



# The Malberg Glosses

## A Phonological Analysis of Frankish

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2018

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Front photo: part of folio 179r of MS Latin 4404 or A1.

*Franco gefaz mit den fini  
Vili verre nidir bi Rini,  
Da worhtin fi dü mit vrowedin  
eini lüzzele Troie,  
Den bach hizin fi Sante  
Na demi wazzere in iri lante,  
Den Rin havitin fi vure diz meri,  
Dannin wuhfin fint Vreinkifchi heri.*

‘Francus and his men  
Settled by the distant Rhine.  
There they took delight in building  
A little Troy.  
They named the stream Sante  
After the river in their own land;  
The Rhine served them as the sea.  
This was the origin of the Franks.’

Annolied, late eleventh century, verses 389-396  
(Graeme Dunphy, 2003: 108-109)

## *Index*

List of Abbreviations.....	v
Introduction: the Malberg Glosses .....	1
The Franks .....	1
The Manuscripts of the Lex Salica .....	2
The Research on the Malberg Glosses.....	4
The Aim of this Thesis.....	5
Methodological Framework.....	6
The Spelling of the Malberg Glosses .....	6
Linguistic Variation in the Malberg Glosses.....	8
The Practice of Glossing .....	9
The Phonology of the Malberg Glosses .....	11
The Consonants.....	11
PGm. <i>*p</i> .....	11
PGm. <i>*b</i> .....	11
PGm. <i>*t</i> .....	14
PGm. <i>*d</i> .....	17
PGm. <i>*k</i> .....	19
PGm. <i>*g</i> .....	20
PGm. <i>*f</i> .....	23
PGm. <i>*p̥</i> .....	24
PGm. <i>*s</i> .....	27
PGm. <i>*z</i> .....	28
PGm. <i>*h</i> .....	29
PGm. <i>*m</i> .....	32
PGm. <i>*n</i> .....	33
PGm. <i>*r</i> .....	34
PGm. <i>*l</i> .....	34
PGm. <i>*j</i> .....	35
PGm. <i>*w</i> .....	35
The Vowels.....	36
PGm. <i>*i</i> .....	36

PGm. *ī.....	36
PGm. *u.....	36
PGm. *ū.....	38
PGm. *e.....	38
PGm. *ē.....	38
PGm. *ō.....	39
PGm. *a.....	39
PGm. *eu.....	40
PGm. *ai.....	41
PGm. *au.....	41
The Phonological Developments .....	42
The Spelling Mistakes in the Malberg Glosses .....	43
The Position of Frankish within West-Germanic.....	45
The Partial Merger of PGm. *b and *f into Frankish /f/ .....	45
The Frankish Assimilations .....	45
The Development of the PGm. Cluster *sk- .....	47
The Palatalisation of PGm. *g .....	48
The Merger of PGm. *g and *h into Frankish /ch/ .....	49
The Merger of PGm. *þ and *d .....	50
The Development of PGm. *VNF.....	51
Vowel Changes in the Malberg Glosses .....	52
Lowering of PGm. *i.....	52
Lowering of PGm. *u.....	52
Raising of PGm. *e .....	54
I-umlaut of PGm. *a.....	54
The Development of PGm. *jan to Frankish <in> .....	55
Summary and Conclusions .....	57
Bibliography.....	59

## *List of Abbreviations*

Du.	Dutch
EMDu.	Early Middle Dutch
Fr.	Frankish
G	German
Lux.	Luxembourgish
MDu.	Middle Dutch
ME	Middle English
MHG	Middle High German
ODu.	Old Dutch
OE	Old English
OFri.	Old Frisian
OHG	Old High German
OS	Old Saxon
PGm.	Proto-Germanic
PIE	Proto-Indo-European
WGmc.	West-Germanic

The sign <\*> is not only used for unattested forms, but also for forms that are attested with spelling mistakes, for example for *\*fitther* ‘four’ that is attested as <fitter>.

## Introduction: the Malberg Glosses

In the sixth century, the Merovingian king Clovis (c. 466-511) issued the law code of the Franks, known both as the *Pactus Legis Salicae*, and as the *Lex Salica*, its younger version. This law code was written in Merovingian Latin, although this was not the mother tongue of the Franks for whom it was written. This is the reason why glosses are found in the manuscripts of the *Lex Salica* that were meant to clarify the Merovingian Latin text. The few hundred glosses in the *Lex Salica* are many times preceded by the abbreviation *mal.* or *malb.*, which is short for *mallobergo* ‘on the mount of justice’, cf. Middle Dutch *maelberg* ‘law court’, and hence their name *Malberg* glosses (Quak, 2008c: 7; Kerkhof, 2018: 33). The *Lex Salica* has come down to us in more than seventy manuscripts, but only ten out of those contain the multitude of the Frankish glosses. In this thesis I address the question of the language of the Franks, as attested in the *Lex Salica*.

## The Franks

The Malberg glosses are found in the legislative texts of the Franks, the *Lex Salica* (De Vaan, 2017: 9). Who were these Franks, and where did they come from? De Vaan states that speakers of West-Germanic crossed the Roman *limes* between 250 and 400 AD and spread south-west into the Low Countries (De Vaan, 2017: 76). However, as De Vaan mentions, Van Loon has a different opinion, as he argues that speakers of Germanic already moved to the southern Low Countries in the third or second century BC, based on place-names, and on remarks made by Caesar and Tacitus (Van Loon, 2014: 46-49). In any case, from the second century onwards the names of the smaller Germanic tribes are replaced by names of coalitions of tribes, such as the Franks, a group that consists of, among others, the earlier Batavi and Chamavi, tribes that lived in what is nowadays the Netherlands (Van Loon, 2014: 52). So, the origin of the Franks probably lies in the Low Countries. The name *Salica* is often related to that of the region of Salland, in the Dutch province of Overijssel, although this connection is not entirely certain. The Franks were allowed to live in what is now the southern part of the Netherlands and Belgium in 358 AD, under the rule of Julianus Apostata (De Vaan, 2017: 76; Quak, 2008c: 9). In that region the Franks, speaking a Germanic language, came into contact with Gallo-Romance, and it was probably there that the *Lex Salica* was written down.

A radically different view on the term *Salic* or *Salian* is given by Faulkner. According to him, the names of other *leges* related to a certain people had genitive plural forms, like in *Lex Allemennorum* or *Lex Baiuvariorum*, while *Salica* seems like a plain adjective. He argues that this adjective is possibly a borrowing from Germanic *\*salja-* ‘companion’ which is derived from *\*saliz-* ‘hall, house’, as to mean ‘common, communal law’ (cf. Kroonen, 2013: 424; Van der Sijs, 2010: s.v. *gezel*). In the end, Faulkner concludes that the *Salian Franks* never existed (Faulkner, 2016: 13-14).<sup>1</sup> This conclusion was already drawn by Govaert Wendelen (1580-1667) with the words: *Nullam revera fuisse Gentem Salicam* ‘In fact, there was no Salic people’, but *Salii dicuntur à Sala, h.e. Regia seu nobili domo & Palatio : (dem Saal, unde & in Belgio*

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<sup>1</sup> For more on this theory, see Faulkner, 2016, and the references he cites.

Sael-recht) ‘*Salii* refers to *sala*, i.e. a royal palace or a noble house and palace, c.f. *dem Saal*, and Belgian *sael-recht*’ (Schilter, 1727: vi).

The language of the Franks is sometimes called *Old Frankish* (Quak, 2008c), for example by Kerkhof (2018: 8), or *salfränkisch* in German (Van Helten, 1900). I will use the name *Frankish* to refer to the language of the Malberg glosses, just as Gysseling does in his treatment, and De Vaan in his book (Gysseling, 1976; De Vaan, 2017: 4). I will not use the adjective *old*, as there is no *middle* or *modern* stage of this language preserved, and I will not use *Salian* or *Salic*, as the language does not need to be distinguished from other Frankish languages or dialects, and there is even uncertainty whether *Salic* Franks actually existed.

### The Manuscripts of the Lex Salica

The Malberg glosses have come down to us in various manuscripts of the Lex Salica. Not all of the manuscripts that contain the Lex Salica include the glosses, and here I will treat only those that do. The manuscripts of the Lex Salica can be divided into various families, where every family presumably goes back to the same source. There are three of these manuscript families relevant for the Malberg glosses: A, C, and D. Other than that, there are other sources as well, as we will see below. All of the manuscripts date from the eighth or ninth century, and are to be found in libraries across France, Switzerland, and Germany. For a clear overview of the relevant sources, see table 1 on the next page.

The first family of manuscripts, A, consists of four, conveniently numbered A1, A2, A3 and A4. This family is the closest to the old text recension, and also the shortest with only sixty-five chapters. The manuscripts show a varying amount of glosses. In the literature scholars contradict each other: according to Hessels, manuscripts A1 and A2 contain many glosses, A3 and A4 have fewer; the scribe of A3 refers to the glosses as *verba graecorum* (Hessels 1880: xiv). However, Gysseling states that A1 contains a lot of glosses, whereas A2, A3, and A4 contain only a few (Gysseling, 1976: 61), and Van Helten states that A2 contains many glosses, and A1 has fewer (Van Helten, 1900: 229). Kern, who studied the glosses in Hessels (1880), concludes that the glosses in A1 and A2 are ancient, but that A3 and A4 are almost worthless (Kern 1880: 433).

The second family of manuscripts that contains the glosses, C, consists of two: C5 and C6. As seen here, the numbering of the manuscripts is independent of the family the manuscripts belong to. These manuscripts have sixty-five chapters, just as the A-family, however they seem to contain additions, pointing to a later period (Hessels, 1880: xv). Kern deems C5 nearly worthless, but C6 is much better (Kern, 1880: 433).

The third family, D, consists of three manuscripts with glosses: D7, D8, and D9. The D-family is closely related to C, but oftentimes a paragraph that is present in C and in Herold’s text (see below) is missing in D. The texts of D7 and D8 are divided into ninety-nine chapters, that of D9 into hundred chapters (Hessels, 1880: xvii). Manuscripts D7 and D9 are more closely related to each other than to D8, says Kern (1880: 433). Within this family there are four more



manuscripts, and some of those manuscripts are said to contain a few glosses, but it is not clear in which manuscript they occur (Van Helten, 1900: 228-229). The A- and C-families are also called the *Pactus Legis Salicae*, whereas D represents the *Lex Salica* (Eckhardt, 1962: x).

	<i>Current location</i>	<i>Name</i>	<i>Date</i>	<i>Origin</i>
A1	Paris, Bibliothèque Nationale	Lat. 4404	800-814	Around Tours
A2	Wolfenbüttel, Landesbibliothek	Weißenburg 97	751-768	Until 1689 in Weißenburg, before that unknown
A3	München, Staatsbibliothek	Clm. 4115 / Lat. 4115 / (Cimel. IV 3g)	+/- 800	Probably Germany, in the 15 <sup>th</sup> c. in Augsburg
A4	Paris, Bibliothèque Nationale	Lat. 9653 / (Suppl. Lat. 65)	825-850	Unknown
C5	Paris, Bibliothèque Nationale	Lat. 4403b	end 8 <sup>th</sup> c.	Luxeuil, since 1668 in Paris
C6	Paris, Bibliothèque Nationale	Lat. 18237 / (Fonds Notre Dame 252.F.9)	825-850	From 17 <sup>th</sup> c. onwards in Paris.
D7	Montpellier, Faculté de Médecine	H 136	819-850	From 16 <sup>th</sup> c. onwards in Troyes
D8	Paris, Bibliothèque Nationale	Lat. 4627 / 5189	after 813	From 16 <sup>th</sup> c. onwards in Fontainebleau
D9	Sankt Gallen, Stiftsbibliothek	731 (M. n. 24)	793	Probably western Switzerland, since 17 <sup>th</sup> c. in Sankt Gallen
Q	Leiden, University Library	Vossianus Lat. 119	9 <sup>th</sup> c.	Probably around Paris

1. The manuscripts containing the Malberg glosses, compiled on the basis of Hessels 1880, and Eckhardt 1962.

Apart from these three manuscript families, there are some other, minor sources of the Malberg glosses. The Emendata, sometimes called the fourth family, can be divided into two subfamilies. Within the first subfamily there are not many manuscripts containing glosses, and it is again not clear which exactly do. The second part consists of one manuscript, which is the most important Emendata manuscript: the Vossianus Latinus, codex 119, K17, or Emendata Q, which is however, according to Hessels, full of palpable errors (1880: xviii). Codex number 10 in Hessels (1880) and Merkel (1850) is an edition written by Johannes Herold in 1557 in Basel, sometimes called the *Heroldina*. His work plays a not insignificant role, because Herold used glossed manuscripts that have not come down to us, which, according to Van Helten, belonged to the C-family, but Eckhardt thinks that one of them belonged to the B-family. Kern agrees with Van Helten in that he states that this manuscript is closely related to C6. Kern also views the Heroldina as the best manuscript to study the Malberg glosses (Van Helten, 1900: 229;

Eckhardt, 1962: xxviii; Kern 1880: 433). Finally, some scholars refer to glosses as originating from manuscripts of the B-family. This B-family is only reconstructed on the basis of excerpts from other manuscripts, for example from the Heroldina.

Although the manuscript dates do give us an indication of the age of the linguistic material, the actual texts within the manuscripts are older than the manuscripts themselves. The text of the A-manuscripts is the oldest, followed by that of the C-manuscripts, which in turn is older than the text of the D-family (see also Kerkhof, 2018: 36).

### The Research on the Malberg Glosses

There are many editions of individual or multiple manuscripts, of which the oldest are a few centuries old. In Hessels' edition (1880) all of the manuscripts are edited, and in Eckhardt's edition (1962) all of the manuscripts are edited except for the D-family. All of the A-manuscripts have been edited in Merkel (1850), and manuscripts A2 and A3 have been edited by Holder as well (1880). Laspeyres includes A2, A3, Herold's text, and one of the Emendata (1833). One of the works he used, is the edition by Johann Schilter, a German historian and legal expert (1727). The earliest text editions of the Lex Salica, such as by Laspeyres (1833), or Merkel & Grimm (1850), compare various manuscripts of the Lex Salica and edit them next to each other, but they only mention the Malberg glosses briefly. In his prologue, Grimm appears to be aware of the importance of the glosses and treats a few of them, comparing the difference in attestation between the manuscripts, and comparing the glosses to cognates in other Germanic languages, such as Old English and Gothic. This is the start of the research on the Malberg glosses.

A few decades later, Hessels and Kern published their edition of the Lex Salica, including a first attempt to read and translate all of the Malberg glosses (Hessels & Kern, 1880). Following this edition, Van Helten wrote a book that is dedicated to the glosses: *Zu den malbergischen Glossen und den salfränkischen Formeln und Lehnwörtern in der Lex Salica*. This book is not uncriticised however, Seebold says that Van Helten does not reckon with the semantics in his analysis, while focusing too much on the phonological comparisons with other Germanic forms. Nevertheless, later treatises draw heavily on Van Helten's work, who, in turn, leans heavily on the work of Kern in Hessels & Kern, 1880 (Seebold, 2007a: 6).

A more recent treatment of a large number of the glosses is found in Gysseling's article from 1976. However, the argumentation is not always present in his article, and even if it is, it is not always sufficient. This conclusion is also drawn by Quak, and in 2008 he argued that it was time for a new investigation of the Malberg glosses (2008c: 16). Seebold, one year earlier, has argued similarly; he says that most of the glosses have been properly analysed for the last time a century ago, but our understanding of the Germanic languages has improved since then (Seebold, 2007a: 2, 3). This is for example owing to the finding of new linguistic material, and the advances in the field of Indo-European Linguistics. It is thus very well possible that the readings of the glosses need to be altered, and the earlier analyses need to be updated to the current state of the field. Seebold and Quak did start to reanalyse the Malberg glosses in various articles, such as Seebold, 2007abc, 2008, and 2010, and Quak, 2008a, 2008b. In these articles

they treat a few glosses at a time, instead of a full-scale investigation of all of the Malberg glosses. A new analysis of most of the glosses is found in the *Oudnederlands Woordenboek* (ONW). This ‘Old Dutch Dictionary’ has 292 entries on the Malberg glosses. The lexicographers included the previous literature on the individual words, comparing the analyses, and giving their interpretation of the phonological form and the semantics. I used this corpus as a starting point for my research.

Even since these relatively recent publications, the field of Germanic linguistics has moved forward, as evidenced by new publications. In 2013 Kroonen published the *Etymological dictionary of Proto-Germanic*, which is a major help in this field of research. Michiel de Vaan very recently published his book about the Old Dutch, *The Dawn of Dutch* (2017), which is the result of his research into the linguistic situation of the Low Countries before 1200. Finally, Peter Alexander Kerkhof just finished his thesis on the linguistic situation of Merovingian Gaul, in which he deals with the Lex Salica elaborately (2018).

### The Aim of this Thesis

The scholars that have researched the Malberg glosses have focused mostly on the individual words. This is of course very important, but now recent works have provided the first analyses in accordance with the current state of the field, it is time to look at the bigger picture. What was the language of the Franks like? What did its phonology or morphology look like, and how does this fit into the Germanic language family? The West-Germanic languages constitute a dialect continuum, but where does this language fit into that picture?

Quak concludes that the language of the Malberg glosses is a variety of Old Dutch (2008: 16). De Vaan shares the Malberg glosses under Old Dutch as well (De Vaan, 2017: 9). Also, the fact that the ONW incorporated the glosses into the Old Dutch Dictionary shows that the language is viewed as Old Dutch. Kerkhof on the other hand does not associate the two languages, and he views it as anachronistic: the other West-Germanic languages still had to acquire their defining characteristics, he says (Kerkhof, 2018: 8).

As we have seen, we know that the Franks spoke a West-Germanic language. The question I would like to answer is the following: What is the position of the language of the Franks as attested in the Malberg glosses, within the West-Germanic dialect continuum? Before we can answer this question, two sub-questions will have to be answered: first, what is the phonological form of the individual Malberg glosses?, and secondly, what does the phonology of the language of the Malberg glosses look like?

For the first sub-question, I will look at the evidence of Frankish as preserved in the manuscripts of the Lex Salica. As the Malberg glosses do not give us a straightforward view on the language due to the many differences in their attestations, the underlying form of the glosses needs to be established. With the (reconstructed) phonological forms of the glosses, it will be possible to establish the phonology of the language. This synchronic phonology of Frankish will be compared to that of other Germanic languages, at different stages of these languages to establish the diachronic phonology and with that it is possible to answer the research question. Before

we dive into this, it is necessary to say something about the methodological and theoretical problems that we will encounter in this thesis.

## Methodological Framework

The glosses from the Lex Salica will be used to establish a historical phonology of the language they represent. However, not all of the words in the Lex Salica can be used, as not all of them are as well-established as other ones. The words upon which a historical phonology can be based have to:

- (1) fit the semantics of the context in which they are found. This includes that, when we are speaking of a gloss, there has to be a plausible connection to a Latin lemma in the context.
- (2) have a good etymology. If this is not the case, it is impossible to say something useful about the development of the sounds of which the word is composed.
- (3) be written in such a way that we do not have to assume many misspellings.
- (4) be phonologically consistent with other words of which we can be certain of the meaning, origin, and reading.

Whereas normally within linguistics the phonology of a language does not leave a lot of room for interpretation, but is falsifiable, this is not the case with the Malberg glosses. Following the *Ausnahmslosigkeit der Lautgesetze* there are no exceptions to phonological developments, and thus they are falsifiable if one finds a good counterexample. However, there is a lot of variation in the Malberg glosses. This variation comes in two forms, of which *spelling problems* is the most straightforward.

## The Spelling of the Malberg Glosses

The spelling of the Malberg glosses leaves much to be desired. A single gloss may be attested in various spellings due to sloppiness on the part of the scribes, and due to interpolations from Gallo-Romance. At a given moment, the copyists copying the manuscripts did not understand the glosses anymore, because the Franks ceased to speak a Germanic language. One scribe even says that he has left out the *verba graecorum* ‘Greek words’, referring to the glosses that were incomprehensible to him (Quak, 2008c: 5). To illustrate this, one example will suffice, in which we can see that a single gloss can have many forms:

Manuscript A1:	<i>uualfath, uualfoth</i>
Manuscript A2:	<i>uad falto, uuadfodo, uuadeflat</i>
Manuscript A4:	<i>uado falto</i>
Manuscript C6:	<i>uueum adepaltheo, uualdphalt</i>
Manuscript D7:	<i>uuidifalt</i>
Manuscript D9:	<i>uuidi falt</i>
Manuscript H:	<i>uuadfaltho, uuadefaltho</i>

All these differences between the manuscripts make it difficult to establish the original word, the original gloss underlying all the forms. On top of this, scribes sometimes mistook a Frankish gloss for a Latin word and thus “corrected” the gloss, for example by adding Latin endings.

