from a collective consensus of what constitutes language rhythm.

Collective authorship contributes to the quality of folk verse as reliable data. To become part of the folk verse tradition, the audience has to accept a poem's organisation, to spontaneously understand it, to be able to re-tell and sometimes even to memorize it. Therefore, the stylisation of everyday speech is the default in oral poetry². This means, in turn, that linguistic well-formedness conditions have to be met by poets. These well-formedness conditions can be analysed on the basis of the documents which have been handed down through the centuries. Structures which do not conform to everyday speech have to be accounted for.

What we find in folk verse is often a conglomerate of productive and no longer productive rhythmical patterns. In order to study the interface between the prosodic and the metrical system, it is important to distinguish between natural and "unnatural" rhythmical patterns and to place them within their respective historical contexts. The

² There are well-known exceptions to this generalisation, e.g. in Homer's formulaic diction (e.g. Parry 1971). However, it is self-evident that productivity is very limited for those frozen formulae.

well-formedness conditions which are analysed here concern language-specific rhythm in sentences. For centuries, this data has been provided by poets and stylised in the now established canon of meters and genres. The diachronic dimension reveals a process of adaptation for German poetry from one prosodic system to the subsequent one.

The process of re-organisation surfaces in two strategies. The first strategy attempts a close imitation of the old patterns; however, there are systematic "errors" in these metrical solutions. The second strategy results in a complete restructuring of the metrical pattern according to the new linguistic situation. The Early New High German continuations of the Nibelungen material exemplify these two strategies.

3. Language change and metrics: transferring metrical patterns from one prosodic system to another

It follows from the assumption of a direct relation between prosodic and metrical systems that language change, in the long run, causes metrical change. In this scenario, meters are subject to a prosodic evaluation process which "optimises" meters according to the new prosodic basis.

The approach implies the existence of prosodically "wrong" metrical solutions. To give an example, a metrical system which could not be integrated into Standard German was the Classical Latin system, since it relied on syllable-based quantity (cf. Noel Aziz Hanna 2006). In the metrical system of quantity-insensitive Standard German, syllable quantity is a prosodically "wrong" solution, since it can neither be uniformly applied by poets nor perceived by the audience. A similar transfer problem occurred from Middle High German to Early New High German.

3.1. The prosodic foundations of the Middle High German Nibelungenlied

The Nibelungen tradition serves to illustrate language-internal metrical re-organisation. The Middle High German *Nibelungenlied* is based on Germanic prosody, i.e. accent-based quantity.

3.1.1. MIDDLE HIGH GERMAN PROSODY

Unlike Modern Standard German, Middle High German had a phonologically distinctive quantity contrast. Stressed syllables ending in a long vowel, a diphthong, or a consonant are heavy (H) and form a minimal foot on their own, all other syllables are light (L). The definition also comprises unstressed syllables of every syllable structure: In contrast to the syllable-based quantity system of Latin, all unstressed syllables are light in the accent-based quantity system of Germanic (cf. Dresher/Lahiri 1991, Vennemann 1995).

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A minimal foot (F_{min}) conforms to a stressed heavy syllable $(|\dot{x}_{H}|, e.g. MHG | trat 405.1.2)$. It can also be the result of resolution, i.e. a combination of a stressed short syllable and another unstressed syllable $(|\dot{x}_{L}x|, e.g. MHG | re.den 405.2.2)$. Extended feet (F_{ext}) contain an additional unstressed syllable (MHG $|\dot{x}_{H}x|, e.g. | sold an 405.3.2, or | \dot{x}_{L}xx|, e.g. | ku.ni.ge 405.1.2)$. Table 1 gives an overview of prosodic feet in Middle High German.

			F _{min}	F	ext	
Stress position		left		left		
	±stress	stress-based		stress-based		
	±quantity	quantity		quantity		
	-resolution	1 stressed heavy syllable:		1 stressed heavy syllable +		
		lx _{́H} l		1 unstressed syllable:		
Foot				lx _H xl		
	+resolution	1 stressed light syllable +		1 stressed light	1 stressed light syllable +	
		1 unstressed syllable (resolution)		2 unstressed syl	lables (resolution	
				+ 1 unstressed s	yllable)	
		$ \mathbf{x}_{L}\mathbf{x} $		$ \mathbf{x}_{L}\mathbf{x}\mathbf{x} $		
	-resolution	'CŬC	sol 'shall'	¹ C ³ VC.CVCC	'angest 'fear'	
		'CV	dâ 'there'	'CV.CVC	'sînen 'his'	
Examples		'CVC	lôn 'reward'	'CCVC.CV	'vrâgte 'asked'	
	+resolution	'CŇ.CVC	'ha.ben 'have'	'CŇ.CV.CV	'degene 'hero'	

TABLE 1. • Middle High German feet⁴.