Scholars easily assume various *misspellings* in order to interpret the Malberg glosses. The most comprehensive overview of the spelling mistakes of the Malberg glosses is found in Van Helten, 1900. He has derived this overview from his analyses of the glosses, and in his analyses, he uses the well-established mistakes to argue for a certain interpretation. The nature of the spelling mistakes is mostly in the similarity of letters, where individual letters are misinterpreted, two letters are read as one different letter, or the other way around. Another phenomenon is the loss of letters, or the addition of letters, either due to (partly) interpreting a gloss as being a Latin word, or adding a Latin ending to a gloss. I will here list the spelling mistakes that Van Helten assumes. First, the mistakes that are due to the omission of a part of a letter:

i	< u	l	< b
n	< m	d	< ch
m	< uu	c	< d
l	< h	c	< g

(Van Helten, 1900: 232-233)

The following mistakes are due to dittography:

u	< i	uu, vu	< m
m	< n	XX	< X
nn	< m		

(Van Helten, 1900: 233)

Other misspellings:

a	< u	and vice versa	m	< in	and vice versa
a	< ti		m	< ni	and vice versa
b	< h	and vice versa	m	< th	
c	< e	and vice versa	m	< ui	and vice versa
c	< r	and vice versa	n	< u	and vice versa
c	< s	and vice versa	nu	< im	
c	< t	and vice versa	nu	< mi	
d	< cl	and vice versa	p	< f	
di	< ch	and vice versa	p	< r	
f	< c		r	< n	and vice versa
f	< s	and vice versa	r	< s	and vice versa
i	< a		r	< t	and vice versa
i	< l	and vice versa	t	< d	
i	< o		z	< g	
im	< un		zy	< gi	
m	< ch				

(Van Helten, 1900: 237-242).

Other than this list, Van Helten also assumes a phenomenon which he argues to be a kind of dittography, where a letter that occurs in the word may be written a second time within the same word, e.g. *firi* for *fri*, *barag* for *barch-*, and *pordor* for *podor* (Van Helten, 1900: 233, 234). A second phenomenon is *writing assimilation*, where a vowel is written the same as the next vowel, e.g. *elecharde* for *olecharde*, and *podor* for *\*poder* (Van Helten, 1900: 235). A final factor to be reckoned with, is the fact that Latin endings were sometimes added to the Malberg glosses, rendering the final syllable of a gloss almost worthless. This is why I only focus on the stressed syllable of the glosses.

When using Van Helten's list to interpret the Malberg glosses, a myriad of possibilities presents itself. Any gloss spelled with, for example, an <a>, might as well go back to a gloss with <i>, <u> or <ti>, which themselves can go back to an <o>, an <l> an <m>, <ci>, and the list continues. This seems very attractive, as the scholar has more room for interpreting the glosses. However, we should be striving towards the smallest possible number of assumptions, following William of Ockham who wrote: *Frustra fit per plura quod potest fieri per pauciora*. 'It is useless to do with more things that which can be done with fewer.'

It is important to note that the majority of attestations is not always correct. In order to discover or reconstruct the original gloss one has to look at probable innovations and archaisms. An example is the root that is written as <(u)uad> fourteen times, but as <uuald> three times. The omission of a letter is more trivial to assume than the addition of a random letter, so although <uuald> is outnumbered, it is very probable that this was the original form.

In this thesis I pay attention to the misspellings in the Malberg glosses, because a good understanding of the spelling will lead to a better understanding of the glosses. I will not talk about phenomena such as dittography, haplography or the reshuffling of letters, but instead look at single letters or digraphs written with different letters than expected. Because I use well-established glosses and I focus only on the stressed syllable, I will need less misspellings than Van Helten does. In this way I hope to remove the blurring data and to elucidate the phonology of the Frankish language.

Whenever I cite a linguistic form that is not directly attested as such, I will mark it with an asterisk. In this way, we can keep track of what is actually attested, as this is often confusing in this field of research. For example, scholars might refer to *scimada* or *scimat* 'goat' but forget that the attested forms read <smata>, <xmata>, <ros cimada> and <muscisimada>. This is very misleading and disturbing.

### **Linguistic Variation in the Malberg Glosses**

The variation found in the glosses that is not due to scribal errors, can be explained in several ways. Within the framework of the *Ausnahmslosigkeit der Lautgesetze* variation is a bigger problem than within the framework of *Lexical diffusion*. Within the latter theory it is assumed that a phonological change does not affect the entire vocabulary at once, but rather spreads from one word to the next. However, as phonological change is always preceded by phonetic change

and phonetic change is a subconscious process, it is more likely that phonological change is in principle without exception.

How can we then explain the variation that is found? How is it possible that one word seems to have undergone a certain change, but the next word that fits the phonological criteria does not? The first possibility is a difference between writers, possibly indicating a dialectal difference. The second possibility is difference in time, if one of the glosses dates from an earlier period than the other. As will be seen, there are no clear differences between the manuscripts in this regard, as there is as much variation within a single manuscript as there is between manuscripts. The time-depth of individual attestations is very difficult to determine, but it is very well possible that some glosses were added earlier than others.

### **The Practice of Glossing**

The fact that glosses are found in a medieval text is not surprising. Glosses were used extensively in the medieval period; due to the fact that the knowledge of Latin was decreasing, readers added glosses in their native tongue in the margins. The interesting fact about the Malberg glosses however, is their age, as the collection of the glosses is one of the earliest sources of West-Germanic that exists.

As is well-known, medieval glosses were often used by scribes of manuscripts to translate or clarify Latin words. Glosses in medieval manuscripts occur in three different settings, according to Studer-Joho. The first is what he calls *occasional glosses*, which are individual glosses to Latin words or phrases within a context. The glosses are sometimes called *interpretamenta*, and the corresponding Latin words are often named *lemmata*. When glosses are added to every lemma in the Latin text, Studer-Joho calls it *continuous (interlinear) glossing*, his second type. The third and last setting wherein glosses appear, is in glossaries. Glossaries provide the *interpretamenta* and the *lemmata*, but no context (Studer-Joho, 2017: 18-20). Our Malberg glosses are of the first type, occasional glosses. However, occasional glosses are usually placed interlinear or in the margins of the manuscript, whereas the Malberg glosses are incorporated in the Merovingian Latin text, signalling that the manuscripts we have, are copied from manuscripts in which the glosses were interlinear or in the margins. It is the case that some glosses were incorporated in the wrong context during the process of copying, which is probably due to the fact that the glossator did not make it clear to which lemma his gloss belonged. In these cases, it can be difficult to determine the original corresponding lemma, and thus the exact form and meaning of the gloss may remain opaque.

As to the use of the glosses, we can distinguish various types of glosses. The types that are most important for our purposes are: lexical glosses and explanatory glosses. The lexical glosses provide synonyms or quasi-synonyms, whereas the explanatory glosses interpret the text (Lendinara, 1999: 6). The *interpretamenta* of lexical glosses can be semantically and formally identical to the *lemmata*, but they can also differ in these respects. Formal differences can occur because of the fact that languages differ; Glaser gives the example of the Latin ablative that is rendered by an Old High German dative, because Old High German does not have an ablative.

The ablative can also be glossed with a nominative, or a prepositional phrase however (Glaser, 2009: 375, 378). A formal difference can also occur if the glossator chose the base form of the gloss, e.g. the nominative of nouns, or was following another glossing convention. Formal incongruence occurs often with verbs, where future tenses are rendered with present tenses, conjunctives with indicatives, or when a Latin verb form is rendered with an infinitive. Lastly, if none of these explanations prove valid, there is a possibility that the glossator made a mistake (Glaser, 2009: 378-379).

Explanatory glosses are not translations of lemmata, but interpretations. The ONW assumes something that is called *artikel-aanduidend trefwoord* ‘clause indicating keyword’, i.e. a gloss that indicates or explains the entire Merovingian Latin clause it belongs to (ONW, 2018: s.v. *\*hantrēp*). However, as long as there is a possibility to connect a gloss to a lemma, it is in my opinion preferable to assume a lexical gloss. This has implications for the interpretation of the glosses, as in the case of a lexical gloss there is a reliable connection between the gloss and the lemma, whereas in the case of explanatory glosses the semantics of the gloss in question is much more opaque and thus less reliable. As the precise phonological form of the Malberg glosses is often not easy to reconstruct, we run into difficulties on different levels: on the semantic level it may be difficult to distinguish between lexical glosses and explanatory glosses, and we cannot be sure of the exact cases of nouns, or number, tense or mood of verbs, as these need not be identical to the Latin lemmata the glosses belong to.

Not all of the Germanic material in the Lex Salica can strictly be regarded as glosses. Tiefenbach gives the example of the phrase *Maltho the atomeo lito* ‘Ich spreche: ich lasse dich frei, Lite’, of which there is no Merovingian Latin equivalent in the text. Also, Germanic loanwords in Gallo-Romance that occur in the text are not glosses (Tiefenbach, 2009: 961). Oftentimes these words are treated as Malberg glosses nonetheless, and I will do so as well, albeit with caution.



## *The Phonology of the Malberg Glosses*

In this chapter I treat the consonants, in a phonetic order; first the plosives, then the fricatives, then the nasals, liquids and approximants, and from the front of the mouth to the back, from voiceless to voiced. After that, I will treat the vowels, from high to low, from front to back, from short to long, starting with monophthongs and finishing with diphthongs. Finally, I will give an overview of the phonological developments that led to Frankish as evidenced by the material from the Lex Salica, followed by a summary of the assumed spelling mistakes.

NB: All the photos are taken from manuscript A1. All the Latin lemmata preceded by <gl.> are more or less standardised dictionary forms of the words, as the lemmata may occur in different spellings or grammatical forms throughout the Lex Salica.

### **The Consonants**

#### **PGm. \*p**

*\*thrīspelli-* ‘threefold’ < *\*prī-speldja-*

This Frankish word is not a lexical gloss, but an explanatory gloss to the Latin text. Two cases of killing a free man are compared, and in the first case the killer is supposed to pay 600 solidi, and in the second case 1800 solidi, which is three times as much. The word occurs two times in the same spelling, namely <tres pellia>, where the first word is probably a Latinisation of the Frankish *\*thrī-* ‘three’, and the second part is related to OHG *zwispid* by Kern and Van Helten (ONW, 2018: s.v. *\*thrīspilli*). This word is probably related to PGm. *\*spaldan-* ‘to split’, in the form *\*speldi-*. We do not see the effect of *i*-umlaut in the Lex Salica, as we see in the OHG form, but we do see an assimilation of *\*ld* > /ll/, for which see further under PGm. *\*d*.

*\*thurp-* gl. *uilla* ‘country house’ < *\*burpa-*

Although the initial consonant is consistently written as <t>, this gloss has to go back to PGm. *\*burpa-* ‘hamlet’ (Kroonen, 2013: 553). The vowel is only written as <u>, so there is no evidence for *a*-umlaut in this word.

These two glosses contain PGm. *\*p* and are continued as such in Frankish. The Frankish phoneme /p/ is consistently written as <p>.

#### **PGm. \*b**

*\*af* gl. *de (trappa)* ‘of, from (the trap)’ < *\*aba*

Both Kern and Van Helten assume a Frankish preposition *\*at*, on the basis of the phrase *ac falla* (D7) ‘at/in the trap’, with variants, from PGm. *\*at* (Kroonen, 2013: 39). The letter <t> and <c> are often confused in the Lex Salica. The phrase would not be a perfect translation of the Latin, which says *de trap(p)a* ‘from a trap’, which is a problem for this reading. On the other hand, it would be very probable that Frankish had this preposition, but it does not provide us with any information about the development of the language. Another possible reading is *\*af* < PGm. *\*aba* ‘from, off’ (Kroonen, 2013: 1). As we will see under PGm. *\*f*, the Frankish phoneme /f/ is in some instances written as <t>, which in turn may be misspelled as <c>.

Semantically this assumption is more attractive than a reading of *\*at*, but for *\*af* we have to assume an extra misspelling.

*acrebrasta* gl. *hirpex* ‘harrow’? < *\*akra-brast-*

The ONW takes this gloss as an explanatory gloss meaning ‘field crime; damage to a field’, while it is also possible, in my opinion, to take it as a lexical gloss to Latin *erpice* ‘harrow’. This is preferable to a meaning that would refer to the Latin clause in general. In any case, it’s a compound of the word for ‘field’ and a substantive on the basis of the verb ‘to break, burst’ from PGm. *\*akra-* + *\*brestan-* (Kroonen, 2013: 75). The first vowel /a/ in *-brasta* may be an ablaut variant, as the ONW suggests (2018: s.v. *\*akkarbarst*). Note however that PGm. *\*e* > Dutch *a* /\_r[dental], so in a metathesised form *\*barsta*, the vowel would be the regular outcome in Dutch (Van Bree, 1977: 193).

*\*bāchmund-*, *\*-monn-* gl. *moechatus* ‘rape’ < *\*bēg-mund-*

Van Helten departs from the assumption that this gloss must contain an element meaning ‘slave’, as the Latin clause talks about a slave raping a female slave. He thus assumes that the forms <bab mundo> and <bathmonio>, the only forms found of this word, contain *\*ambaht*, with a nasal diacritic on the *\*a*. He translates this gloss as ‘haftpflicht für den sclaven’ (Van Helten, 1900: 389). This interpretation seems to me both semantically and phonologically implausible. The ONW prefers to read the first part as *\*balo-* < PGm. *\*balwa-* ‘evil’, and the second part as *\*munt-* < PGm. *\*mundō-* ‘hand’, which cognates also mean ‘protection, guardianship’ in Old English, Old Frisian, and Old High German (ONW, 2018: s.v. *\*balomunt*). The ONW thus arrives at a meaning ‘bad protection’, which, in my opinion, does not fit the semantics of the actual clause. Seebold compares the gloss to Old Frisian *nedmund* ‘rape’, which comes closer to the probable meaning of the gloss in the Lex Salica (Seebold, 2010: 374). Old Frisian *nedmund* is a compound of the word *mund* discussed above, and *nēd* ‘need, difficulty, distress’ < PGm. *\*naudi-* ‘compulsion, distress’ (Kroonen, 2013: 385). This Old Frisian compound shows that, although the word *mund* might mean ‘protection, guardianship’, an older meaning might have been preserved in this compound; a meaning closer to ‘hand’. Now, when we replace the first element *nēd* with *\*balo* vel sim., which roughly belongs to the same semantic field, we might read Frankish *\*balomund-* or *\*balomonn-* ‘rape’. However, the spelling of the first part remains problematic, as the <b> and the <th> are hard to derive from one single spelling, and to derive both of them from *\*<lo>* is not easy; a misspelling of this kind does not occur elsewhere, see also the summary of the spelling on pages 43 and 44. That is why I propose a different scenario in which the original spelling was <ch>, as to spell *\*bāch-*, continuing PGm. *\*bēg-*, cf. OHG *bāgan* ‘to scold, to have a row’, OHG *bāgēn* ‘to quarrel’ and ON *bāga* ‘to quarrel’ (Orel, 2003: 44). A misspelling of <t> for <c> is very common, which leaves only the spelling with <b> as an anomaly. This misspelling might be paralleled in <ablatam> for *\*alacham-* gl. *excutio* ‘to shake out, throw off’, see under PGm. *\*h*. <ablatam> would then come from *\*<ahlatam>* from *\*<alatham>* from *\*<alacham>*. So, the Frankish word was *\*bāch-mund-* ‘rape’ from earlier *\*bēg-mund-* ‘~quarrel-hand~’. The semantic relation might not be obvious, but spellingwise this solution is to be preferred. If this is the case, this

word would also be evidence for the development of PGm. \*ē to Frankish /ā/, spelled as <a>, see also there.

*\*bain-* gl. *os* ‘bone’ < *\*baina-*

The Latin text reads: *Si quis hominem ita plagauerit in capud ut exinde tres ossa exierint...* ‘If someone wounds a man in the head in such a way that three bones will appear...’ The following gloss occurs only once and reads <inanbina>. The first part <inan> is analysed by the ONW as *\*hirn-* ‘brain’, although I prefer the other possibility that the ONW mentions, namely a connection with the PGm. word *\*in-* ‘in’, to gloss Latin *in capud* ‘in the head’, as it requires no misspellings, and works fine semantically. The second part of this gloss is analysed by the ONW as the outcome of PGm. *\*baina-* ‘bone, leg’, which is semantically very plausible (ONW, 2018: s.v. *\*hirnbēn*). However, instead of reading it as a form *\*bēn*, I prefer *\*bain-*, with a reshuffling of the letters instead of a misspelling of the letters.

*barch-* gl. *maialis* ‘castrated pig’ < *\*baruga-*

The interpretation of this gloss is clear, due to the fact that the word is known from other Germanic languages, and that it consistently appears in phrases where the Latin text has a form of the word *maialis* ‘castrated pig’. Two out of the eleven attestations show a vowel, <a> (C6) or <e> (H), between the /r/ and the /g/, which is paralleled in OHG *barug* < PGm. *\*baruga-* ‘barrow’ (Kroonen, 2013: 54). Ten out of the eleven variants go back to a spelling in <ch> for the final consonant, and only C6 has a <g>.

*baum-* gl. *arbor* ‘tree’ < *\*bauma-* < *\*bagma-*

The first part of the gloss <ortobaum> is probably the Latin word *hortus* ‘garden’, while the second one is the reflex of PGm. *\*bagma-* ‘beam, tree’, which gave West-Germanic *\*bauma* (Kroonen, 2013: 47; cf. Gothic *aurtigards* ‘yard’ for a similar compound of a Latin and a Germanic element). The Latin *hortus* occurs in more glosses, and it is difficult to say whether it formed compounds or was a separate dative/ablative singular *horto*. This is due to the fact that we see that word boundaries are not always copied correctly.

*\*brust-* gl. *mamilla* ‘breast’ < *\*brust-*

Although none of the spellings show an <s>, but instead read <bructe>, <bruche>, and twice <bracti>, the semantic connection to Latin *mamilla* ‘breast’ is so strong that it is plausible to assume that this gloss continues PGm. *\*brust-* ‘breast, chest’ (Kroonen, 2013: 80). For an explanation of the spelling as influenced by Gallo-Romance, see Kerkhof 2018: 125-126.

*lamp-, lamm-* gl. *agnus* ‘lamb’ < *\*lambiz-*

The PGm. word *\*lambiz-* ‘lamb’ possibly occurs as *lamp-* in the Lex Salica, which always seems to be inflected, mostly as <lampse>. The suffix <se> is analysed by Kern as a diminutive suffix, to be compared with the ON diminutive suffix *-si* (Kern, 1880:454). None of the spellings show a <b>, but there are spellings that lack the plosive entirely, for example <lammi> (A1), which might be due to assimilation. The spelling <p> for older *\*b* probably indicates the devoicing of the consonant, either before the voiceless /s/, or at the end of the syllable. So, on

the one hand we see the assimilation process of *\*mb* to /mm/ and on the other we have a voiceless plosive before /s/. This plosive could have been retained before a consonant, as to give *\*mbs* > /mps/, or it might have arisen after the original assimilation as an epenthetic consonant, giving *\*mbs* > *\*ms*/ > /mps/.

*\*sVfun* ‘seven’ < *\*sebun-*

The attestations of this word are not without a problem. The word for ‘seven’ only occurs in combination with ‘100’, e.g. as <septunchunna> (H). The dental is probably inserted on the basis of the Latin word *septem*, just as the spelling with <p> is probably influenced by it. Because of this, it is difficult to determine the original phoneme, but it was probably /f/. The same is true for the first vowel; all the attestations have <e>, which would mean that nothing has changed departing from PGm. *\*sebun-* (Kroonen, 2013: 429). However, as the similarity to the Latin cognate is so great, we cannot use the word as evidence for the development of the vowel.

*\*theuf-* gl. *fur* ‘thief’ < *\*peuba-*

The semantic relation between the gloss and the lemma is impeccable. Proto-Germanic intervocalic *\*b* is written as <b> four times as <ph> three times, once with <p> and once with <f>, indicating fricativisation of the plosive. See also ONW, 2018: s.v. *\*thiefwan?* and *\*thiefwart*.

As we can see, Proto-Germanic initial *\*b* is unchanged, while it changed into /f/ intervocalically. However, as seen in the word *lamp-*, it might be the case that the phoneme became devoiced, either at the end of a syllable, or due to an assimilatory effect of the following consonant /s/. PGm. *\*mb* assimilated to /mm/ in cases where the plosives remained voiced. There is no instance of the Frankish phoneme /b/ being written as something other than <b>.

## PGm. *\*t*

See also *\*brust-* gl. *mamilla* ‘breast’ under PGm. *\*b*.

*\*achto* ‘eight’ < *\*ahtau*

This word is strictly speaking no gloss, as there is no Latin lemma it belongs to. Its interpretation is clear though; the text says, for example in H: *Acto & usunde, sol. CC culpabilis iudicetur* ‘He is sentenced (to pay) eight thousand; 200 solidi’. Within this monetary list, the Frankish numbers represent the number of *denarii*, and the Latin number the number of *solidi*, where one solidi equals forty denarii, as it always does in the Lex Salica. The Frankish number goes back to PGm. *\*ahtau* (Kroonen, 2013: 6). If we look at the final vowel <o>, this might be an indication of monophthongisation in unaccented syllables in Frankish. Monophthongisation of *\*au* to /o/ is regular for Old Saxon and Old Dutch, e.g. in OS, ODu. *bōm* < *\*bauma-* (Kroonen, 2013: 47; ONW, 2018: s.v. *bōm*), see also Quak & Van der Horst, 2002: 35, and Van Bree, 1977: 146-149.

*\*alachalt-* gl. *capolo* ‘to cut off’ < *\*ala-halta-*

This gloss stands in a Latin clause discussing a person mutilating someone else’s tongue, so that the other person is not able to speak anymore. The ONW takes this gloss as an explanatory gloss meaning ‘completely mute, mutilated’, while Seebold sees it as a substantive *\*alahaltia* of the same stem. The problem with the meaning ‘mute’ for *halt* is that the word means ‘lame, limping’ in all other Germanic languages. The language of the Franks would then have shifted the meaning to ‘mute’. I suggest taking the word as a lexical gloss to Latin *capolauerit* ‘s/he cut off’, comparing it to Old English *healtian* ‘to halt, limp, be lame’ and Old Saxon *haltôn* ‘to limp’ (Bosworth-Toller, 2018: s.v. *healtian*). The semantics of the Old English and Old Saxon forms and our gloss do not match however, as we would expect a causative meaning ‘to make halt, limp’. Whatever be its exact meaning, the word probably comes from PGm. *\*ala-* ‘all’ + *\*halta-* ‘lame, limping’ (Kroonen, 2013: 23, 205).

*chalt-* gl. *scrofa* ‘sow’ < *\*galti-*

This root is the second part of compounds referring to various types of pigs, e.g. in H <dracechalt>, <focichalta>, <lerechala>, <soagne chalte>, and in C6 <chranchalte>, <lescalti>. The root of the word is spelled as <chalt>, <chalta>, <chalte>, <thalti>, and <calti>, all presumably going back to *chalte* or *\*chalti*, ultimately from *\*galt-* ‘castrated boar’ (Kroonen, 2013: 165-166). Kroonen says that the feminine forms of OHG *galze*, *gelze*, and MDu. *gelte* go back to *\*gelt(t)jōn-*, but this is probably a mistake for *\*galt(t)jōn-*, as a development of PGm. *\*e* to Frankish /a/ is not seen elsewhere, and all of the forms in the Lex Salica contain an <a> in the root, without a trace of an older *\*e*, or of *i*-umlaut. It is thus best to assume that the word ‘sow’ derives from the root *\*galti-*. As for the unstressed syllable; manuscripts A1 and A2 show the ending <i>, A3 and H show no ending, and C6 has <e>.

*chanzist-* gl. *caballus* ‘horse’ < *\*hangista-*

The semantic side of the gloss is clear, and so is the etymological connection to PGm. *\*hangista-* ‘horse, stallion’ (Kroonen, 2013: 209). For the initial Proto-Germanic fricative, we find <zero> (2x), <ch> (6x), <c> (1x), and <h> (2x). One attestation shows *i*-umlaut, which is quite rare in the Lex Salica, this is <chengisto> in H. Eight out of the ten attestations have <z> from PGm. *\*g*, which probably stands for [d͡ʒ], the other two have <g>, see also PGm. *\*g*.

*chrāt-* gl. *uasum ab apis* ‘beehive’ < *\*hrētō-*

The root of this gloss that only occurs in the D-manuscripts is written as <chrāt> twice and as <grāt> once. Kroonen claims that the initial fricative is not attested in Low Franconian but can be reconstructed on the basis of the Gallo-Romance loanword *frata* ‘honeycomb’, however the fricative is attested as <ch> (Kroonen, 2013: 245). Although the Latin *uasum ab apis* is semantically not exactly the same as the reconstructed Germanic meaning ‘honeycomb’, it is close enough.

*drucht-*, *\*drocht-* ‘host’ < *\*druhti-*

This word occurs both as a loanword in Latin and as a gloss. The Latin word occurs in clauses speaking of a wedding procession. It is written in various ways, among others <druchte>, <druce>, and <dructhe> (ONW, 2018: *druht*). The word is derived from PGm. *\*druhti-* ‘host, retinue’ (Kroonen, 2013: 104). A compound including this word as its first element, is the gloss that is reconstructed as *\*druhtlimig* by the ONW (2018: s.v.). Its second element is written as <limici> (2x) and <lennici>, and possibly connected to PGm. *\*limu-* ‘limb’ and its variants, as to translate *de eo contubernio* ‘of this squad/company/group’ (Kroonen, 2013: 338). The original suffix can be either *-ich* for an adjective, or *-ithi* for a collective (ONW, 2018: s.v. *\*druhtlimig*).

*frīfastin-* gl. (*filiam*) *sponso* ‘to betroth (a girl)’ < *\*fri(j)a-fastjan-*

The first element of the gloss is probably related to OE *freo* ‘woman’, which is an infrequent word, and OS *frî* ‘woman’ < PGm. *\*fri(j)a-* ‘free’. The contraction product is probably a long /ī/, as it is in Old Saxon. The second part of the word is related to PGm. *\*fastu-* ‘firm, solid’, cf. OE *fæstan* ‘to fasten, to commit’, OHG *festen* ‘to confirm’ (see also ONW, 2018: s.v. *\*frīfeston*).

*\*lēt-* gl. *litus* ‘serf’

OE *læt*, OFri. *let*, OHG *lāz*, all ‘serf’, go back to PGm. *\*lēt-*, as does the Latin loanword *litus*. We see various spellings of the vowel in the Lex Salica, namely: <e> (7x), <i> (5x), and <eo> (1x). The spellings with <i> may have been influenced by the Latin form, whereas the spelling <eo> indicates long /ē/, according to the ONW (2018: s.v. *\*lātesmuosit*). I am not aware of more cases where this spelling would indicate a long monophthong. Kerkhof convincingly argues that the Medieval spelling <eo> stood for the pre-French diphthong /iɛ/, the continuation of Gallo-Romance /ɛ/. As the Germanic diphthong *\*eu* was borrowed into Old French as /iɛ/ as well, this phoneme could be written as <eo> in cases where it was etymologically not correct (Kerkhof, 2018: 218-220). In this case, the word *litus* would have been pronounced as [lɛto], soon to become [liɛðo], so the spelling with <eo> indicates the latter form (Kerkhof, p.c.).

*quint-* gl. *cinitus* ‘male prostitute, homosexual’ < *\*kwint-*

The ONW relates this word to Bavarian *quinze*, and dialectal English *queint*, continuing PGm. *\*kwint-* ‘hole, gap, opening’ (ONW, 2018: s.v. *\*kwintuk*). There may or may not be a diminutive suffix *-uc* following the stem.

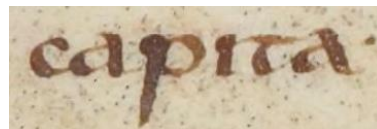
*scut-*, *schot-* gl. *inclusus* ‘enclosed’ < *\*skut-*

Probably related to Old English *scyttan* ‘to shut’, Old Frisian *sketta* ‘id.’ from PGm. *\*skutjan-*, although the attested form does probably not come directly from this form, as *\*-jan-* verbs normally end in <in> in Frankish (Van der Sijs, 2010: s.v. *schutting*). As to the phonology, we have both evidence of /u/ and /o/ for the root vowel, and of both /sc/ and /sch/ for the initial cluster (see also under PGm. *\*k*). However, the old features, /sc/ and /u/, are never mixed with the newer features /ch/ and /o/ in one single attestation.

*sicht-*, *\*secht-* gl. *ecio* ‘to cut off/out’, *capolo* ‘id.’, *excutio* ‘id.’ < *\*seg-*, *\*seh-*

The ONW relates the word to Dutch *zeis* ‘scythe’ and *zicht* ‘small scythe’, and I might add Old Norse *segðr* ‘scythe’ < *\*segiba-*, all from the PGm. root *\*seh-* or *\*sah-*, the same root as that of the word *\*sahsa-* ‘knife’ (ONW, 2018: s.v. *\*sihta*; Van der Sijs, 2010: s.v. *zeis*; Kroonen, 2013: 4; 421). The root of the word is written with <e> four times, and with <i> four times, but as the proto-form had *\*e*, the <i> must be an innovation.

As evidenced by the examples, the Proto-Germanic consonant *\*t* is unchanged in Frankish. Once we find <d> in a spelling of the word *\*lēt-* ‘serf’ in C6, which signals Gallo-Romance



influence in this form, as intervocalic /t/ was voiced in Gallo-Romance. The phoneme /t/ is written as <t> most of the time. A reoccurring misspelling is <c> for /t/, as in *\*alachalt-* ‘to cut off’, which is written with <t> twice, and twice with <c>, and once in *drucht-* ‘host’ against twenty-six spellings with <t>. The two graphemes were rather similar; see the photo of the Latin word *capita* from manuscript A1 for comparison. As seen above under PGm. *\*b*, the combination /st/ is sometimes written as <ch>, evidenced by <bruch> for *\*brust-* ‘breast’, and in four attestations of *chanzist-* ‘stallion’ as well. A more aberrant spelling of the phoneme /t/ is found in an attestation of the word *\*lēt-* ‘serf, namely with <x> in A2. Instead of a misspelling an sich, one could think of an analogical mistake, e.g. to the Latin word *lex* ‘law’, but it is impossible to be certain in this regard. The words read as *\*at*, and *\*tarin-* ‘to plunder’ are only attested with <c>, and the same misspelling of <c> for <t> is often assumed in these cases, however I suggest different possibilities, namely a reading of *\*af* (under PGm. *\*b*) and *\*charin-* (under PGm. *\*h*).

### PGm. *\*d*

See also *\*thrispelli* ‘threefold’ under PGm. *\*p*, *\*bāchmund-*, *\*-monn-* gl. *moechatus* ‘rape’ under PGm. *\*b*, and *drucht-*, *\*drocht-* ‘host’ under PGm. *\*t*.

*\*chard-* gl. *unam apem hoc est unum uasum* < *\*garda-*

Although the first part of the gloss, written as <(h)ole>, <ale>, or <ele>, is controversial, the second part is certainly the outcome of PGm. *\*garda-* ‘courtyard’ (Kroonen, 2013: 169). The unaccented vowel is written as <i> (5x), <e> (2x), and <o> (1x), while it was originally an *\*a* (ONW, 2018: *\*ūlagart?*). In one case we find <t> instead of <d>, in manuscript A1. This apparent devoicing is also seen in *\*leud-*, see there.

*chunn-* gl. (*canis*) *seusius* ‘dog’ < *\*hunda-*

The semantic relation between the gloss and the lemma is undoubtedly correct, so the word comes from PGm. *\*hunda-* (Kroonen, 2013: 256). The five attestations (C6, D789, H) all show an assimilation of PGm. *\*nd* to Frankish /nn/, but with regards to the ending, they do not agree; two times we find <a>, once <e>, and once <i>.

*chunn-*, *chund-* ‘a hundred’ < \**hunda-*

This word occurs rather frequently and is most often spelled as <chunna>. Only the list of denarii and solidi in manuscript D8 contains the spelling <chunde> (2x), whereas all the other forms found in this and in other manuscripts have <nn> (19x). The word is a continuation of PGm. \**hunda-* (Kroonen, 2013: 256), so the forms with <nn> show an assimilation, just as we have seen for the word *chunn-* ‘dog’.

*drach-* gl. *tertussum porcellum* ‘piglet’ < \**dragjō-*?

This word is attested five times as a simplex, and twice as part of a compound. The word is compared to ON *dregg* ‘dregs, lees, yeast’ (ONW: s.v. \**dregigelta*) < PGm. \**dragjō-* ‘dregs’ (Kroonen, 2013: 99). It is to be noted that we would expect a phonological form \**drazi*, with palatalisation of the velar before the front vowel, but what we find is that the final vowel has been lowered, and that palatalisation did not take place (see also PGm. \**g*). This might of course be an indication that the etymology is not correct, as the semantic development is also not undoubtedly correct.

*leud-* ‘weregild’ < \**leudi-*

This explanatory gloss occurs in many clauses dealing with murder. In each of these cases, the people responsible had to pay a *weregild*, which was a sum of at least 200 solidi, but it varied per type of person killed. The root of this word is the same as in PGm. \**leudi-* ‘man, people’, and occurs as a loanword in Latin as *leudis*, with the same meaning. The root is written with a <t> in three cases, in manuscripts D789. This different spelling might indicate a devoicing of the consonant, although there is no clear distribution.

*theuda* gl. *rex* ‘king’ < \**peud-*

The gloss at hand is written as <teoda> (A1), <teuda> (A2), <deuda> (A3), <theuda> (A4), <theoda> (C6), and <theadā> (H, K), and is always preceded by the Latin preposition *ante* ‘before’. The ONW reads the word as \**thiet* ‘people’, from PGm. \**peudō-* (Kroonen, 2013: 540; ONW, 2018: s.v.). However, I am inclined to follow the explanation given by Van Helten, who compares the Germanic word to the Latin *ante regem* ‘before the king’, as the word ‘people’ is not present in the Latin text. In this case, we would expect a final \**n*, cf. Old English *peoden* ‘prince, king’, as the ONW also notices. For the root of the word it does not matter which of the two explanations is the correct one, as both words go back to the same root. Manuscript A3 is the only manuscript in which we find a <d> for the phoneme /th/, namely as <deuda>. This is probably not a spelling mistake, but a phonological phenomenon, although it is only found once.

\**thus(ch)und-* ‘thousand’ < \**pūshundī-*

The attestations are supposed to continue PGm. \**pūshundī-* (Kroonen, 2013: 554). There are however many problems with the attestations, and not all of the attestations are as certain, due to the word division. There is almost always a space before the etymological \**hund-*, which might indicate that we are dealing with the word ‘hundred’ instead. However, in none of the attestations we find the same assimilation as we found in \**chunn-* ‘hundred’, which is



remarkable. In four cases we find <ch>, indicating that the Proto-Germanic phoneme *\*h* is retained, but in four other cases we find only <s>, and in two cases we find <c>, which might be either a mistake for <s>, or for <ch> (ONW, 2018: s.v. *\*thūsunt*). Also, on the semantic side the numbers do not always add up; in the phrase <Theio tho sunde ter theo chunna> the ONW reads for example ‘three (times eight) thousand, thirty (times eight) hundred’, in order to arrive at the sum of 600 solidi, equalling 24.000 denarii. In order to arrive at this, we need a lot of mistakes. The following upper line shows the gloss as found, and the lower line the reconstructed gloss:

<Theio	tho	sunde	ter	theo	chunna>
*<Thrio	achto	thusunde	ther-	achto	chunna>

The cases in which the numbers do add up, are spelled as follows: <u sunde>, <usunde>, <us chunde> (2x), <to condi>, <thocundi>. Here we find that long *\*ū* is written as <u> or <o>, but this may very well be due to Latin morphology instead of Frankish phonology as there is a word division in the middle of the actual word.

The phoneme *\*d* is unchanged in most environments in Frankish. The cluster *\*ld* underwent assimilation to /ll/, as in *\*thrispelli* ‘threefold’ which only occurs in manuscript H, and the cluster *\*nd* assimilated to /nn/, as in *chunn-* gl. (*canis*) *seusius* ‘dog’ and *chunn-*, *chund-* ‘a hundred’. The development of *\*nd* > /nn/ is seen in manuscripts C6, D8, and H for the word *chunn-* ‘dog’, and not in D79. The word *chunn-* ‘a hundred’ is only attested in B8a and B10, of which the first shows both <nd> and <nn>, and the latter has only <nn>. In these two manuscripts, the word *\*thūs(ch)und-* is only attested with <nd>. Finally, the word *\*bāchmund-* ‘rape’ is attested with <nd> in A2, and with <ni> in C6, where the <i> may either be a misspelling for <n>, or a Latin ending added later. There are some rare cases of spellings with <t> for PGm. *\*d*, namely in the manuscripts A2 and D89 where we find <t> for /d/ in the word *leud-* ‘weregild’, and in A1 we find <chart> for *\*chard-* ‘yard’. The consonant might have been devoiced at the end of the root in these cases. This probably phonetic phenomenon might then be paralleled in the form *lamp-* ‘lamb’, see under PGm. *\*b*. The Frankish phoneme /d/ is, apart from these cases, always spelled as <d>.

### PGm. *\*k*

See also *acrebrasta* gl. *hirpex* ‘harrow’? under PGm. *\*b*, *quint-* gl. *cinitus* ‘male prostitute, homosexual’ and *scut-*, *schot-* gl. *inclusus* ‘enclosed’ under PGm. *\*t*.

*renk-*, *rink-* gl. *quis ingenuus* ‘a free man’ (or maybe *seruus* ‘slave’) < *\*rinka-*

The ONW connects this word to Old English and Old Saxon *rinc* ‘man’ (ONW, 2018: *\*rinkesmuosit*). Bosworth-Toller also includes Icelandic *rekkr* ‘man, warrior’ (2018: s.v. *rinc*). These forms continue PGm. *\*rinka-* (Orel, 2003: 302). The spelling with <e> occurs twice, and that with <i> once. It is possible that this signals a phonological development instead of a spelling mistake, see also under PGm. *\*i*.

*\*schelo* gl. *uuaranion (regis)* ‘breeding stallion’ < *\*skelō*

The word is to be compared to OHG *scelo* of the same meaning, which is reconstructed as *\*skelō* by Kroonen (2011: 123). The ONW assumes that the original gloss would have been spelled as *\*<schelo>*, based on the attestations *<selcho>* and *<setheo>*. If this reading is correct, this would mean that in the cluster *\*sk* the plosive would have changed into a fricative.

This phoneme is written as either *<c>* or *<k>*, without a clear distribution. In the combination /kw/, the phoneme is written as *<q>*, cf. *quint-* ‘male prostitute, homosexual’. The only environment in which Proto-Germanic *\*k* may have been changed, is when preceded by *\*s* in the anlaut. With regards to *scut-*, *schot-* gl. *inclusus* ‘enclosed’, we cannot use the forms containing *<xc>* from A2 and C6, as these are probably influenced by Latin *excutio* ‘to shake out, off’, which occurs in the same phrase. We are then left with three cases of *<ch>* (D78, H) and two of *<c>* (A2, D9). The word *\*schelo* ‘breeding stallion’ occurs once with *<ch>* (C6) and once with *<th>* (H) from older *\*<ch>*. One point should be made, namely that an *<h>* does not normally occur out of nowhere, but the loss of a letter is quite common. It could thus be the case that in some cases where we find *<c>*, the *<h>* was simply lost.

Although other proposed readings of glosses including this cluster are not as certain, we do see this fricativisation more often. The word reconstructed as *\*skot* ‘penalty, fine’, which is found as *scot* in Old Dutch, is written as *<schodo>* (2x), *<scoth>* (3x), and *<scot>* (1x), where five out of the six attestations could go back to initial *<sch>* (ONW, 2018: *skot* (I)). As there were no initial *sch*-clusters before, this is a phonetic development, and not a phonological one. See also pages 48 and 49.

### **PGm. *\*g***

See also *barch-* gl. *maialis* ‘castrated pig’ and *baum-* gl. *arbor* ‘tree’ under PGm. *\*b*, *chalt-* gl. *scrofa* ‘sow’ and *chanzist-* gl. *caballus* ‘horse’ under PGm. *\*t*, and *\*chard-* gl. *unam apem hoc est unum uasum* and *drach-* gl. *tertussum porcellum* ‘piglet’ under PGm. *\*d*.