3.1.2. The prosodic organisation of the Middle High German

Nibelungenlied

This prosodic system is reflected in Middle High German metrics.⁵ There are three types of metrical feet: minimal feet (F_{min}), extended feet (F_{ext}), and parasitic feet (F_{par}). Minimal and extended metrical feet are equivalent to minimal and extended prosodic feet. The third type, which is restricted to the metrical system, is the parasitic foot. Parasitic feet are filled by reduction syllables and are limited to the absolute half-line ending of the on-verse (e.g. (*snel.*)*le* 405.1.1). They form metra on their own despite their light weight (for a discussion of parasitic feet in terms of naturalness cf. Noel Aziz Hanna/Lindner/Dufter 2003)⁶.

³ Glottal stop.

⁴ H: heavy; L: light; C: consonant; V: vowel; V: short vowel; V: long vowel; "!": stress; ".": syllable boundary; "C" ambisyllabic consonant.

⁵ The Middle High German literary period lasts from the 11th to the 14th century.

⁶ The last foot of the on-verse can also be filled by a minimal foot, though this is less frequent. The parallel lines gives a) ending in a minimal foot and b) ending in a parasitic foot:

a) Do | sprach div | clagende | kvni|gin: | "wa sint die vriunde min, (Nibelungenlied A: 1222, 1)

b) Do | sprach div | chlagende | vro|<u>we:</u> | "wa sint di vrivnde min, (Nibelungenlied B: 1279)

^{[&}quot;Then the moanful queen (A) /noblewoman (B) said: "Where are my friends, [...]'.]

The Nibelungenstrophe consists of tetrametric half-lines. Each metron is filled by a foot (cf. Table 2).

Nibelungenstrophe			
on-verse	off-verse		
(a) F F F F (a) F F F F (a) F F F F (a) F F F F par/min (a) F F F F par/min	$\begin{array}{l} (a) F F F \varnothing \\ (a) F F F \varnothing \\ (a) F F F \varnothing \\ (a) F F F F \end{array}$		

 TABLE 2. • The Nibelungenstrophe.

(1) is an illustration of the pattern, a strophe from the *Nibelungenlied* with each halfline consisting of four metra and the characteristic parasitic foot in on-verses:

(1) Strophe of Ms. A: VII, 4057

Sîlfrit der snellle	zvo deme kvnige trat Ø .		
' <u> </u>	a ' \cup x ' \cup x x ' $-$ Ø		
F _{min} F _{ext} F _{ext} F _{par}	$_{a}$ F_{min} F_{ext} F_{min} \emptyset		
allen sînen willlen	er in reden bat Ø		
' <u> </u>	$-x \lor x - \varnothing$		
F _{ext} F _{ext} F _{min} F _{par}	F_{ext} F_{min} F_{min} \emptyset		
gen der kvnilginlne;	er sold ân angest sîn Ø .		
'— x '∪ x '— 'p	a ' x ' x ' Ø		
F _{ext} F _{min} F _{min} F _{par}	$_{a}$ F_{ext} F_{ext} F_{min} \emptyset		
"ich sol dich wol belhuelten	vor ir mit den listen mîn ."		
a ' <u> </u>	a ' <u> </u>		
a F _{ext} F _{ext} F _{min} F _{par}	a F _{min} F _{ext} F _{ext} F _{min}		

['Siegfried the valiant / stepped unto the king,

And bade him speak out freely / his thoughts upon this thing Unto the queen so wayward, / he might have fearless heart. "For to well protect thee / from her do I know an art."; Translation by Needler 1904]

The connection between the metrical pattern and its prosodic foundation is obvious. Neither syllable-counting nor syllable-based quantity can account for the pattern.