*\*fugl-*, *\*fochl-* ‘bird’ < *\*fugla-*

This word is part of at least two different glosses as the second part of a compound translating various Latin bird names, such as *acceptorem* ‘bird of prey’, and *cicino* ‘swan’. The spellings show various alternations; either *<c>* or *<g>* for the velar, and either *<u>* or *<o>* for the vowel. The origin of the word is PGm. *\*fugla-* ‘bird’, so the *<o>* would indicate lowering of the vowel, which is seen more often in the Lex Salica, see also PGm. *\*u*.

*\*gang-* ‘going’ < *\*gangan-*

This word is probably a derivative from the PGm. verb *\*gangan-* ‘to go’ (Kroonen, 2013: 167). In the text, it is possibly translating (a part of) Latin *dructe ducente* or *dructi ducenti* ‘from a leading host, procession’, cf. PGm. *\*druhti-* ‘host, retinue’ (Kroonen, 2013: 104). Only one out of the five attestations preserves the *<n>*, whereas the other four manuscripts misspelled it as *<u>*. To spell the velar consonants, the manuscript containing *<n>* (H) has *<ch>* initially, whereas the other manuscripts show *<g>* twice.

The second part of the gloss is written as <chaldo> (3x), <caldo> (1x), and <altho> (1x). This is seen as derived from the verb *\*haldan-* by the ONW (2018: s.v. *\*ganghalt*), as to mean ‘hindering to go’. This has to be an explanatory gloss to the Latin clause, where a girl is raided or assaulted during her wedding procession. This semantic connection seems to be a little farfetched, as is the assumption that /d/ would have been misspelled as <th>, while a change of /th/ to /d/ occurs more often in the Lex Salica, e.g. in *andr-* < PGm. *\*anþara-*. I would suggest a tentative reading of *\*<chalþ>* and later <chald> from PGm. *\*halþa-*, with the oldest meaning ‘to be skewed’, cf. Old English *onhioldan* ‘to lean, incline, bend down’ (Kroonen, 2013: 205-206). Semantically, this is as farfetched, but phonologically it is to be preferred.

*\*lāchin-, lāzin-* gl. *osto* (< *obsto*) ‘to stand in the way, hinder’ < *\*lēgjan-*

Occurring only in combination with the Latin word *via* ‘road, way’, this root has survived in various spellings. The velar consonant is found as <z> six times, as <c> twenty times, and as <ch> once. Assuming that the <c> has emerged by omitting the <h>, we have twenty-one cases of <ch> against seven of <z>. Apart from two cases where the first vowel is written as <ai>, and one case where the second vowel is written as <y>, there are no major spelling issues with regards to this word. As for the meaning of the word; it occurs thirteen times together with a form of Latin *osto* ‘to stand in the way, hinder’, five times together with Latin *rumpo* ‘to break, destroy’, and two times with Latin *claudio* ‘to shut, close’. Seven times the word occurs as the heading of a chapter, so without a Latin lemma.

The most probable PGm. proto-form of this root is *\*lēg-*, cf. OHG *lāga* ‘ambush, trap’, Middle Dutch *laghe* ‘id.’, Old Frisian *lēge, lāge* ‘id.’, which is a derivative of the verb *\*leg(j)an-* ‘to lie’ (Bichlmeier & Kozianka & Schuhmann, 1988: 967; Kroonen, 2013: 330). Judging from the semantics of the cognates, and from the numbers, the Latin word *osto* is the most likely lemma for this gloss.

*thunzin-* ‘thing-judge’ < *\*þungjan-*

This word occurs both as a gloss and as a loanword in the Latin text, and probably means ‘judge of the *thing*’, related from PGm. *\*þinga-* (Kroonen, 2013: 542). The exact form in Frankish is the zero-grade to this root, *\*þung-*, followed by either the suffix *\*-ina*, according to Schmidt-Wiegand (ONW, 2018: s.v. *\*thungin*), however I would argue that the agent noun suffix *\*-jan* is also a likely candidate, see also pages 55 and 56. In the attestations, we see both spellings with <gi> (9x) and with <zi> (7x).

*uuarg-* ‘outlaw’ < *\*warga-*

This word is a loanword, and not a gloss. In principle we thus cannot assume this word to be part of the Frankish language as come down to us in the Lex Salica. The Latin text deals with a man that robs a grave, after which it reads: *uuargo sit usque die illa quæ...* ‘he will be a *uuarg*-until the day upon which...’ After this, it is added that whoever will give him food or shelter, has to pay a fine. Following this, the word is interpreted as ‘outlaw’, cf. OE *wearg* ‘villain, felon, criminal’, OHG *warg* ‘enemy, devil’ < PGm. *\*warga-* (ONW, 2018: s.v. *warg*).

\**uuicche* gl. *admissarius* ‘breeding (stallion)’ < \**wiggi*-

The gloss occurs only once, and is written as <huicthe>, as a gloss to Latin *admissarium*, which is always interpreted to mean ‘stallion’, as the phrases before it are dealing with horses as well. The <t> would be a misspelling of <c>, so the original gloss was probably \*<uuicche>, with a geminate, cf. Old English *wicg* ‘steed’, Old Saxon *wigg(i)* ‘horse’, ON *vigg* ‘horse’ (ONW, 2018: s.v. \**wiggi*; Quak, 2008c: 14).

\**zimi*, \**gimi* ‘winter’ gl. *anniculum* ‘one-year-old’, *bimum* ‘two-years-old’ < \**gim*-

The ONW connects the word to PIE \**ghimo*- ‘winter’, cf. Latin *bimus* ‘two-year old animal’ (ONW, 2018: s.v. \**ēngimi*). According to Kroonen, the form at hand is the genitive stem of PGm. \**gōin*- ‘late winter’, i.e. PGm. \**gim*- continuing PIE \**g<sup>h</sup>im*- (Kroonen, 2013: 184). In total, there are fourteen attestations with a <z> instead of the <g> that occurs in the other two attestations, once in D8 and once in A3.

The sound that goes back to Proto-Germanic phoneme \**g* is spelled both as <g> and as <ch>, without a clear distribution. Both graphemes occur at the beginning of a syllable, cf. \**chard*- and \**gang*-. At the end of a syllable, we find <g> after a consonant, cf. \**gang*-, but <ch> after a vowel, cf. \**fuchl*-. There is one environment in which the consonant has changed, namely before \**i*, where we often see the spelling <z>. For this spelling there are not many examples, and there is no clear distribution between the manuscripts.

	A1	A2	A3	A4	C5	C6	D7	D8	D9	H
<i>chanzist</i> -	z	z				z	z	z	z	g
<i>thunzin</i> -	g	g	g	z	z	z	z	z	z	g, z
* <i>zimi</i> -		z	g			z	z	g, z	z	z
<i>lāgin</i> -	ch, c	c	c	c	z	z	c	c	c	c

## 2. The distribution of the spelling of the allophone [d͡ʒ].

Van Helten assumes that the spelling <z> comes from the Anglo-Saxon letter *yogh* <ȝ>, representing /g/ in Old English (Van Helten, 1900: 241). However, it is noteworthy that the



<z> only occurs before a <i> or <y> in the Lex Salica, and furthermore I think it is implausible to assume that the writers of the Lex Salica borrowed an Anglo-Saxon letter to write this one allophone before the high front vowel /i/. Also, when we look at the actual form of the grapheme in the photo of the spelling <anzacho> (A1), it is clear that the letter does not look like a yogh. In this I agree with Kerkhof who argues the same. He explains the merger of Latin /dj/, /j/, and /g/ before front vowels into /d͡ʒ/, which was sometimes written as <z> (Kerkhof, 2018: 112, 113). In his book about Vulgar Latin, Joseph Herman gives examples of words spelled with <z> in Vulgar Latin, e.g. *septuazinta* for *septuaginta*, and the mistake of *baptidiata* for *baptizata*, where the <z> spells a palatalised consonant (Herman, 2010: 44). This originated in the fact that the letter <z> was used to represent Greek <ζ>, a voiced dorsal affricate. So, it is

probable that the Frankish spelling <zi> for Proto-Germanic \*gi indicates palatalisation of the consonant, probably pronounced as [dʒi].

In the word *baum-* ‘tree’ from \**bagma-*, we see a development of the \*g into a West-Germanic \*w, resulting in a merger with PGm. \*au. According to Kroonen, the development into \*w was due to the labial environment, i.e. the labial /m/, but this development is not paralleled in other attestations (Kroonen, 2013: 47).

For the phonemic position of the continuation of PGm. \*g, see PGm. \*h.

### **PGm. \*f**

See also *frīfastin-* gl. (*filiam*) *sponso* ‘to betroth (a girl)’ under PGm. \*t, and \**fugl-*, \**fochl-* ‘bird’ under PGm. \*g.

\**chafr-* gl. *caper* ‘goat’ < \**hafra-*

The semantic connection is very probable, and the development from PGm. \**hafra-* ‘billy goat, buck’ is without a doubt (Kroonen, 2013: 198). We find two spellings with <f> (C6, H), and three with <p> (D789), possibly influenced by the Latin word. The D-manuscripts also show a vowel between the final consonants; <per>. There is only one form that spells an initial <h>, the other forms lack this letter entirely.

*falla* gl. *trappa* ‘trap’ < \**falla-*

Both the phonology and the semantics of this gloss are well-established. The gloss occurs four times in the same spelling, and can be compared to OS, OHG *falla*, and OE *fealle*, all ‘trap’ derived from PGm. \**fallan-* ‘to fall’ (Kroonen, 2013: 125).

\**fīf* ‘five’ < \**fimfe-*

The PGm. form of the word is \**fimfe-* (Kroonen, 2013: 140). One of the certain attestations reads *Tho to condi vueth chunna, sol. LXII et dimidio* (H), ‘2500: 62.5 solidi’, with the spelling <vueth>, whereas we otherwise find the spelling <fit>. Both spellings lack a nasal, so the most likely phonological form is \**fīf*, with compensatory lengthening. The Germanic languages lacking a nasal in this word are Old English, Old Frisian, Old Saxon, and Dutch, see also page 51.

\**fitther* ‘four’ < \**feþwar-*

The word is spelled *fitter* throughout the Lex Salica, but the interpretation is clear from, for example: *Fit ternu sunde, sol. C* (manuscript H), with the same 40:1 ratio of denarii:solidi. In Gothic, the word is spelled with an internal <d>, as *fidwor*, but the other Germanic languages point to a fricative, such as Old English *fyðer-* (Kroonen, 2013: 133). A PGm. form \**feþwar* would have resulted in West-Germanic \**feþþwar* > *feþþar*. The outcome of this cluster varies per language. De Vaan sums up the possibilities: Old English retains the cluster; Old East Frisian retains it as /thth/, later /tth/, while Old West Frisian changes it into /tt/; Old Saxon has a variety of forms that includes /th, /tth/, /dd/, and /tt/; Old High German has /thth/ or /dhdh/,

giving /tt/ in Late Old High German through a stage /tth/ (De Vaan, 2014: 5). After his survey of the Dutch data, De Vaan concludes that *\*þ* has given /s(s)/ in Dutch (De Vaan, 2014).

The Frankish evidence here suggests either /tt/, or possibly /tth/ when we assume the omission of the letter <h>, which is a trivial mistake. A reading of /th/ is highly unlikely, as the misspelling of <t> for <h> is not found elsewhere. /tt/ is otherwise only found in West Frisian and in some cases in Old Saxon, while /tth/ is more widespread. This word alone cannot serve as evidence to pair Frankish with any other West-Germanic dialect.

The Proto-Germanic phoneme *\*f* remains unchanged in Frankish. This phoneme is written in various ways. The situation is as follows: for the word *frifastin*- ‘to betroth a girl’ we find the /f/ of the first element three times as <f>, whereas the /f/ of the second element is written as <f> twice in D78, and once as <b> in D9. In *\*fugl*-, *\*fochl*- ‘bird’ the phoneme is written either as <f>, or it is omitted, e.g. in <cla>. In *\*chafr*- ‘goat’ we find a <p> three times in D789, and the <f> spelling only twice in C6 and H. *Falla* ‘trap’ is written with <f> in all four occurrences in D789 and H. The number *\*fif* ‘five’ is found as <fit> twice, and once as <vueth>. The word *\*fitther* ‘four’ is only spelled with an <f>.

In conclusion we can say that the Frankish phoneme /f/ was not rendered consistently in spelling. Although we find <f> most of the time, spellings otherwise used for other labial consonants are also used, namely <p>, <b>, and <vu>. There is no clear distribution between the manuscripts in this regard. In Merovingian spelling the letter <b> could be used for both the product of Latin intervocalic /b/ and /w/, that is Romance /β/ (Kerkhof, 2018: 78). Also in Frankish, Proto-Germanic intervocalic *\*b* became a fricative. The spelling of /f/ as <t> or <th> is very much unexpected and I do not have an explanation for this.

### PGm. *\*þ*

See also *\*thrispelli* ‘threefold’ and *\*thurp*- gl. *uilla* ‘country house’ < *\*þurpa*- under PGm. *\*p*, *\*theuf*- gl. *fur* ‘thief’ under PGm. *\*b*, *theuda* gl. *rex* ‘king’ < *\*þeud*- and *\*thūs(ch)und*- ‘thousand’ under PGm. *\*d*, *thunzin*- ‘thing-judge’ under PGm. *\*g*, and *\*fitther* ‘four’ under PGm. *\*f*.

*\*andr*- gl. *alienus* ‘of another’ < *\*anþara*-

The attestations of this word are not very certain. Among the more certain examples are the ones in the D-manuscripts, where the Latin text has *spunsam alienam* ‘other man’s wife’, glossed as <andrateo> (D7), <andratheo> (D8), and <andratho> (D9), which the ONW reads as *\*andras theuua* (ONW, 2018: s.v. *andar* (I)). All these certain examples show either a metathesis of *\*þar* to /dra/, or the deletion of the unstressed vowel. If the reading is correct, the PGm. cluster *\*nþ* in *\*anþara*- would have given /nd/ in the Lex Salica, or one could posit a more complicated scenario where the /d/ is explained as epenthetic: *\*anþar*- > *\*annar*- > *\*anar*- > *\*anra*- > *\*andra*-. The assimilation of *\*nþ* would be in line with the assimilation of *\*lþ* as seen in the next word.

*malth-*, *mall-* ‘speak, declare’ < \**maþl-*

Kern, Van Helten, and Quak all agree on the reading of the word at hand (ONW, 2018: \**malthon*). The word is supposed to be derived from PGm. \**maþla-* ‘meeting-place’. This word shows metathesis of the cluster \**þl* to /lth/, whereas this metathesis is not found in the other languages in which this root is found: Gothic *maþl* ‘forum, marketplace, assembly’, OE *mæðel* ‘assembly’, OS *mahal* ‘court, meeting; speech’, and OHG *mahal* ‘court, assembly’ (Kroonen, 2013: 358). However, the fact that these forms do not show the metathesis does not mean that the process itself was alien to the languages, e.g. PGm. \**nēþlō-* ‘needle’ > OFri. *nēdle* and *nēlde*, OHG *nādala* and *nālda*, and MDu. *naelde* (Kroonen, 2013: 388). The fact that one language shows forms with and without metathesis, renders the process of metathesis useless as to the purpose of this thesis. In this same word however, we see a different sound change as well, namely that of assimilation of this very same cluster. In fourteen attestations there is a lack of assimilation of the cluster \**þl*, and in six attestations we see an assimilation to <ll> (A3, C6, D79) or <l> (D78). We do not see a clear distribution between the manuscripts with regards to this assimilation: A12, C6, D789, and H have forms lacking assimilation, and A3, C6, and D789 contain forms that do show assimilation. We can thus say that A12 and H do not show assimilation, and that A3 does.

*theo*, *theu* gl. *seruus* ‘slave’ < \**þewa-*

This word occurs both in compounds and as a substantive and is spelled in various ways. The vowel occurs both as <eo> and as <eu>, for example in the entry \**thiotaksaka* the ONW lists eight times <eo>, against four times <eu>, and for \**thiolōsin* eleven times <eo>, against two times <eu>. It is interesting to note that the <eu> spellings only occur in manuscripts D9 and H. The <h> is sometimes omitted in spelling, but it is written in most cases. This word goes back to PGm. \**þewa-* ‘servant’ (Kroonen, 2013: 541).

\**thrī-* ‘three’ < \**prī-*

Although the attestations of this word are not very clear, it comes as no surprise that the word for ‘three’ has this form in Frankish. The context it is found in compares the number of denarii with that of solidi, in a ratio of 40:1. However, in manuscript H the phrase is: *Theio tho sunde ter theo chunna, sol. DC*, and in D8: *Triothus chunde therteo chunna, sol. DC*. 600 solidi would equal 24000 denarii, so the Frankish numbers here should read: three times eight, times thousand, and thirty times eight, times hundred. One problem with this reading is the lack of any indication that the word for ‘eight’ was present in this phrase. If we assume that the interpretation is correct, the candidate for ‘three’ is thus *theio*, or *trio-*, from PGm. \**prī-* (Kroonen, 2013: 546), but this could just as well represent the feminine, PGm. \**prīōz*, or neuter form, PGm. \**prīō*, of the word for ‘three’. As the word \**thūs(ch)und-* ‘thousand’ was feminine in all Germanic languages in which the word was not a numeral, we are probably dealing with the outcome of PGm. \**prīōz*. Since the spelling <io> is also found for the phoneme /eu/, we might speculate that it merged with PGm. \**eu*.

A word that is closely connected to this word, is the word for ‘thirty’. The attestation of this word (see above) is, however, so very blurred, that it is difficult to say anything meaningful

about it. The part <ter> might signal the fact that metathesis has taken place, as in English *thirty*, but in none of all the Old Germanic languages we do find this metathesis.

*uuidr-* ‘toward, against’ < \**wipra*

This preposition occurs eight times in the Lex Salica, in combination with uncertain elements, of which the first is the element <darchi>, and the second <sitelo> and its variants (ONW, 2018: s.v. \**withersithilo?*; \**witherteri*; \**witherdenki?*). The preposition is written as <uuidr> most of the time; once we find <vu> instead of <uu>, and once <e> instead of <i>. The second vowel is written as <e> (2x), <i> (3x), and <o> (3x). The semantics of the word cannot be determined exactly as the elements it is combined with are uncertain. One possibility is to link it to the Merovingian Latin *contra interdictum* ‘against prohibition’.

The Proto-Germanic phoneme \**p* is written as <th> in Frankish. Although unchanged in most environments, the fricative is written as <d> in some cases, possibly when followed by an /r/ in medial position (*andr-* ‘other’, *uuidr-* ‘toward, against’), and maybe when preceded by /l/ in medial position (\**chalth-*?), although we do not have many examples to prove this. This letter <d> can in theory stand for either the phoneme /d/, or for a new voiced fricative /ð/. There is as of yet no way to prove one or the other, so I will assume that it stands for /d/. As the phoneme /d/ can also occur in these positions, we are dealing with a conditioned merger of /d/ and /th/. Another probable change is the assimilation of the cluster \**lp* to /ll/, as seen in *malth-* > *mall-*, which is not yet completed as evidenced by the spellings of the original cluster. This change may have gone through a stage of \*/ld/, as PGm. \**ld* assimilated to Frankish /ll/. Kerkhof assumes that the Germanic word was changed because it was borrowed into Gaulish before it ended up in the Lex Salica, so Germanic \**mabla-* > Gaulish \**mallo-* (Kerkhof, 2018: 47-48). However, as these assimilations are rather frequent in Frankish, I do not deem it necessary to invoke Gaulish.

In manuscript A3 we see a younger form that changed the phoneme /th/ into a /d/ initially in <deuda> for *theuda* ‘king’. The cluster \**pw* probably became /tth/ between vowels, as in \**fitther*.

Apart from the regular spelling with <th> of this phoneme, we often find <t>, with an omission of the second letter. Some words are more often spelled with <t> than with <th>, e.g. *thunzin* ‘thing-judge’ is spelled with <t> eleven times (A23, C56, H, K), and with <th> five times (A14, C6), and \**fitther* ‘four’ is only spelled with <tt> from \*<tth> in all four attestations. \**thrisPELLi* ‘threefold’ is spelled with a <t> twice, but this is probably due to the Latinisation of the first element, see also under PGm. \**p*. For *malth-* ‘speak, declare’ we find: <th> twelve times in A12, C6, D789, H; <t> once in A2; and <ch> once in D8, with the same mistake as seen under /t/ above. A more aberrant spelling is found for the word \**thūs(ch)und-* ‘thousand’, which has three times <th>, three times <t>, and once <ti>. However, it is important to note that the first syllable of this word is always attested as attached to the previous word, while the second syllable is written separately, so in this case we find <Fit tertius chunde> for \*<fitther thuschunde>, with an obvious analogy to Latin *tertius* ‘third’.



### PGm. \*s

See also *\*thrīspelli-* ‘threefold’ under PGm. \*p, *\*brust-* gl. *mamilla* ‘breast’ under PGm. \*b, *chanzist-* gl. *caballus* ‘horse’, *frīfastin-* gl. (*filiām*) *sponso* ‘to betroth (a girl)’, *sicht-*, *\*secht-* gl. *eicio* ‘to cut off/out’, *capolo* ‘id.’, *excutio* ‘id.’ and *scut-*, *schot-* gl. *inclusus* ‘enclosed’ under PGm. \*t, *\*thūs(ch)und-* ‘thousand’ under PGm. \*d, and *\*schelo* gl. *uuaranion (regis)* ‘breeding stallion’ under PGm. \*k.

*mus-*, *mos-* gl. *expolio* ‘to plunder’ < PGm. \**musjan-*

This root occurs rather frequently, and always in clauses where the Latin text has some form of the verb *expolio* ‘to plunder’. Van Helten connects the root to Sanskrit *muṣ-* ‘to steal’, which he spells as *mush-*, from PIE \**mus-* (Van Helten, 1900: 332). For the simplex, we find ten spellings with <u>, against ten with <o>. The word also seems to occur in compounds, where we find the following picture, (the reconstruction are the ONW’s): *\*frīomuosit* has <o> five times and <u> two times; *\*lātesmuosit* twice <o> and twice <u>; *\*rēomuosit* twice <o>; *\*rinkesmuosit* twice <o> and once <u>; *\*thiomuosit* <o> four times and once <u>; and *\*thiorēomuosit* has <o> three times (ONW, 2018: s.v.).

*salin-* gl. *reddo* ‘to give back, return’ or *fidem facere reddo* ‘to be given guarantee’ < \**saljan-*

The two abovementioned Latin terms are translated by two Frankish terms, of which *salin-* is one. The word appears to continue PGm. \**saljan-* ‘to offer, sell’ (Kroonen, 2013: 424), which fits the semantic context well.

\**sex-* ‘six’ < \**sehs-*

The word occurs two times in combination with ‘100’, both times it reads: *sexanchunna*. It is clear that the base-form is *sex*. It is important to note that the Latin word is exactly the same, so we might be dealing with influence from Latin in the spelling of the word. The ending *-an* could be from the ordinal, PGm. \**sehstan-* ‘sixth’ (Kroonen, 2013: 431), although the /t/ is lacking. The spelling <x> probably signifies /ks/, a variant which is otherwise only found in Old Frisian and Old English; the other West-Germanic languages show an <h>, e.g. OHG, OS *sehs*. The scribe could have changed the gloss to look more like the Latin word however, so the Frankish form could as well have been \**sehs*.

*seul-* ‘soul’ < \**saiwalō-*

The contraction of \**aiwa* to /eu/ is also seen in *chreu-* ‘corpse’ from PGm. \**hraiwa-*, see also PGm. \**ai*. The resulting diphthong is written as either <eo> or <eu> twenty times, which is as expected, but four times <sel> is found. The clauses in which the word is found talk about arson in combination with the possibility of loss of life. There is probably no exact lemma to which the gloss belongs, and we are dealing with an explanatory gloss.

*son-*, *sun-* gl. *grex* ‘group of animals’ < \**sunu-*

The connection between OE *sunor*, *sonor* ‘pig herd’, ON *sonargöltr* ‘boar in pig herd’ and the gloss at hand was already proposed by Kern (ONW, 2018: s.v. \**sunist*). The PGm. root was

\**sunu-* according to the ONW (ibid.). The Proto-Germanic vowel has been lowered in twenty-two cases to <o>, while we find ten cases of the older <u>.

\**sundVlin-*, \**sondVlin-* gl. *anser* ‘goose’, *anas* ‘duck’ < \**sunda-*

This bird name is not known from other languages, but it has been compared to roots for ‘swimming’ (ONW, 2018: s.v. \**sundilo*) < PGm. \**sunda-* (Kroonen, 2013: 492). For the vowel of the root, we again find both <u> (6x) and <o> (1x). The ending might be the same as in \**suokilo* ‘sparrow hawk’ (ONW, 2018: s.v.), but we find various spellings of the first vowel of the ending: <o>, <u>, <e>, <i>, and zero. This spelling variation might indicate the presence of a schwa.

As seen in the various examples, the Frankish phoneme /s/ continues Proto-Germanic \**s* unchanged. The combination /st/ is sometimes misspelled as <ch>, see under /t/, or simply as <c>, as in <hanziaco> ‘stallion’. The /s/ is written as <r> three times, in <murdo> (2x) and <nurdo> for *mus-*, *mos-* ‘to plunder’, maybe in analogy to the word for *murder*. <mundo> for the same root has <n> for /s/, and it is to be noted that this spelling reminds of the Latin word *mundo* ‘to clean’, or a form of *mundus* meaning, among others, ‘world’ in medieval Latin. In the attestations of *scut-*, *schot-* ‘enclosed’ we also find the beginning of the word written as <exc->, which is indicative of an analogy with the Latin word *excutto* ‘to cut off’.

#### **PGm. \*z**

\**mVro* gl. *super* ‘more’ < \**maizan-*

This word only occurs in combination with \**scimada*, to mean ‘more goats’; *ros cimada* (A2), and *muscisimada* (A1). The reading is not very clear however, and the few things we can learn from the attestations are that the word starts with an /m/, and possibly ends in /ro/. This would indicate rhoticism of a voiced sibilant, as the proto-form was PGm. \**maizan-* (Kroonen, 2013: 350). We cannot see the outcome of PGm. \**ai* in this word, which blurs the connection between the word that we find, and the explanation given.

\**nare* gl. *sequens* ‘following; sucking’ < \**nazjan-*

Van Helten, Gysseling, and the ONW all assume that the gloss <nare> has to mean *poletro sequente* ‘sucking foal’, and all of them note that the part translating *poletro* is missing (Van Helten, 1900: 432; Gysseling, 1976: 90; ONW: s.v. \**neri*). So, I assume that the gloss is just meant to translate the word *sequente*, of which the meaning in this sense was probably not clear to the glossator. Van Helten assumes a proto-form \**nāri*, Gysseling \**narī-*, while the ONW goes for \**neri*. If the word is from the verb \**nazjan-* (Kroonen, 2013: 385), it is understandable to reconstruct \**e*, as all the other Old West-Germanic languages show this vowel. However, as the word is spelled three times in the same way, we must consider the possibility that the vowel was in fact /a/.

| The Proto-Germanic phoneme \**z* is rhotacised between vowels in Frankish.

## PGm. \*h

See also \**achto* ‘eight’, \**alachalt-* gl. *capolo* ‘to cut off’, *chanzist-* gl. *caballus* ‘horse’, *chrāt-* gl. *uasum ab apis* ‘beehive’, *drucht-*, \**drocht-* ‘host’, *sicht-* and \**secht-* gl. *eicio* ‘to cut off/out’, *capolo* ‘id.’, *excutio* ‘id.’ under PGm. \*t, *chunn-* gl. (*canis*) *seusius* ‘dog’, *chunn-*, *chund-* ‘a hundred’ and \**thūs(ch)und-* ‘thousand’ under PGm. \*d, and \**chafr-* gl. *caper* ‘goat’ under PGm. \*f.

*alach* gl. *casa* ‘house’, *basilica* ‘basilica’ < \**alh-*

The word is often connected to another word, e.g. in <alachescido> or <alachtaco>. It occurs most often as a gloss to the word *casa* ‘house’, but in a gloss to Latin *basilica* we find the word <alatrudua> or <alutrude>. So, the word *alach* was probably not only used for ordinary houses (ONW, 2018: s.v. \**alrūda*). The meaning of the PGm. word \**alh-* is reconstructed as ‘temple’, as it has this meaning in Gothic *alhs* and Old English *ealh*. This means that we must assume a semantic shift from ‘temple’ to ‘house’ for Frankish, or the other way around for the other languages (Kroonen, 2013: 22). The phonological form shows us that the PGm. cluster \**lh* was broken to /*lach*/.

\**alacham-* gl. *excutio* ‘to shake out, throw off’ < \**ala-ham-*

Where Van Helten and the ONW assume an adjective ‘completely mutilated’, comparing it to OHG *ham* ‘mutilated’, with the same prefix \**ala* as we have seen before, we could again be dealing with a lexical gloss to the Latin verb, and compare it to OFri. *hemma* ‘mutilate’ (ONW, 2018: s.v. *alaham*?). Half of the attestations show an <o> after the <m>, whereas the other half does not. If the gloss represents a verb, we could be dealing with the infinitive \**alahamon*, or with the 3sg.pres. conjunctive \**alachame*, more like the Latin 3sg.pret.conj. form. The word is composed of PGm. \**ala-* + \**ham-* (Kroonen, 2013: 23; Boutkan & Siebinga, 2018: s.v. *hemilinge*).

*chamin-* gl. *stringo* ‘to press’, *capulo* ‘to hit’, *excutio* ‘to cut off’ < \**hamjan-*

This gloss is compared to OHG *hemmen* ‘to hamper’, and OFri. *hemma*, *hamma* ‘mutilate’ by the ONW (2018: s.v. \**hemin* (I, II)). Kroonen follows this, and adds ON *hemja* ‘to rein, force’, and he translates the Old Frisian forms as ‘to hinder’. The reconstruction he provides for the proto-form, is PGm. \**hamjan-* (Kroonen, 2013: 206).

*chan-* gl. *gallus*, *coccus* ‘rooster’ < \**hanan-*

The semantic side of this gloss is clear, but the phonological side less so. The form goes back to PGm. \**hanan-* (Kroonen, 2013: 207). Three out of four attestations have double <nn>, whereas etymologically there is supposed to be only one. The variation in spelling of the fricative is omnipresent in the Lex Salica, here we find <ch> once, <c> twice, and once no consonant is spelled at all. Both Old Saxon and Old High German show the form *hano*, whereas Old English and Old Frisian have *hana*. The form we have here is the same as the latter, although we should always be careful with the unaccented syllables.

*chār-* ‘hair’ < \**hēra-*

The word *chār-* occurs in two different contexts: the first in contexts dealing with young boys who have not yet been shaved (Latin *non tonsorato* D7), and the second in contexts dealing with wounds to the head. The word comes from Proto-Germanic \**hēra-* ‘hair’ (Kroonen, 2013: 220), and is mostly spelled as <char>.

\**charin-* gl. *expolio* ‘to plunder’ < \**harjan-*

This word occurs only once in the gloss *tornechallis siue odocarina* to Latin *effoderit uel expoliauerit*. The idea is that <odo> is the translation of Latin *uel*, but was later attached to the following word, and the Latin *siue* replaced it. In <carina> then, Van Helten and the ONW see a verbal derivative of PGm. \**tarjan-*, cf. OHG *zerren* ‘tear apart, destroy’, which is a derivative of PGm. \**teran-* ‘to tear’, matching the meaning of Latin *expoliauerit* ‘will have plundered’ (ONW, 2018: s.v. \**terin*). A different etymology is proposed by Kroonen (p.c.); he pointed out the possibility to read \**charin-* from PGm. \**harjan-* a derivative of PGm. \**harja-* ‘host, troop, army’, cf. OE *hergian* ‘to plunder’ and OHG *harion*, *herion* gl. *populor* ‘to plunder’ (Kroonen, 2013: 211; Bosworth-Toller, 2018: s.v. *hergian*). The semantic connection between Latin *expolio* and the proposed \**charin-* is stronger than that between *expolio* and \**tarin-*. As to the spelling; we only have to assume the omission of the letter <h> of the original gloss \*<charina>.

*chreu-* gl. *homo mortuus, corpus homini mortui* ‘corpse’ < \**hraiwa-*

Although there are some minor spelling alternations, the semantic connection between the Latin lemmata and the Frankish word is clear. The word derives from PGm. \**hraiwa-* ‘dead body, corpse’ (Kroonen, 2013: 242), and the vowel was possibly long in Frankish, as it was in Old Saxon and Old High German *hrēo*, but it might as well have merged with the PGm. diphthong \**eu*. The diphthong is written as <eo> fifteen times in manuscripts A2, C6, D789 and H, as <eu> once in A1, and as <io> once in H. Two times the word is spelled with an initial <f>, which is a Roman feature, seen in other Germanic loanwords in French such as *frelon* ‘hornet’, cf. Dutch *horzel*, or *frapper* ‘to hit’ from PGm. \**hrap-* ‘to touch’.

*chros-* gl. *caballus* ‘horse’ < \**hursa-*

Since Van Helten, scholars assume that we are dealing with the outcome of PGm. \**hursa-* ‘horse’, which shows the same metathesis as Old Saxon *hros*, Old High German *hros*, *ros*, and Dutch *ros*, all ‘horse’ (ONW, 2018: s.v. \**turniros*; Kroonen, 2013: 259). This is probably correct, although the word is preceded by a more difficult to interpret part, namely <turne>, which is written connected to the word *chros-*.

\**marchi* gl. *iumentum* ‘mare’ < \**marhī-*

This gloss occurs only once in manuscript A1 but is nonetheless quite certain. It is written as <marthi>, so only one trivial misspelling needs to be assumed. There is no doubt on the semantic level, nor on the phonological level.

*uuala* gl. *romanus* ‘Roman’ < \**walh-*

This word is only found twice; both attestations are from manuscript A2, in the same spelling. Van Helten connects it to OHG *walah*, *walh*, as does the ONW, and it can further be connected to Old English *wealh* ‘foreigner’ (ONW, 2018: s.v. \**walaliut*; Bosworth-Toller, 2018: s.v. *wealh*). The ONW translates the word as ‘Walloon, Roman, Frenchman’ in the entry *walo*. Van Helten reconstructs the word as \**uualach*, which is more like the OHG form, but we do not have any evidence for a final consonant, as it is only written as <uuala>. Although we have seen that in the word *alach* ‘house’ the PGm. cluster \**lh* was broken in Frankish and gave /lach/, see under PGm. \**h*, the examples we have here show a lack of the final consonant. We might of course be dealing with a diachronic issue, if the word at hand is of a later date.

The Frankish form can be compared to Old Dutch *wal-*, without the final consonant, which is attested in the twelfth century (ONW, 2018: s.v. *walo*). The Old Dutch *al* < PGm. \**alh-* is also only attested without the final consonant, however this word is only found in toponyms and can thus sometimes be interpreted as being a different root (ONW, 2018: s.v. *al*).

Proto-Germanic \**h* is written as <ch> in the Lex Salica, exactly the same as the sound that continues Proto-Germanic \**g*. When judging from the spelling, we could say that the two sounds show a merger in most environments. Another hint is the fact that the word *chrāt-* ‘honeycomb, beehive’ is written with a <g> once in D9, while it goes back to PGm. \**h*. The environments in which the merger probably did not take place, are those in which the letter <g> is used for PGm. \**g*, so after a resonant at the end of a syllable and before a PGm. \**i*. We find only two spellings of <g> initially, against an abundance of <ch> spellings. The <g> is thus easier explained as either an older spelling, or, in the case of *gang-*, as an assimilatory spelling to the <g> that is found within the same syllable. The sound \**h* was possibly lost in \**thūs(ch)und-* ‘thousand’, where we find both forms retaining and forms omitting the sound, and was possibly lost in \**walh-*, although we have a counterexample in \**alh-*. When we assume that the form *uuala* is younger than *alach*, we may compare this to Old Saxon where the \**h* is often deleted, e.g. in *hō* next to *hōh* ‘high’, *thuru* next to *thurh*, *thuruh* ‘through’, and *ala* next to *alah* ‘temple’ (Gallée, 1993: 178). In Dutch the final /χ/ is often deleted when it preceded a word starting in a vowel, cf. *ho* and *hooch* ‘high’ (Van Bree, 1977: 215). Also in Old English we find both *heah* and *hea* ‘high’ (Kroonen, 2013: 215), and both *wealh* and *weala*, *wala* ‘foreigner’ (Bosworth-Toller, 2018: s.v. *wealh*). The feature of the loss of \**h* in the auslaut is thus not specific enough to say something about the position of Frankish.

For the phoneme /ch/, there are various attested spellings apart from <ch>. First, there is <c>, with omission of the second letter, and <h> with omission of the first. The <c> may be misspelled as <t>, giving raise to two more possibilities. The spelling <g> is mostly found at the end of a syllable, with is probably phonologically governed. A misspelling of <b> occurs rarely and is due to the fact that the <h> is rounded at the bottom, see photo. In one case <ph> is found, which is unexplained, but very rare. The spelling with <f> before a following /r/ is phonological rather than a spelling mistake, see above.



Speaking of the distribution of the spelling variants, there is only so much we can deduce. We see that oftentimes the different manuscript families behave in a similar way, which is obvious as manuscript families are also based of this type of features. This is true when we are speaking about a single gloss, but if we compare the glosses, we cannot say that a certain manuscript always spells or misspells the phoneme /ch/ in the same way.

	A1	A2	A3	A4	C5	C6	D7	D8	D9	H
<i>*achto</i>										c
<i>alach-</i>						c, t	t	t	g, t	c, t
<i>*alacham-</i>	th	th				th, b?				
<i>bāch-</i>		b				th				
<i>barch-</i>						g	tch, th	th	tch, th	c
<i>*chafr-</i>							h			
<i>*chalt-</i>	th, c	c	c							
<i>chan-</i>						c			c	
<i>chanzist-</i>		h						c		
<i>*chard-</i>						ph			c	th
<i>chrāt-</i>									g	
<i>chreu-</i>	c	c				f				f
<i>chunn-</i> ‘dog’						h				
<i>drache-</i>		c	g							c
<i>drucht-</i>			c		c	c		c		c
<i>*fugl-</i>		c				c	c, g	c, g	c, g	c
<i>*gang-</i>							g	g	g	ch
<i>*gang-</i>							g	g	g	g
<i>sicht-</i>	c					c		c	c	
<i>*thūs(ch)und</i>										c
<i>uuarg-</i>	g		g		g	g				g
<i>*uuicche</i>										cth

3. The misspellings of the phoneme /ch/, spellings with /ch/ or /zero/ are not included.

### PGm. *\*m*

See *\*bāchmund-*, *\*-monn-* gl. *moechatus* ‘rape’, *\*lamp-* gl. *agnus* and *baum-* gl. *arbor* ‘tree’ under PGm. *\*b*, *\*fif* ‘five’ under PGm. *\*f*, *malth-*, *mall-* ‘speak, declare’ under PGm. *\*p*, *mus-*, *mos-* gl. *expolio* ‘to plunder’ under PGm. *\*s*, *\*mVro* gl. *super* ‘more’ under PGm. *\*z*, *\*zimi-*, *\*gimi-* ‘winter’ under PGm. *\*g*, and *\*alacham-* gl. *excutio* ‘to shake out, throw off’, *chamin-* gl. *stringo* ‘to press’, *capulo* ‘to hit’, *excutio* ‘to cut off’ and *\*marchi* gl. *iumentum* ‘mare’ < *\*marhī-* under PGm. *\*h*.

*māl-* gl. *bimum animal* ‘two-year-old animal’ < \**mēl-*

This gloss is normally connected to Middle Dutch *mael* ‘young cow’ < PGm. \**mēl-*, Greek μῆλον ‘small cattle; sheep and goats’, Old Irish *míl* ‘animal’ < PIE \**meh<sub>1</sub>l-* (Quak, 2016: 322). Both semantically and phonologically this works well, as the attestations read <mala>, <maia> and <malia>. The misspelling of <i> for /l/ occurs more often, as will be seen below.

The Proto-Germanic labial nasal is only lost in the word for ‘five’, between a vowel and a fricative, with compensatory lengthening of the vowel in Frankish, but remained otherwise unchanged. We find a few misspellings for /m/, which are all more or less expected. We find <leue> for /lem/ ‘lamb’ in D79, and <leui> in C6 for the same word. <bano> for \**baum-* ‘tree’ in C6, and <inalo> for /malo/ from *malth-* ‘to speak, declare’ in D8. As the <u>, <i> and <n> all basically consist of vertical bars, just as the <m> does, the misreading or misspelling of these attestations is not unexpected.