⁷ $a = anacrusis; \cup = short syllable, stressed; -= long syllable, stressed; x = syllable with irrelevant syllable weight, unstressed; p = parasitic foot; Ø = metrical rest, |...| = metron.$

The variable number of syllables in each half-line (e.g. 5 syllables in 405.1.1; 7 syllables in 405.4.1) proves that syllable-counting is not the organising principle in the *Nibelungen-lied*. The epic is also not built on syllable-based quantity, because the syllable structure of unstressed syllables (x) is metrically irrelevant – all unstressed syllables are light (e.g. an 405.3.2 = long vowel, closed syllable, unstressed; (*sî.)nen* 405.2.1 = reduced syllable, unstressed). Nevertheless, the *Nibelungenlied* is based on quantity; otherwise, a stressed syllable could not form a well-formed foot on its own (e.g. |Si-| 405.1.1; |bat| 405.2.2). Since the distinction between heavy and short syllables is only relevant if the syllable is stressed, the *Nibelungenlied* is organised according to accent-based quantity just like the Middle High German prosodic system.

There is no New High German meter which conforms to the Middle High German system. The reason for this is prosodic change, vowel quantity having collapsed in the 14th century.

3.2. Prosodic change in the history of German

The prosodic change which altered the rhythmic system of German by the late 14th century was the collapse of quantity. The phonological quantity contrast was replaced by a different phonological contrast, i.e. syllable cut (cf. Sievers 1901, Vennemann 1991). The structure of a stressed syllable ending in a short vowel was abolished. The formerly short syllables were either lengthened (Open Syllable Lengthening, e.g. MHG *jugent* ['jU. g \exists nt] 'youth' > NHG *Jugend* ['ju.g \exists nt]), or they were closed by ambisyllabic consonants (e.g. MHG *gate* ['g \check{a} .t \exists] 'spouse'> NHG *Gatte* ['g \check{a} : \exists]).

The prosodic change destroyed the foundations of the Middle High German metrical system. Since the change affected all stressed light syllables, the metrical system became opaque. Middle High German resolution was no longer understood (cf. Vennemann 1995). Also, there was no difference between long and short syllables ending in a vowel any more, which is why the well-formed monosyllabic minimal foot became incomprehensible (cf. section 3.3.1. below). Table 3 gives the inventory of New High German feet.

Minimal and extended feet are defined in terms of the New High German nonquantifying system. A minimal foot consists of a stressed syllable of any syllable weight and an unstressed syllable of any syllable weight (trochee, $|\dot{x}x|$). It can be extended by another unstressed syllable of any syllable weight (dactyl, $|\dot{x}xx|$). The Middle High German and the New High German system have accent-based feet in common, with feet always being left-headed. However, while the Middle High German foot is quantity-based (i.e. it contains at least two and maximally three moras), the New High German foot is based on the number of syllables (i.e. it contains at least two and maximally three syllables). Therefore, neither the number of syllables or moras in a foot nor the number of syllables in a line is transferable from one metrical system to the other.

		Fmin (= trochee)	Fext (= dactyl)	
Stress position		left	left	
	±stress	stress-based	stress-based	
	±quantity	quantity-insensitive	quantity-insensitive	
Foot	-resolution	1 stressed syllable + 1 unstressed	1 stressed syllable + 2	
root		syllable :	unstressed syllables :	
		lxxl	lxxxl	
	+resolution	-	-	
	-resolution	'CVĊVC	'CVV.CV.CVC	
		'sollen 'shall'	<i>weiteres</i> 'another'	
		'CV.CVC	'CVCC.CV.CV	
Examples		<i>haben</i> 'have'	'kostbare 'precious'	
_		'CCVC.CV	['] C ⁸ VĊVC.C ⁹ VCC	
		<i>fragte</i> 'asked'	<i>¹essen und</i> 'food and'	
	+resolution	-	-	

TABLE 3. • New High German feet.

Because of this complex situation, there have been various experiments by poets on the ideal metrical system following the breakdown of the old Middle High German prosodic system.

3.3. Adaptation: the Early New High German continuations of the Nibelungen tradition¹⁰

The Early New High German continuations of the Nibelungen tradition show alternative treatments of the dilemma. They also document which metrical features remained transparent because these features were retained and used in a productive way. There were two options for adapting the Middle High German meters to the new linguistic conditions:

1. The speech community aims at preserving the meter and, in pursuing this plan, violates prosodic well-formedness (e.g. *Lied vom huernen Seyfrid*, Hildebrandston).

2. The speech community changes the metrical system according to prosodic wellformedness (e.g. Hans Sachs, *Der huernen Seufrid*, Knittelvers).

In the conservative solution, the old patterns were imitated on the background of an unintelligible system; in the progressive solution, just the features which accorded to the actual prosodic system were reproduced.

⁸ Glottal stop.

⁹ Glottal stop.

¹⁰ The Early New High German literary period lasts from the 15th to the 16th century. The Early New High German prosodic system does not differ from the New High German one, and is therefore referred to as "New High German".

3.3.1. The preservation of an unintelligible meter: the Lied vom huernen Seyfrid (around 1540)

The *Lied vom huernen Seyfrid* ('Song of the horn-skinned Seyfrid') is the last epic version of the Nibelungen material. Some of its old motifs like Seyfrid's youth and Kriemhild's abolition by a dragon do not occur in the *Nibelungenlied* (cf. Heinzle 1994: 55-57). The *Lied vom huernen Seyfrid* is composed in the Hildebrandston, which differs mainly from the Nibelungenstrophe in that the fourth off-verse has a rest like the three preceding half-lines.

There is ample evidence for a "correct" rhythmic adjustment of the medieval pattern. $(2^{||})$ gives half-lines from the *Lied vom huernen Seyfrid* which would also be correct in the Middle High German metrical system, because the penultimate foot contains two moras in the Middle High German prosodic system (examples in (2) and (3) from Philipp 1975: 117):

(2)	Metrical in the MHG prosodic system:	
	1,1 Es saß im Nider <u>lan</u> de	
	Early New High German scansion:	a 'xx 'xx 'x 'p
	Hypothetical Middle High German scansion:	$a \parallel x \parallel \cup x \parallel = \parallel p \parallel$
	51,3 Kriemhilt heyst die Kueni gin	
	Early New High German scansion:	'xx 'xx 'xx 'x
	Hypothetical Middle High German scansion:	$ -x -x \cup x - $

It is obvious that the tetrametric organisation was understood by the new generation of poets. They also recognized the special metrical characteristics at half-line endings and translated them in terms of their own prosodic system.

The transfer was unproblematic at the endings of off-verses, with rests being taken into account. However, the poets did not understand the Middle High German quantity requirement for the penultimate foot of the on-verse. Middle High German on-verse endings with their frequent pattern of a minimal monosyllabic foot being followed by a parasitic one were imitated by the Early New High German poets in a systematic way. As (3) shows, the choice of the correct material for the penultimate foot was not guided by quantity.

(3)	Unmetrical in the MHG prosodic system:	
	4,5 Do kam er zu eym Schmi de	
	Early New High German scansion:	🗸 a l 'xx l'xx l'x l'pl
	Hypothetical Middle High German scansion:	* a '− x '− x '⊻ 'p

7,5 Er thet jn bald er schla gen	
Early New High German scansion:	✓ *a 'xx 'xx 'x 'p
Hypothetical Middle High German scansion:	* a '_ x ' _ x '⊻ 'p

A short syllable does not form a foot in Middle High German. The examples in (3) testify that the category of the short syllable was not available in Early New High German (see section 3.2 above for Open Syllable Lengthening). Middle High German prosody was no longer understood, but was still imitated. Poets could not distinguish between metrical and unmetrical lines according to the Middle High German rules. To them, the requirement was not to create a well-formed penultimate foot. In New High German, a monosyllable can never form a foot. The speech community interpreted the old metrical rule as a license for stress clash between the penultimate and the ultimate foot. As a result, there is metrical re-analysis according to New High German prosody despite the wish to preserve the Middle High German meter.

In the Early New High German *Lied vom huernen Seyfrid*, an imitation of the metrical pattern is attempted, but the epic clearly does not share the prosodic characteristics of Middle High German. The last epic version of the Nibelungen tradition gets as close to the medieval pattern as possible. The employment of stress clash instead of well-formed penultimate feet for on-verse endings is an effect of language change. Prosodic change is reflected in metrical patterns and capable of converting their shape.

3.3.2. The creation of a new meter: Evidence for rhythmic adjustments in Hans Sachs' Der huernen Seufrid (1557)

The new rhythm of Early New High German is not only apparent in the "errors" of metrically conservative poetry but also in newly established meters. The prediction, according to natural versification, is that the new patterns are adjusted to the new prosodic system.

Table 4 is a comparison of the Middle High German and the New High German versification, exemplified by tetrametric lines (excluding lines with rests and parasitic feet).