### PGm. \**n*

See also \**bāchmund-*, \*-*monn-* gl. *moechatus* ‘rape’ and \**bain-* gl. *os* under PGm. \**b*, *chanzist-* gl. *caballus* ‘horse’ and *quint-* gl. *cinitus* ‘male prostitute, homosexual’ under PGm. \**t*, *chunn-* gl. (*canis*) *seusius* ‘dog’, *chunn-*, *chund-* ‘a hundred’ and \**thūs(ch)und-* ‘thousand’ under PGm. \**d*, *renk-*, *rink-* gl. *quis ingenuus* ‘a free man’ under PGm. \**k*, \**gang-* ‘going’ and *thunzin-* ‘thing-judge’ under PGm. \**g*. \**andr-* gl. *alienus* ‘of another, strange’ under PGm. \**h*, \**nare* gl. *sequens* ‘following; sucking’ under PGm. \**z*, and *chamin-* gl. *stringo* ‘to press’, *capulo* ‘to hit’, *excutio* ‘to cut off’ and *chan-* gl. *gallus, coccus* ‘rooster’ under PGm. \**h*.

\**ain-* ‘one’ gl. *anniculum* ‘one-year-old’ < \**ain-*

There are two compounds supposedly containing the word \**ain* ‘one’, combined with either the word for ‘year’, or the word for ‘winter’ (ONW, 2018: s.v. \**ēngimi*, \**ēnjāri*?). The spelling of the first part is <in> (4x) with the word for ‘winter’, but the existence of the compound containing the word \**jāri* according to the ONW, is highly unlikely. This gloss is spelled as <ethatia> in H, and <natariaē> in C6, in which I refuse to see \**ēnjāri* as the ONW does. The PGm. form is \**aina-* ‘one’ (Kroonen, 2013: 11), and when we assume that in <in> the first vowel was lost in spelling, then the accented syllable would have been unchanged.

\**neun* ‘nine’ < \**newun-*

The two attestations read *vuenet* (H) and *uene* (D8). The ONW assumes a form \**neune*, which is quite possible, although the origin of the final vowel would be difficult to explain, so I assume that it was added later by the scribe and is not part of the Frankish word. The first vowel <e> is probably original, as there is no apparent motive from a Latin point of view to change the vowel, and thus it continues the PGm. vowel unchanged, < PGm. \**newun-* (Kroonen, 2013: 389-390). It is clear that the PGm. \**w* did not change into a /g/ in this form, as it did in Old English *nigon*, Old Frisian *niugun*, Old Saxon *nigun*, and Dutch *negen*. In this respect, it is to be compared with Old High German *niun*.

The dorsal nasal remains unchanged in the course of Proto-Germanic to Frankish. The misspellings for the phoneme /n/ are not many. It is rarely omitted, as in <tuginus> for *thunzin-* ‘thing-judge’. A misspelling is found in <uarachalt> for *\*nari-* ‘sucking’ in H, with <u>. This is also found for the number ‘nine’, spelled as <uene> and <vuenet>, where the second /n/ is written, but the first has been changed into a <u>, or <vu> by dittography. A possible misspelling is found for the word *\*bāchmund-* ‘rape’, where manuscript C6 has <ni> for <nn>.

### PGm. \*r

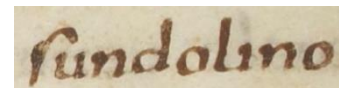
See *\*thrīspelli-* ‘threefold’ and *\*thurp-* gl. *uilla* ‘country house’ under PGm. *\*p*, *barch-* gl. *maialis* and *\*brust-* gl. *mamilla* ‘breast’ under PGm. *\*b*, *chrāt-* gl. *uasum ab apis* ‘beehive’ and *drucht-*, *\*drocht-* ‘host’ under PGm. *\*t*, *\*chard-* gl. *unam apem hoc est unum uasum* and *drach-* gl. *tertussum porcellum* ‘piglet’ under PGm. *\*d*, *renk-*, *rink-* gl. *quis ingenuus* ‘a free man’ under PGm. *\*k*, *\*chafr-* gl. *caper* ‘goat’ and *\*fitther* ‘four’ under PGm. *\*f*, *\*andr-* gl. *alienus* ‘of another, strange’, *\*thrī-* ‘three’ and *uuidr-* ‘toward, against’ under PGm. *\*þ*, and *chār-* ‘hair’, *\*charin-* gl. *expolio* ‘to plunder’, *chreu-* gl. *homo mortuus, corpus homini mortui* ‘corpse’ and *\*marchi* gl. *iumentum* ‘mare’ under PGm. *\*h*.

None of the attestations of the continuation of Proto-Germanic *\*r* shows any difference between the Proto-Germanic and the Frankish phoneme. /r/ is mostly written with the letter <r>. In the case of <theo> for *\*thrī-* ‘three’, we see an <e> instead, and we find once <s> in a spelling for *chār-* ‘hair’ (C6). Especially in the onset /chr-/ the <r> is often omitted, e.g. <cheo> for *\*chreu-* ‘corpse’.

### PGm. \*l

See *\*thrīspelli-* ‘threefold’ under PGm. *\*p*, *\*lamp-* gl. *agnum* under PGm. *\*b*, *\*alachalt-* gl. *capolo* ‘to cut off’, *chalt-* gl. *scrofa* ‘sow’ and *\*lēt-* gl. *litus* ‘serf’ under PGm. *\*t*, *leud-* ‘weregild’ under PGm. *\*d*, *\*schelo* gl. *uuaranion (regis)* ‘breeding stallion’ under PGm. *\*k*, *\*fugl-*, *\*fochl-* ‘bird’ and *\*lāchin-*, *lāzin-* gl. *osto* (<*obsto*>) ‘to stand in the way, hinder’ under PGm. *\*g*, *falla* gl. *trappa* ‘trap’ under PGm. *\*f*, *malth-*, *mall-* ‘speak, declare’ under PGm. *\*þ*, *seul-* ‘soul’ under PGm. *\*s*, *\*alacham-* gl. *excutio* ‘to shake out, throw off’ and *uuala* gl. *romanus* ‘Roman’ under PGm. *\*h*, and *māl-* gl. *bimum animal* ‘two-year-old animal’ under PGm. *\*m*.

The phoneme *\*l* is unchanged in Frankish. The phoneme /l/ is almost always written as <l>, except for some attestations in which it is written as <i>, in <fugia> for /fugla/ ‘bird’, and in <maia> for



/māl-/. To understand this, one should know that the letter <i> did not have a dot; see the photo for the word <sundolino>, from manuscript A1, for comparison of the two letters. We have already seen the problems with the reconstruction *\*balomund* ‘rape’, which is written with <b> and <ch>, something very unusual for the phoneme /l/. This points us to the other interpretation given above, namely that of a connection with PGm. *\*bēg-* ‘to fight’, as a spelling of <c> for /t/ is not unusual.



### PGm. \*j

Only the word *frī* ‘woman’ < PGm. \**fri(j)a*- ‘free’ might have contained a \*j in an accented syllable, although it is not retained as such in this word. Other than that, we often find this phoneme in the suffix \*-jan-. This suffix seems to have given <in> in Frankish, which will be discussed on pages 55 and 56.

### PGm. \*w

See *quint*- gl. *cinitus* ‘male prostitute, homosexual’ under PGm. \*t, \**fitther* ‘four’ under PGm. \*d, *theo*, *theu* gl. *seruus* ‘slave’ and *uuidr*- ‘toward, against’ under PGm. \*b, *seul*- ‘soul’ under PGm. \*s, *chreu*- gl. *homo mortuus*, *corpus homini mortui* ‘corpse’ and *uuala* gl. *romanus* ‘Roman’ under PGm. \*h, and \**neun* ‘nine’ under PGm. \*n.

\**uurain*- ‘breeding stallion’ < \**wrainjan*-

As this word is a Latin word that is borrowed from Germanic, we cannot reconstruct this word for the language of the Malberg glosses, although none of the scholars discussing this word do address this issue. Helten, Quak, and the ONW all agree that we are dealing with a word \**wrain(i)o* meaning ‘breeding stallion’ (ONW, 2018: s.v. \**wrēno*-), from PGm. \**wrainjan*- (Kroonen, 2013: 596). The spellings of the word show variants of <waran> (10x), and <war(r)in> (2x), so the scholars assume a switch of place between the <r> and the first vowel, although this is due to the fact that the Germanic anlaut \**wr*- was broken in Latin, cf. Old French *garçun* < \**wrakkjō* and Old Normandic *varence* < \**wratja*- ‘madder’ (Von Wartburg, 1922: s.v. \**wrakkjo*; \**wratja*; Kroonen, 2013: 594).

The second vowel is written as <a> or <i>, which would mean that the development of PGm. \**ai* to /e/ has not taken place, just as we have seen in the word \**ain* ‘one’. However, most of the cases do not even spell the /i/ that is supposed to be present, and as we are dealing with a loanword, I do not think this word will help us in determining the development of the Proto-Germanic form into the Frankish form.

Although not abundant, there is evidence that the Proto-Germanic sound \*w was unchanged initially in Frankish but was lost between vowels. The cluster \**dw* became /tth/ between vowels, as in \**fitther*. As the word \**uurain*- ‘stallion’ is a loanword from Frankish, the only real Frankish evidence we have for the phoneme /w/ shows spellings with <uu>. The loanword is spelled with <uu> six times, with <w> five times, and with <vu> once. The combination of /kw/ is written as <qu>, as in *quint*- ‘male prostitute, homosexual’.

## The Vowels

### PGm. \*i

In the words \**uuicche* ‘breeding (stallion)’ and \**zimi-*, \**gimi-* ‘winter’ we see that the \**i* has been retained as such. However, this was not always the case. In two cases PGm. \**i* has been lengthened, namely in *frī-* ‘woman’, (*frīfastin-* gl. (*filiam*) *sponso* ‘to betroth (a girl)’ under PGm. \**t*), from PGm. \**fri(j)a-* ‘free’ with contraction, and in \**fīf* ‘five’ (under PGm. \**f*), where the loss of the nasal \**m* caused lengthening. According to the ONW, the latter development also happened in the gloss written as <suuido>, which supposedly goes back to PGm. \**swinþ-* ‘strong, healthy’. However, on top of the weak semantic connection to Latin *gallus*, this is phonologically difficult. \**swinþ-* can give \**suuind-*, as in *andr-* from \**anþara-*, or it can give \**suuīth*, with the same development as in \**fīf*. If this form \**suuīth* would then have developed into the attested *suuid-*, we would have to assume that the fortition of the fricative occurred both before the development of \**VNF* > /*ŨF*/ (*andr-*), and after this development (*suuid-*), giving two different results for the same environment /*Vnþ*/.

In the words *renk-*, *rink-* gl. *quis ingenuus* ‘a free man’ from PGm. \**rinka-* and *uuidr-*, *uuedr-* ‘toward, against’ from PGm. \**wīþra* we see both /*e*/ and /*i*/ written for PGm. \**i*. This lowering might be due to the following \**a*, although we might have expected this change to happen in \**fri(j)a-* ‘free’ as well, but it did not as in this case we find *frī* ‘woman’. For more on this process, see page 52.

A variant spelling for the letter <*i*> is found in the word \**zimi-*, \**gimi-* ‘winter’. The word for ‘winter’ has <*y*> nine times in A2, C6 and H, against <*i*> seven times; the <*y*> only occurs after <*z*>, and <*g*> is always followed by <*i*>. The word \**lāchin-*, *lāzin-* gl. *osto* (<*obsto*) ‘to stand in the way, hinder’ has one spelling with <*zy*> in manuscript C6. The word *thunzin-* is once found with the spelling <*gy*> in manuscript A2. Interestingly, the spelling with <*y*> is only found in three different manuscripts, namely A2, C6, and H. The reason for the usage of <*y*> is not easy to detect but may lie in the fact that both <*z*> and <*y*> were used in Latin to represent Greek phonemes that were not present in Latin. However, as it is probable that the <*z*> was specifically used because of the fact that it represented a sound that could not be represented otherwise, it is highly doubtful that the spellings with <*y*> in fact represent a pronunciation [y].

In the attestation <*vueth*> for \**fīf* ‘five’, we find a rare misspelling of <*e*> for Frankish /*ī*/. There does not seem to be a ground to assume analogical spelling, as the found spelling does not look like another known word, neither in Latin, nor in Frankish.

### PGm. \*ɾ

The only example for this sound is found in \**thrī-* ‘three’ under PGm. \**þ*, where it seems to have been retained, spelled as <*i*>.

### PGm. \*u

See \**thurp-* gl. *uilla* ‘country house’ under PGm. \**p*, \**bāchmund-*, \*-*monn-* gl. *moechatus* ‘rape’, *barch-* gl. *maialis* ‘castrated pig’ and \**brust-* gl. *mamilla* ‘breast’ under PGm. \**b*,

*drucht-*, *\*drocht-* ‘host’ and *scut-*, *shot-* gl. *inclusus* ‘enclosed’ under PGm. *\*t*, *chunn-* gl. (*canis*) *seusius* ‘dog’, *chunn-*, *chund-* ‘a hundred’ and *\*thūs(ch)und-* ‘thousand’ under PGm. *\*d*, *\*fugl-*, *\*fochl-* ‘bird’ under PGm. *\*g*, *mus-*, *mos-* gl. *expolio* ‘to plunder’, *son-*, *sun-* gl. *grex* ‘group of animals’ and *\*sundVlin-*, *\*sondVlin-* gl. *anser* ‘goose’, *anas* ‘duck’ under PGm. *\*s*, and *chros-* gl. *caballus* ‘horse’ under PGm. *\*h*.

Although we find Proto-Germanic *\*u* oftentimes written as such, we also find quite some cases of <o>. This process looks a lot like *a*-umlaut, as attested in other Germanic languages, but the conditions are not that clear. The form *\*drocht-* comes from PGm. *\*druhti-*, without the umlaut factor of a low vowel in the next syllable. For more on this process, see pages 52-54. In the case of *barch-* ‘castrated pig’ from PGm. *\*baruga-* ‘barrow’, we see that unaccented *\*u* was dropped in nine attestations but kept as <a> (C6) or <e> (H) in two attestations. Judging from these spellings, the vowel was lowered and fronted in unaccented position, and ultimately lost.

Apart from the phonological variants /u/ and /o/, we find two spellings of <a> in <bract> (D79) for *\*brust-* ‘breast’, against two spellings with <u>; one with <i> in <chisto> (D8) for *scut-* or *shot-* ‘enclosed’; three with <a> in <chan> (D789) for *chunn-* ‘dog’. The misspellings with <a> in <bract> may be explained by analogy to Latin *bractea* ‘thin plate of metal’ vel sim., but this is very much speculative. The <a> in <chan> is explained by the various authors in different complicated ways. The assumption the ONW has is that <fhuuuichuus> (D7), <fluuuicus> (D8) and <phuuuichuus> (D9) write *\*fimig* ‘trained’, which needs misspellings of /im/ as <uuu>, and of /i/ as <h> or <l>. Then, the original gloss would have read *\*fimichan chunn-*, of which the last two syllables were contracted in spelling (ONW, 2018: s.v. *\*hundo?*). The misspellings needed to assume this word are rather trivial; we have seen misspellings for /m/, such as <iu>, so <uuu> would not be too surprising. However, in the manuscripts the two words are separated by another word, namely <cornutur> (D79) or <cornutum> (D8), which seems to mean ‘horned’ in Latin, although this does not make sense in this context, talking about dogs. This fact renders the whole gloss obscure.

A possible parallel for the misspelling of <a> for /u/ is found in manuscripts C6 and H. The gloss in question is written as <madoalle>, <mandualo>, and <mandoado>. I hesitantly suggest reading these glosses as *\*mund-uual-* ‘burial mound, elevated hill’, of which the first part may be compared to English *mound* which is often derived from PGm. *\*mundō-* ‘hand; protection’, through a meaning ‘rampart, earthen defence’ (e.g. Skeat, 1993: 295). This English word is often used to translate Latin *tumulus* ‘grave hill’. The second part of the compound possibly comes from Latin *vallum* ‘wall’, cf. OE *weall* ‘id.’, which would explain the spelling with double <ll> perfectly. The literal meaning would then be either ‘protection-wall’ or ‘wall of a burial mound’. The gloss probably belongs to *cheristoniam* in this clause (LV.3), or to *tumulum* ‘tumulus’ (C6) or *tombam* ‘tomb’ (H) in the previous clause (LV.2). For a different, less convincing explanation, see ONW, 2018: s.v. *\*manthwalu*.

### PGm. \*ū

This phoneme is only attested in the word *\*thūs(ch)und-* ‘thousand’, where it is spelled in various ways. However, the first syllable of this word is almost always written as if it were the last syllable of the preceding word and is thus susceptible to analogical spellings as Latin morphological endings, and so we find both <u> and <o>.

### PGm. \*e

See *\*thrīspelli-* ‘threefold’ under PGm. \*p, *\*schelo* gl. *uuaranion (regis)* ‘breeding stallion’ under PGm. \*k, *\*fittther* ‘four’ under PGm. \*f, *theo, theu* gl. *seruus* ‘slave’ under PGm. \*þ, and *\*neun* ‘nine’ under PGm. \*n.

In two words, PGm. \*e is written as <i>, namely in *\*fittther* ‘four’, and in *sicht-*, *\*secht-* ‘to cut off’, in both cases immediately before a fricative. For more on these cases, see page 54. Two other cases of PGm. \*e show contraction; *theo, theu* ‘slave’ from *\*þewa-* and *\*neun* from *\*newun* contracted due to the loss of \*w. Otherwise we find /e/ from PGm. \*e. The Frankish phoneme /e/ is always spelled as <e>.

### PGm. \*ē

If our reading of *\*bāchmund-*, *\*-monn-* gl. *moechatus* ‘rape’ from PGm. \*bēg- is correct, the Proto-Germanic vowel \*ē changed into Frankish /ā/, which is paralleled in *\*lāchin-*, *lāzin-* gl. *osto* (< *obsto*) ‘to stand in the way, hinder’ from PGm. \*lēg-, *chār-* ‘hair’ < PGm. \*hēra- and *māl-* gl. *bimum animal* ‘two-year-old animal’ < PGm. \*mēl-, and *chrāt-* gl. *uasum ab apis* ‘beehive’ < *\*hrētō-*. However, the vowel \*ē seems to have been kept as such in Frankish *\*lēt-* gl. *litus* ‘serf’ (under PGm. \*t). The word is spelled with <e> four times, but with <i> five times. It is to be noted that the Gallo-Romance word is *litus*, a borrowing from Germanic. Quak argues that the forms with <i> are influenced by the Latin written form *litus*, and that the forms with <e> are archaic and represent /ē/ (Quak, 2016: 320). Kerkhof solves the problem in the same way, assuming that the gloss is in fact influenced by the Merovingian Latin spelling <letus> of the Gallo-Romance word, and not a Frankish word directly inherited from Proto-Germanic *\*lēt-* (Kerkhof, p.c.). As the Gallo-Romance word is a loanword from Germanic, this word was probably borrowed at the stage at which Frankish still had \*ē (Quak, 2016: 321). For the word *chār-* ‘hair’, we find one spelling with <e> in manuscript C6, which would then be an archaism. Quak concludes that the Frankish were the last to undergo the North-West-Germanic sound change of PGm. \*ē > /ā/ in the fifth and sixth century AD (Quak, 2016: 328).

The other attestations in which Frankish presumably had /ā/ from PGm. \*ē are quite problematic in my opinion. The word *\*wradunia* (Quak, 2016: 318) or *\*wrādunna* (ONW, 2018: s.v.) is reconstructed with initial \*wr, but the initial cluster should have been preserved; in the attestations we find six times <r> and once <chr>, which is easier to derive from PGm. \*gr- or \*hr-. The lemma to which the gloss belongs is *scrouam ducariam* ‘leading sow’, and the word is often compared to Gothic *wreþus*, which is unattested; the only form that is attested is *wriþus* ‘herd’, and furthermore Old Danish *vrāth* ‘herd of twelve pigs’ and Old English *wrāþ*, *wrāed* ‘bandage, band, flock’ (ONW, 2018: s.v. *\*wrādunna*; Kroonen, 2013: 595). This word shows

<e> in the manuscripts A1, A2 and H, <eo> in the three D-manuscripts, and <a> in manuscript C6. As we have seen before, the spelling <eo> probably indicates the pre-French diphthong /iɛ/, meaning that the word was borrowed into Romance at the time that Frankish still had \*ē. The spelling with <e> could indicate an archaism, but the fact that PGm. \*p is represented by <d> contradicts that, which is another problem with this word.

The gloss reconstructed as \*antdēdi (ONW, 2018: s.v.) is problematic on various levels. First, the meaning of the gloss is not clear; the only connection between most of the clauses in which it occurs is the word *furauerit* ‘s/he steals’ and the fact that most of the crimes are committed indoors. The spelling does not point us to the reconstruction given: the vowel reconstructed as \*ē is written as <e> twenty-six times, as <i> seven times, and as <eo> two times. The first dental consonant most likely goes back to <th>, as it is written as <t> nineteen times, and as <th> sixteen times, and the second dental consonant is thirty-two times written as <d>. The most probable reading is thus <anthedio>. The first part seems to be /an/ from PGm. \*ana ‘on(to), to, by’. The following root is normally connected to the verb \*dōn- ‘to do’, but a spelling of <th> for /d/ does not occur elsewhere. To me, the gloss looks like a past subjunctive form of a strong verb of class 4 or 5 in order to translate the Latin form *furauerit*, cf. Gothic *nemi* 3sg.pret.conj. (De Vries, 1982: 47). A verb that matches these criteria is Gothic *hlifan* (class 5) ‘to steal’ < PGm. \*hlefan- (Kroonen, 2013: 230). If the current gloss is related, we would probably have to read \*<chlebi> from a verb \*chlefan. Another tentative possibility is to compare the gloss to the root \*peuba- ‘thief’ (Kroonen, 2013: 539), however in this case the two times the vowel is written as <eo> would have to be more original than the overwhelming cases of <i> and <e>. On top of that, the specific derivation of a verb \*theuban- would be unparalleled.

### PGm. \*ō

There is one possible example for the continuation of PGm. \*ō in accented syllables in the Lex Salica. The gloss is written as <obdo> in A1 and as <obdon> in H, probably to gloss Latin *effregerit* ‘may he have opened’. Both Van Helten and the ONW relate this word to the verb \*dōn- ‘to do’ prefixed with *ob* < PGm. \*upp (Kroonen, 2013: 120). In this case we have to assume voicing of the PGm. \*p before the voiced plosive \*d. For the meaning, the Middle Dutch verb *opdoen* ‘to open’ is to be compared (ONW, 2018: s.v.). In this case, the PGm. vowel \*ō is written as <o>, probably representing /ō/.

### PGm. \*a

See \*af gl. *de (trappa)* ‘of, from (the trap)’, *barch-* gl. *maialis* ‘castrated pig’, *baum-* gl. *arbor* ‘tree’ and *lamp-*, *lamm-* gl. *agnus* ‘lamb’ under PGm. \*b, \*achto ‘eight’, \*alachalt- gl. *capolo* ‘to cut off’, *chalt-* gl. *scrofa* ‘sow’, *chanzist-* gl. *caballus* ‘horse’ and *frīfastin-* gl. *(filiam) sponso* ‘to betroth (a girl)’ under PGm. \*t, \*chard- gl. *unam apem hoc est unum uasum* and *drach-* gl. *tertussum porcellum* ‘piglet’ under PGm. \*d, *acrebrasta* gl. *hirpex* ‘harrow’? under PGm. \*k, \*gang- ‘going’ and *uuarg-* ‘outlaw’ under PGm. \*g, \*chafr- gl. *caper* ‘goat’ and *falla* gl. *trappa* ‘trap’ under PGm. \*f, \*andr- gl. *alienus* ‘of another, strange’ and *malth-*, *mall-* ‘speak, declare’ under PGm. \*p, *salin-* gl. *reddo* ‘to give back, return’ or *fidem facere reddo* ‘to

be given guarantee’ under PGm. \*s, \*nare gl. *sequens* ‘following; sucking’ under PGm. \*z, and *alach* gl. *casa* ‘house’, *basilica* ‘basilica’, \*alacham- gl. *excutio* ‘to shake out, throw off’, *chamin-* gl. *stringo* ‘to press’, *capulo* ‘to hit’, *excutio* ‘to cut off’, *chan-* gl. *gallus*, *coccus* ‘rooster’, \*charin- gl. *expolio* ‘to plunder’ \*marchi gl. *iumentum* ‘mare’ and *uuala* gl. *romanus* ‘Roman’ under PGm. \*h.

For the rare cases of <e> for /a/ due to *i*-umlaut, see pages 54 and 55. All other cases of Proto-Germanic \*a are retained in Frankish before umlaut factors as \*i and \*j, as witnessed by *chalt-* ‘sow’, *frīfastin-* ‘to betroth a girl’, \*charin- ‘to plunder’, *salin-* ‘to give back, return’, \*nare ‘to suck’, *chamin-* ‘to press’, \*marchi ‘mare’, and the many attestations of *chanzist-* ‘stallion’ not showing *i*-umlaut.

Apart from the spelling with <e> due to *i*-umlaut, the phoneme /a/ is always spelled with the letter <a>. For the word \*lāchin-, lāzin- gl. *osto* (< *obsto*) ‘to stand in the way, hinder’ we find one spelling of <ai> (A4), which may be due to the <i> in the preceding word *via* ‘road, way’ or in the following syllable.

#### PGm. \*eu

This diphthong is found in various different roots, namely in \*theuf- gl. *fur* ‘thief’, *leud-* ‘weregild’, and in *theuda* gl. *rex* ‘king’. It fell together with the contraction product of \*ewa, as seen under PGm. \*e and \*ai. The diphthong is written both as <eu> and as <eo>, either indicating uncertainty on the writer’s part, or a phonological lowering of the second element of the diphthong to /o/. We also find the spelling <iu> in A2 and <i> in A3 for the word *leud-* ‘weregild’, and <io> for *chreu-* in H. This might indicate the raising of the first element of the diphthong.

	A1	A2	A3	A4	C5	C6	D7	D8	D9	H
<i>chreu-</i>	eu	eo				eo	eo	eo	eo	eo
<i>leud-</i>	eu/o	eu/o	eu			eo	eo	eo	eo	eu/o
<i>seul-</i>	eu	eu				eu/o	eo	eo	eo	eu
<i>theu-</i>	eo	eo				eo	eu	eu	eu	eu/o
<i>theuda</i>	eo	eu	eu	eu		eo				
*theuf-	eu				eo	eo	eo	eo	eo	eo

4. The spelling of the Frankish diphthong /eu/ or /eo/.

There is no clear distribution between the two main variants when we look at the manuscripts, as is evident from table 4. Except for manuscript A3, all manuscripts show both forms to a varying degree. As can be seen in table 5, the variant <eo> occurs overall more often than <eu>.

	<eu>	<eo>
<i>chreu-</i>	13	19
<i>leud-</i>	16	33
<i>seul-</i>	8	17
<i>theu-</i>	14	29
<i>theuda</i>	3	2
<i>*theuf-</i>	1	8
<i>total</i>	55	108

5. The number of occurrences of <eu> and <eo>.

Apart from the variant spellings <eu>, <iu>, and <eo>, for which see PGm. *\*eu*, we see a few misspellings of the diphthong. In some cases, one of the two letters has been omitted, so we find <led> (A2, D789) for *leud-* ‘weregild’, and <t(h)o> (A2, D789) and twice <the> (C6) for *theu-* ‘slave’. For *\*neun* ‘nine’ we find either <e> or <ue> in D8 and H; the <u> could also be a misspelling of the first /n/. The other misspellings found for the diphthong are <then> (A17, H) for *theu-* ‘slave’, <au> (A4) in *leud-* ‘weregild’, and <ea> in (H, K) for *theuda* ‘king’, where either the first or the second letter is mistaken for an <a>.

**PGm. *\*ai***

See *\*bain-* gl. *os* ‘bone’ under PGm. *\*b*, *seul-* ‘soul’ under PGm. *\*s*, *chreu-*, gl. *homo mortuus, corpus homini mortui* ‘corpse’ under PGm. *\*h*, and *\*ain-* ‘one’ under PGm. *\*n*.

The two cases in which the diphthong seems to be retained, are only slightly problematic in their spellings, namely <bina> for *\*bain-* and <in> for *\*ain*. In the words *chreu-* ‘corpse’ and *seul-* ‘soul’ the diphthong /eu/ is the result of contraction due to the loss of *\*w* in *\*hraiwa-* and *\*saiwalō-*. We could say that the diphthong first monophthongised to /e/, after which the contraction took place, as we see the same contraction product in *theo, theu* ‘slave’ from *\*þewa-* (under PGm. *\*e*).

**PGm. *\*au***

There are no good examples of this Proto-Germanic diphthong in the Lex Salica. The word *baum-* ‘tree’ < West-Germanic *\*bawma-* < PGm. *\*bagma-*, the only word with the Frankish diphthong /au/, is once written with <au> and once as <bano>. Here the <n> may either be a mistake for the /u/, or for the /m/ with loss of the letter <u>.

## The Phonological Developments

To conclude the phonological description of Frankish, I assume the following relatively certain sound changes that occurred between the Proto-Germanic period and the language stage of the Malberg glosses:

### (1) Full assimilation

Although the individual assimilations might be evidenced only by a limited number of examples, the total number of assimilatory processes suffices to assume the developments. As for the development of *\*lþ* to /l/, it is possible that it went through a stage *\*ld* and participated in the change of *\*ld* to /l/.

PGm. *\*mb* > Fr. /mm/ (Not completed.)<sup>2</sup>

PGm. *\*ld* > Fr. /l/

PGm. *\*nd* > Fr. /nn/ (Not completed.)

PGm. *\*lþ* > Fr. /l/

PGm. *\*sh* > Fr. /s/ (Not completed.)

### (2) Partial assimilation

The two elements of these clusters assimilated, either in fricativeness, in voicedness, or in frontness.

PGm. *\*sk* > Fr. /sch/ (Not completed.)

PGm. *\*gm* > Fr. /um/

Fr. *\*gi* > Fr. [dʒi] (Not completed.)

Pre-Fr. *\*bs* > Fr. /ps/ (Possibly, see under PGm. *\*b*.)

### (3) Merger

The exact phonetics of the phoneme written as <ch> is as of yet unclear. Here I assumed that the glottal fricative and the coronal plosive both became a coronal fricative. PGm. *\*g* after a resonant came to be a marginal phoneme in Frankish, with [dʒ] as its allophone before PGm. *\*i*.<sup>3</sup> The phoneme *\*z* merged with Frankish /r/, at least between vowels.

PGm. *\*g*, *\*h* > Fr. /ch/ (Except after a resonant and before PGm. *\*i*.)

PGm. *\*þ* > Fr. /d/ (Not completed.)

PGm. *\*z* > Fr. /r/

PGm. *\*b* > Fr. /f/ (Intervocalically.)

PGm. *\*b* > Fr. /p/ (At the end of a syllable?)

PGm. *\*d* > Fr. /t/ (At the end of a syllable? Not completed.)

### (4) Loss

PGm. *\*w* > Fr. ø (Intervocalically.)

PGm. *\*h* > Fr. ø (Word-finally. Not completed.)

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<sup>2</sup> *Not completed* in this case means that there is both evidence for and against the development.

<sup>3</sup> In theory it would be just as valid to view [dʒ] as a marginal phoneme, only occurring before /i/, with [g] as its allophone after resonants.



(5) Other developments

PGm. *\*lh* > Fr. /lach/

PGm. *\*d<sub>w</sub>* > Fr. /tth/ (Intervocalically.)

PGm. *\*pl* > Fr. /lth/

	labial		dorsal		coronal	
plosive	p	b	t	d	k	(g)
fricative	f		th, tth		ch, cch	
nasal	m, mm		n, nn			
sibilant			s			
approximant	uu		l, ll			
trill			r			

6. The phonemes of the Frankish language, as evidenced in the Lex Salica.

As for the vowels, we have seen the following sound developments:

(1) Contraction and assimilation

PGm. *\*i(j)a* > Fr. /ī/

PGm. *\*imf* > Fr. /īf/

PGm. *\*aiwa* > Fr. /eo/

Fr. *\*eu* > Fr. /eo/ (Not completed.) *or*

Fr. *\*eu* > Fr. [iu] (Not completed. Only in A23.) *or*

Fr. *\*eu* > Fr. [io] (Not completed. Only once in H.)

(2) Raising and lowering

PGm. *\*i* > Fr. /e/ (Before *\*a* in the next syllable.)

PGm. *\*e* > Fr. /i/ (Before fricatives.)

PGm. *\*u* > Fr. /o/ (Not completed.)

PGm. *\*a* > Fr. /e/ (Before a *\*i* in the next syllable. Not completed.)

## The Spelling Mistakes in the Malberg Glosses

We must assume the following misspellings but note that only one misspelling is assumed per letter, so there is no basis to assume multiple misspellings of a single letter:

/t/	>	<c>	/nn/	>	<ni>
/f/	>	<b>	/l/	>	<i>
/h/	>	<b>	/gi/	>	<zy>
/m/	>	<u>, <i>, <n>	/u/	>	<a>
/n/	>	<u>	/u/	>	<i>

Sometimes analogy may have played a role in misspelling Frankish words. This is possibly the case for the cases in which:

/s/	>	<r>
/st/	>	<ch>
/f/	>	<p>

The following misspellings occur only once, and one can thus not easily invoke these misspellings as a rule:

/t/	>	<d>	/r/	>	<e>
/f/	>	<vu>?	/r/	>	<s>
/f/	>	<t(h)>?	/ī/	>	<e>?
/ch/	>	<ph>	/ā/	>	<e>

The phoneme /ch/ < PGm. \*g may be written with <g> or with <ch>, but this is not explained by scribal errors, but by the etymology, just as the spellings with <z> before an original PGm. \*i. It is to be noted that three of the misspellings assumed above are necessary to deal with the gloss spelled as <vueth> which is supposed to stand for \*fīf, namely /f/ > <vu>, <th>, and /ī/ > <e>. The misspelling of <t> for /f/ is only found in <fit> for the same word. The semantics of this gloss may be well-established, but this form is still methodologically problematic.

## *The Position of Frankish within West-Germanic*

In the previous chapter we have taken a look at the phonology of Frankish as it has come down to us in the Lex Salica. In order to say something about the position of Frankish within the West-Germanic dialect continuum, it is necessary to look for Frankish innovations that are shared by other languages, as those indicate that the languages developed together. The innovations chosen here are all present in Frankish to a certain degree, as is seen in the previous chapter, and they are presented in the same order of phonemes. Finally, one development in the unaccented syllable is treated as well.

### *The Partial Merger of PGm. \*b and \*f into Frankish /f/*

Proto-Germanic \*b became Frankish /f/ when in intervocalic position. This development is evidenced by the word \**theuf*- ‘thief’ from PGm. \**þeuba*-, and probably also in \**af* ‘of, from’ from PGm. \**aba*. This development is paralleled by all West-Germanic languages except for Old High German, as is seen for example in *aba*, *ab* from PGm. \**aba*, against OE *of*, OFri. *of*, *af*, OS *af*, and Dutch *af* (Kroonen, 2013: 1). The word \**þeuba*- has developed similarly into OE *þeof*, OFri. *thiāf*, OS *thiof*, and Dutch *dief*, against OHG *diob*, *diub* (Kroonen, 2013: 539). Also in Luxembourgish \**VbV* developed into a fricative, either into voiceless /f/ as in *Déif* ‘thief’ from \**þeuba*-, or into voiced /v/ as in *liewen* ‘to live’ from \**libēn*-.

### *The Frankish Assimilations*

A number of Proto-Germanic consonant clusters underwent a process of assimilation on their way to Frankish. The following are the most striking: PGm. \**mb* > Fr. /mm/, PGm. \**nd* > Fr. /nn/, and PGm. \**ld* > Fr. /ll/. The first assimilation is seen in more West-Germanic languages, e.g. PGm. \**lambiz*- ‘lamb’ gave *lam* in Old Frisian, Middle English, Middle Dutch, late Middle High German, and Middle Low German. This drift of changing \**mb* into /mm/ is thus not helpful in determining the position of Frankish, although we may note that Frankish seems to be quite early in featuring this sound change. The other two assimilations are more promising, as they are less widespread.

There are at least two areas that show the assimilations of PGm. \**ld* and \**nd*, the first being in Frisia. PGm. \**landa*- ‘land’ gave West Frisian *lân*, North Frisian *lon*, *lön*, Heligoland Frisian *lun*, and Wangerooge Frisian *laun* (Ten Doornkaat Koolman, 1882: 466), PGm. \**hunda*- ‘dog’ gave West Frisian *hûn*, North Frisian *hün*, and Wangerooge Frisian *hûn* (Ten Doornkaat Koolman, 1882: 115). Proto-Germanic \**haldan*- ‘to hold’ gave East Frisian *holden*, *hollen*, and Wangerooge Frisian *höl*, *hîl*, *hîlen* (Ten Doornkaat Koolman, 1882: 99). East Frisian only features the assimilation of \**ld*, while West Frisian only features the assimilation of \**nd*; Wangerooge Frisian shows both assimilations.

The second area that features assimilation of PGm. \**nd* and \**ld* is found in the south of the Germanic speaking area. The change of \**nd* to /nn/ occurred in what Bruch calls *Mitteldeutsch*-

*Frankisch*, and he provides dialect maps for this phenomenon (Bruch, 1953: 117).<sup>4</sup> Another dialect map of the development of PGm. \*nd to <ng> or <nn> is found in Besch et al., 1982, on page 55.<sup>5</sup> We learn from these maps that the Low Franconian dialects often show <ng>, whereas the Westfalian and Middle Franconian dialects have <nn> from PGm. \*nd. Also in the region of Baden, further to the south-east, we find forms like *hunnat* ‘hundred’, *hun* ‘dog’, although we do not find assimilation of PGm. \*ld, e.g. *haldə* < \*haldan- (Kluge et al., 1925: 790; 792). In Limburgish we have the same situation, where we find *hōnərt* ‘hundred’ (e-WLD, 2018: s.v. *honderd*). The Luxembourgish language on the other hand, shows both assimilations regularly between vowels, e.g. in *halen* ‘to hold’ < PGm. \*haldan-, *al* ‘old’ < PGm. \*alda- and *kal* ‘cold’ < PGm. \*kalda-, and *bannen* ‘to bind’ < PGm. \*banda-, *honnert* ‘hundred’ < PGm. \*hunda- and *aner* ‘other’ < PGm. \*anþara- (Luxemburger Wörterbuch, 1950: s.v.). The problem here is that these forms are all attested late, e.g. in the Wachtendonck Psalms there are no instances of this process. Also, Proto-Germanic \*d remained /d/ in Central Franconian, of which Luxembourgish is a part, contrary to High German (Newton, 1900: 159). Therefore, it is difficult to date the assimilations that resulted in the modern Luxembourgish forms, as this possible *terminus ante quem* is lacking.

Kerkhof suggests that the spelling of <nn> for PGm. \*nd in the Lex Salica might be a sign of transfer into Romance, and he compares Walloon *hounine* ‘caterpillar’ from Germanic \*hundīna ‘little dog’ (Kerkhof, 2018: 49).<sup>6</sup> However, the Walloon language seems to have kept Latin nd-clusters, e.g. *prinde* < Latin *prehendo* ‘to grasp, seize’ (Deprêtre & Nopère, 1942: 226), *monde* < Latin *mundus* ‘sky; world’ (Deprêtre & Nopère, 1942: 189), *onde* < Latin *unda* ‘wave’ (Haust, 1933: 440). However, another example of the assimilation in a Germanic loanword is seen in *bande*, *banne* (Liège), *bane* (Louvain), and *benne* (Proyart, Somme region) < \*banda- (Von Wartburg, 1922: s.v. *bandwa*). Therefore, I deem it more likely that the assimilation of Proto-Germanic \*nd to /nn/ and \*ld to /ll/ was native to the Frankish language, as the same sound change is seen in other Germanic dialects, and not in the neighbouring Romance dialects. The Walloon word *hounine* is probably a loanword from a Germanic dialect that featured the sound change, maybe Frankish itself.

The fact that, for example, Luxembourgish features the sound change may be explained either as an independent development, as in Frisian, or a development that is somehow connected to the Frankish development. In the latter case, there are still two possible scenarios; either a Frankish substrate would be present in Luxembourgish, or Frankish and Luxembourgish shared the development. Assuming a shared development is difficult however, because of the time-depth; the Lex Salica outdates the earliest sources for Luxembourgish by centuries.

<sup>4</sup> In Hessian German, further to the east, there are also extensive assimilations of PGm. clusters, see e.g. Holsinger & Houseman, 2013 for an insight into the plurals of the type *hond*, pl. *hon* ‘dog’ and *vald*, pl. *vel* ‘forest’.

<sup>5</sup> The sources something give contradicting information, e.g. according to Besch et al. Cologne shows /ng/ from PGm. /nd/ (1982: 55), but according to Newton, Cologne has /nn/ (1990: 165).