		Middle High German		New High German	
		F _{min}	Fext	F _{min} (= trochee)	F _{ext} (= dactyl)
Stress position		left	left	left	left
Foot	±stress	stress-based	stress-based	stress-based	stress-based
	±quantity	quantity	quantity	quantity- insensitive	quantity- insensitive
	±resolution	resolution	resolution	-	-
Number of syllables/foot		1-2	2-3	2	3
Number of moras/foot		2 moras	3 moras	_	-
Number of syllables/half-line		4-12	4-12	8-12	8-12

TABLE 4. • Comparison of Middle High German and New High German feet in tetrametric lines.

As a result of the differences, the highly prestigious Middle High German poetry was unintelligible to Early New High German poets. Therefore, the speech community created a new system.

When Hans Sachs' tragedy *Der huernen Seufrid* ("The horn-skinned Seufrid') was published, the default metrical form was the Knittelvers. It is very likely that Hans Sachs knew the *Lied vom huernen Seyfrid* and also the *Nibelungenlied* (e.g. Classen 2006: 96-97, Philipp 1975: 7-9). Still he did not choose to imitate either of the metrical patterns closely, as is illustrated in the following lines from *Der huernen Seufrid* (3, 363-371):

(4)	Scansion
Der trach spricht:	(New High German prosody):
Edle jungfraw, gehabt euch wol, Kein leidt euch widerfaren sol, Denn das ir müst gefangen sein Ein kurzte zeit auff diesem stein. Doch wil ich euch vor allen dingen Gnug zu essen und trincken bringen. Biß das verloffen sindt fünff jar Und ein tag. []	'xxl'xxxl'xxl'x x 'xx 'xx 'xx 'x x 'xx 'xx 'xx 'x x 'xx 'x

[The dragon says: Noble maiden, peace be to you, no harm shall be done to you – other than that you have to remain captive here on this rock for a short while. But first and foremost I will provide sufficient food and drink for you. Until five years and a day have passed.]

Just like the metrical patterns of the Nibelungenlied and the Lied vom huernen Seyfrid, the Knittelvers has four metra. Another shared feature is that the Knittelvers has leftheaded feet, which has been a prerequisite of German prosody from its beginnings.

Despite these commonalities, Knittelvers depicts the difference between Middle High German poetry and New High German poetry. Metra, as a default, are filled with trochees or dactyls¹¹. Quantity-insensitive trochees and dactyls can occur in any position in the Knittelvers and, in this way, stylise everyday speech.

Early new High German dactyls contrast with Middle High German extended feet. Like Middle High German monosyllabic feet, they were not transferable from one system to the other. For instance, the dactyl *essen und* (|'xxx|, 369) 'eat and' in (4) would contain too many moras in the Middle High German system. MHG '*ezzen* itself forms an extended foot, because it consists of a heavy closed syllable and an additional unstressed syllable.

Knittelvers stands in the Germanic tradition. Yet it is a new creation with prosody as an organising force. The speech community reacted to language change by adapting metrical patterns to the new prosodic system which invalidated Middle High German meters. The result of this process is the evolution of an entirely new metrical system, which conforms to the new rhythm of language. The evolution of the Knittelvers provides evidence for a direct relationship between meters and language rhythm.

Summary: "phonologie créative" in Middle High German and Early New High German versification

Literary history documents that the relationship between rhythm and meters is not coincidental. In German literary history, metrical patterns which did not fit everyday rhythm became re-interpreted; meters were adapted to language rhythm and thus manifest the speech community's competence about rhythm. Meters are abstract manifestations of speech rhythm, which is reflected by accent-based quantity in the meter of the Middle High German *Nibelungenlied* and by quantity-insensitive prosody in the Hans Sachs' Early New High German tragedy *Der huernen Seufrid*. In some meters, obsolete prosody is 'reproduced' and reinterpreted according to the new prosodic system, as can be inferred from imitations of monosyllabic minimal feet in the *Lied vom huernen Seyfrid*.

When the New High German prosodic system became effective after the breakdown of vowel quantity, the poets no longer understood the rules of Middle High German poetry. The Middle High German relation between the metrical foot, the line and the prosodic system was damaged. Since the breakdown of accent-based syllable quan-

^{11 (4)} shows that endings and subsequent beginnings of lines are often rhythmically grouped together.

tity, German meters have quantity-insensitive trochaic and dactylic feet. The evolution of the New High German metrical system is only explicable under the condition of a direct relation between the prosodic and the metrical system. Metrical change in the poetry of the Nibelungen tradition is in accord with natural versification – creativity in forming new meters is limited by the prosodic system.

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