<sup>6</sup> Cf. also *honine* from “Molinets heimat”, referring to Jean Molinet who lived in the 15th century and was born in Desvres in Pas-de-Calais (Von Wartburg, 1922: s.v. *canicula*).

## The Development of the PGm. Cluster \*sk-

As we have seen above, there is some proof for the development of PGm. \*sk- into Frankish /sch/ in the Lex Salica. This might give us an indication as to the position of Frankish within the linguistic situation of Western Europe in the early Middle Ages.

For Old English, all the handbooks state that the initial cluster written as <sc> is to be pronounced as [ʃ] (e.g. Mitchell & Robinson, 1992: 16). One of the arguments for this position is that Old Norse loanwords in late Old English, starting with /sk/ kept this as such, e.g. ON *skinn* > OE *scinn* > E *skin*, while inherited \*sk-clusters became [ʃ]. In the other Old West-Germanic languages on the other hand, the cluster seems to have been retained, see for example PGm. \*skauni- ‘beautiful’ > Old Frisian *skēne*, OS *skōni*, and OHG *scōni*, and PGm. \*skeldu- ‘shield’ > Old Frisian *skeld*, *skiold*, *skiuld*, OS *skeld*, *skild*, and OHG *scilt* (Kroonen, 2013: 441; 442). However, if we look more closely, we do see some examples of /sch/ in the early West-Germanic languages.

De Vaan assumes that the cluster \*sk is retained in Old Dutch (2018: 183). According to Van Bree it is unclear when or where exactly the change of /sk/ to /sch/ happened, but he assumes that it was in the Middle Dutch period. It should be noted that even to this day some dialects retain the original cluster (Van Bree, 1977: 216, 217). When we look at the data from the Old Dutch period, we see that the PGm. cluster still has the form /sk/ and is written as <sc>, e.g. in *scado* ‘shadow’ (dated around 1100) (ONW, 2018: s.v.). However, around the same time we also find e.g. *schilden* ‘shields’, showing the development that we are looking for (ONW, 2018: s.v. *skilt*). Also in Old Saxon, the cluster is most often found as /sk/, although there are examples of /sch/, e.g. *schilduuri* ‘roof of shield’ in the 10<sup>th</sup> or 11<sup>th</sup> century, *schimbal* ‘mould (fungus)’, and *schifsang* ‘time-setting song for rowers’ (Tiefenbach, 2010: 345; 346). It is noteworthy that these spellings only occur before front-vowels; before /i/ in the aforementioned examples, and before /e/ in e.g. *schelliuurz* ‘common delandine’ (Tiefenbach, 2010: 342). Three of these examples, namely *schimbal*, *schifsang* and *schelliuurz* are from the same manuscript from the first third of the eleventh century, the Glossar des Trierer Seminarcodex, MS 61 in the Bibliothek des Priesterseminars (Tiefenbach, 2010: xxx). The cluster \*sk is kept as such into the Old High German period, but during this period the second element of the cluster probably changed into a voiceless palatal fricative, after which the cluster as a whole developed into /ʃ/. In the eleventh century <sk> and <sc> are still the spelling norm, but <sch> and <sg> occur as early as the ninth century (Braune, 2004: 140). Most of the modern varieties of the West-Germanic languages have altered the sk-cluster, and so has Luxembourgish, e.g. in *Schëff* ‘ship’ [ʃɛf] (Keller, 1961: 266).

To the south of the area where Frankish was spoken, Gallo-Romance, the ancestor of Old French was spoken. The initial Latin cluster /sc/ before /u/ is preserved in Old French and modern French, albeit with a prosthetic vowel, and a loss of the sibilant in modern times, e.g. in French *écu* ‘shield’ < Old French *escut* < Latin *scūtum* (Von Wartburg, 1922: s.v. *scūtum*). Before front vowels, the /k/ is palatalised and ultimately lost in e.g. *scène* < *scaena* ‘stage’. Walloon however did not share these French developments, but rather changed \*sk into /sx/

and later /h/ before front vowels; before back vowels it was retained, as evidenced by e.g. *scot* (Liège, Namurs) < \**skot* (Von Wartburg, 1922: s.v. \**skot*). This development of \**sk* is already noted by Wilmotte, as he states that the cluster /sk/ became /sx/ in Old Walloon and changed to /x/ or /h/ later on in East Walloon (Kerkhof, 2018: 158). An example of this is given by Marchot. He connects the Walloon words *hî* (Liège) and *chî* (Namur), both meaning ‘ploughshare’, to the Proto-Germanic word \**skara-* ‘ploughshare’, cf. OE *scear* and OHG *scar* with the same meaning. He argues that the word must be an early borrowing, probably from the eighth century, as we see Bartsch’s law operating, changing the \**a* into /ie/, cf. Latin *canem* > French *chien* (Marchot, 1921: 117, 118).<sup>7</sup>

As the process of fricativisation of \**sk* occurred in Old English, Old Dutch, Old Saxon and Old High German between the ninth and twelfth century, the phenomenon was possibly inherent to all of West-Germanic, including Frankish. The occurrence of the sound change thus does not help us to determine the place of Frankish within the West-Germanic branch. Both Walloon and French show similar developments as West-Germanic, but only before front vowels. The Frankish development that led to *schot* < \**skut-* is thus easier explained as an inherently Frankish feature, rather than as caused by language contact.

### The Palatalisation of PGm. \**g*

Palatalisation of velar plosives before front vowels is a process that occurs quite often in languages of the world. Also in Medieval Western Europe there were a number of languages that knew this process. Old Frisian changed initial \**g* > /j/ and \**k* > /ts/ before front vowels, e.g. in \**gasta-* > *iest* ‘guest’ and \**kinnu-* > *tsin* ‘chin’ (Bremmer, 2009: 30-31). Old English behaved similarly in this regard, although this was not made clear in the spelling; OE *gēotan* ‘to pour’ was still written with <g>, although we know it was pronounced more like [j], as evidenced by, for example, the spelling *geár* ‘year’ < PGm. \**jēra-*. In Old Saxon, palatalisation of PGm. \**g* to /j/ before front vowels happened as well, as evidenced by *ieldan* from \**geldan-* ‘to pay, be worth something’, or *giung* from \**junga-* ‘young’ indicating that PGm. \**g* and \**j* partially merged (Van der Hoek, 2010: 146; Gallée et al., 1993: 166-171).

In chapter 9 of his book, De Vaan studies the process of palatalisation in Old Dutch. He concludes by saying: “...on chronological and geographical grounds, few of the reviewed palatalisations qualify as (influenced by) Proto-Frisian or can be linked to the difference between western and eastern Dutch” (De Vaan, 2017: 186), which means that palatalisation is a process native to the Dutch language to some extent. What is notable is that the product of palatalisation of PGm. \**g* in Dutch is always /j/. Van der Hoek argues in his dissertation that palatalisation of PGm. \**g* happened in Old High German dialects as well, although there are not many examples. One of the few examples is *iechose* instead of *gecosi* from the Trier Prudentius glosses (see also Braune, 2004: 141). According to Newton, PGm. \**g* palatalised to /j/ in the dialect of Central Franconian, for example in Cologne: e.g. *Jaß* ‘guest’, *jot* ‘good’

<sup>7</sup> Cf. Liègeois *tchin* < *canem*, or before an /r/ in *tchîr* ‘to take a dump’, French *chier* < *cacare* (Haust, 1933: 96; 97)

(Newton, 1990: 159). The result of the palatalisation process is again /j/<sup>8</sup> (Van der Hoek, 2010: 156).

In Romance, the Latin /g/ palatalised as well. In the manuscripts of Gregory of Tours, we find *iniens* instead of *ingens* ‘huge’ and *aiebat* for *agebat* ‘s/he did, made’, which shows that /g/ and /i/ had partially merged. Brunot argues that in the sixth century AD /dy/, /g/ before /e/ and /z/ had merged (Brunot et al., 1966: 72). Kerkhof argues that Gallo-Romance, spoken in what is nowadays France, /g/ became /j/ before front vowels, when standing between two vowels. In syllable-initial position the /g/ became /d͡ʒ/. As an example, he gives Latin *gaudia* > Gallo-Romance *\*d͡ʒæuja* > Old French *joie* ‘joy’ (Kerkhof, 2018: 113).

The trait that all the West-Germanic languages have in common, is that the palatalisation product of PGm. \*g before front vowels is /j/. As De Vaan points out, the allophonic difference was probably present in West-Germanic and was phonologised by different languages at different times and in different degrees (De Vaan, 2017: 186). However, the Frankish evidence from the Lex Salica shows a <z> in this exact same environment and we have seen that this represented the pronunciation [d͡ʒ]. The probable conclusion is thus that the specific palatalisation of \*g to [d͡ʒ] as found in the Lex Salica is due to Gallo-Romance influence. The occurrence of palatalisation in Frankish is not surprising as all the other West-Germanic languages show this process to some extent, and this is an explanation of the susceptibility of Frankish to palatalisation. A different possibility is that the process of assimilation of PGm. \*g went through a stage [d͡ʒ] before arriving at [j] in the other West-Germanic languages. However, we have no indication that this might have been the case, other than the <z>-spellings in the Lex Salica.

### The Merger of PGm. \*g and \*h into Frankish /ch/

The Frankish digraph <ch> represents both Proto-Germanic \*g and \*h. The fact that the word that goes back to *\*hrētō-* is once written as <grat> indicates confusion between <ch> and <g>, and this cannot be due to Gallo-Romance influence as the ONW notes (2018: s.v. *rāta*) as the initial cluster *\*hr* is borrowed as either /kr/ or /fr/. The most probable conclusion is that the two Proto-Germanic phonemes have partially merged. The phonemes did not merge after a nasal, nor before PGm. \*i. The merger is seen in the anlaut before a vowel, e.g. *chalt-* ‘sow’ < \*g and *\*chafr-* ‘goat’ < \*h, in the auslaut, e.g. *barch-* ‘castrated pig’ < \*g and *alach* ‘house’ < \*h, and intermedially, cf. *\*fugl-*, *\*fochl-* ‘bird’ < \*g and *\*achto* ‘eight’ < \*h. Frankish has kept \*h before a consonant in the anlaut, but we do not have any example of PGm. \*gC- in the Lex Salica. In intermedial position, the West-Germanic languages make a difference between intermedial clusters with a resonant and those with a different consonant. The problem is that we do not know the Frankish outcome of the cluster of the type *\*Rh*, so we cannot compare the outcomes to those in the other West-Germanic languages.

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<sup>8</sup> Only the intervocalic geminate \*ggj became [d͡ʒ:] in Anglo-Frisian, e.g. in OE *secgan*, OFri. *sedza* < \*sagjan- ‘to say’ (Kroonen, 2013: 420).



In the anlaut, the merger of PGm. \*g and \*h is not seen elsewhere, cf. \*hiar ‘here’ > OE *hēr*, OFri. *hīr*, OS *hēr*, *hier*, Du. *hier*, and OHG *hiar*, against \*gaiza- ‘spear, tip’ > OE *gār*, OFri. *gēr*, OS *gēr*, MDu. *geer*, OHG *gēr* (Kroonen, 2013: 225; 164). However, in other positions we do see a merger in some languages. In Old Frisian, PGm. \*g and \*h merged into [χ] in the auslaut (Bremmer, 2009: 48-49). In Old Dutch, in the auslaut and before a voiceless consonant, \*g and \*h merged into /χ/ as well (Van Bree, 1977: 213-215; 219-220). The Luxembourgish language likewise shows a partial merger of the two phonemes. PGm. \*h is only preserved as such initially, while it merged with \*g into /x/ before voiceless consonants and at the end of a word, e.g. *Dag* is phonetically [da:x]. Medial PGm. \*g became [γ], phonetically identical to PGm. \*j in initial position (Keller, 1961: 256-261; 265-267). In Old High German on the other hand, PGm. \*h became a velar fricative in the auslaut, and in anlaut before consonants, e.g. *wahsan*, *naht* (Braune, 2004: 145), but nothing happens to PGm. \*g in these positions, so there is no merger.

The merger of PGm. \*g and \*h is only partially mirrored in Old Frisian, Old Dutch and Luxembourgish, namely in the auslaut. The more complete merger as seen in Frankish is a factor that sets this language apart from all the other West-Germanic languages. The evidence from the Malberg glosses strongly suggests a merger of the PGm. phonemes \*g and \*h, whereas Germanic loanwords in Gallo-Romance show two different outcomes, e.g. *jardin* ‘yard’ from \*gard-, and *hangar* from \*haimgard. This can be due to a spatial or a temporal difference between the two language varieties. In any case, a merger of the two phonemes is unlikely from the point of view of Gallo-Romance. Early Gallo-Romance had /g/, /χ/, and /γ/ as phonemes, although the latter two did not occur initially, and later /h/ was incorporated as a loan phoneme (Kerkhof, 2018: 137). Taking this into account, there is no apparent reason to merge the phonemes \*g and \*h, from a Gallo-Romance point of view. This means that the change was probably not contact-induced.

### The Merger of PGm. \*þ and \*d

Proto-Germanic \*þ pops up as /d/ in some cases in the Lex Salica. This is the case for all attestations of the words *andr*- ‘other’ and *uuidr*- ‘toward, against’, but we also find it in <deuda> from *theuda*- ‘king’. As we have no reason to assume a spelling mistake, we must be dealing with a phonological merger of the two phonemes. As the two words that consistently show /d/ have the phoneme in medial position, followed by an /r/, it might very well be the case that the merger happened in this environment before it affected /th/ in other environments, such as initially in <deuda>.

Frankish is not the only West-Germanic language to lose its dental fricative; of all the modern West-Germanic languages English is the only one to have preserved it. During the Old Frisian period final and initial /th/ became /t/, e.g. in *tyennya* ‘to serve’ from *thiānia*. In medial position, /th/ was dropped already in Old West Frisian, i.e. in manuscripts from the late fifteenth century, e.g. in *brōr* ‘brother’ < *brōther* (Bremmer, 2009: 50, 114). So, both these languages do not share the Frankish development.



Already from the tenth century, the Old Dutch word *tand* ‘tooth’<sup>9</sup> is attested with a plosive from PGm. *\*þ*, and the same is true for the oldest attestations of *ander* ‘other’ from around 1100 (ONW, 2018: s.v. *tant*; *andar*). The normal form of ‘three’ is *thri*, with the fricative preserved, although forms with /d/ occur in the north-east (ONW, 2018: s.v. *thrī*). Intervocally, /th/ remains the norm in Old Dutch, e.g. in *wither* ‘against’, with only one attestation of *wider* (ONW, 2018: s.v. *wither*). Already in Early Middle Dutch, i.e. in the early thirteenth century, all of these words show plosives instead of fricatives. Also from OHG *andar* ‘other’, *zant* ‘tooth’, and *widar* ‘against’ it is evident that the fricative has become a plosive in medial position already in the Old High German period. Tatian and Otfrid, both from the ninth century, still wrote <th> initially, but <d> elsewhere (Wright, 1906: 71). Old Saxon is more conservative and there *uuithar* ‘against’ is the norm, while *uuidar* occurs as well. In Middle Low German, PGm. *\*þ* has changed into /d/ in all cases, e.g. in *dīsel*, *dissel* ‘shaft, drawbar’ < *\*pinhslo-* (Kroonen, 2013: 542). For PGm. *\*þ* preceded by a nasal consonant in Old Saxon, see page 51.

In conclusion we can say that the fact that Frankish changed /th/ to /d/ is not surprising, nor the fact that this happened first in medial position. The development itself is shared by Old Dutch, Old High German and Old Saxon, and not by Old Frisian and Old English.

### The Development of PGm. *\*VNF*

The Frankish word *\*fīf* ‘five’ shows the development of *\*imf* > /īf/, which is interesting, as this is often seen as an Ingvaenic feature. This sound change has occurred in Old English, Old Frisian, and Old Saxon, which all show *fīf* (Kroonen, 2013: 140). The loss of a nasal before a fricative, with compensatory lengthening of the preceding vowel is sporadically found in Dutch. For example, the Old Dutch form of the word for ‘five’ is either *fīnf* or *fīf*, of which the latter only occurs in toponyms (ONW, 2018: s.v. *fīf*, *fīnf*). After his analysis of the data for this sound change in Dutch, De Vaan concludes with two possible explanations: either the change was due to a Proto-Frisian substrate layer in Dutch, or the change was native to the coastal Franconian dialects of Old Dutch. It is to be noted that the change mostly occurred in non-core vocabulary of Dutch, while the core vocabulary was unaffected by it, e.g. *kind* ‘child’, *mond* ‘mouth’, and *ander* ‘other’ (De Vaan, 2017: 517). De Vaan deems it likely that this sound change started in Anglo-Frisian and subsequently spread further south (De Vaan, 2017: 231).

In Old Saxon, we still find variation when it comes to this sound development. We find both *mūth* and *mund* < *\*munþa-* ‘mouth’, *ôthar* and *andar* < *\*anþara-* ‘other’, and only *tand* < *\*tanþ-* ‘tooth’. These double outcomes of a single PGm. form can be due to language contact where one of the languages involved changed PGm. *\*þ* into /d/ before the sound change of *\*VNF* > /VF/ came into being, so these forms did not participate in the change. As we see the same situation in Frankish, with *\*fīf* on the one hand, and *andr-* ‘other’ on the other, we might be dealing with a similar contact situation. However, it is hard to tell whether Frankish behaved more like Old Dutch, i.e. Frankish did not participate in the change of PGm. *\*VNF* > /VF/, but

<sup>9</sup> From OHG *zan*, pl. *zendi* it is clear that we have to depart from PGm. *\*tanþ* in the nominative, see also Kroonen, 2013: 510.

only borrowed the word *\*fīf* from a language that did; or more like Old Saxon, i.e. Frankish did participate in the change, but either borrowed the word *andr-*, or featured a sound change preventing the form from undergoing the sound change.

## Vowel Changes in the Malberg Glosses

### Lowering of PGm. *\*i*

In two Frankish words, we see both /e/ and /i/ written for PGm. *\*i*, namely in *renk-*, *rink-* gl. *quis ingenuus* ‘a free man’ from PGm. *\*rinka-* and *uuedr-*, *uuidr-* ‘toward, against’ < PGm. *\*wīpra*. This lowering might be due to the following *\*a*, although we might have expected this change to happen in *\*fri(j)a-* ‘free’ as well, but it did not as in this case we find *frī* ‘woman’. We could thus also assume that it occurred in closed syllables. A similar lowering of PGm. *\*i* is also seen in Dutch, e.g. in ODu. *withēr* ‘against’, Early Middle Dutch *weder* ‘id.’ < *\*wīpra-*, ODu. *uuidouuano* ‘widow’, EMDu. *wedewe*, *weduwe* < *\*widu(w)ōn-*, ODu. *uuitton* ‘to know’, EMDu. *weten*, *witen* ‘id.’ < *\*witan-*. However, this development in Dutch is not due to umlaut, as it only occurred in open syllables and the following vowel was not always *\*a*, see e.g. *\*winda-* > ODu., EMDu. *uuint* ‘wind’, and *\*winnan-* > Du. *winnen* ‘to win’. As both examples in Frankish are in closed syllables and probably due to the following *\*a*, the two lowering processes are independent.

PGm. *\*i* has developed into Lux. /ə/ in *Kënn* ‘chin’ and *gewëss* ‘surely’, but into Lux. /a/ in *batter* ‘bitter’ and *fannen* ‘to find’. Before *\*r* and in open syllables, it has become /i:/, e.g. in *riicht* ‘right’ (Keller, 1961: 256-258). Both in Frankish and in Luxembourgish, lowering occurs in closed syllables, but in Luxembourgish this is not due to *a*-umlaut, as is evidenced by *Kënn* from PGm. *kinnu-* (Kroonen, 2013: 288).

### Lowering of PGm. *\*u*

Proto-Germanic *\*u* is attested as either /u/ or /o/ in the Lex Salica. In other West-Germanic languages this sound change is due to what is called *a*-umlaut; the *\*u* becomes /o/ before the vowel *\*a* in the next syllable. In the Lex Salica we have the following examples where this might be the case: *\*fugla-* > *\*fochl-*, *\*sunda-* > *sond-*, and *\*hursa-* > *chros-*, compare e.g. OE, OFri. *hors*, OS *hors*, *hros*, Du. *ros*, OHG *ros*, *hros* (Kroonen, 2013: 259).

Often in the Germanic languages, *a*-umlaut is blocked by a cluster containing a nasal consonant, however we have seen two examples where this cluster did not stop the process, namely in *\*bāchmonn-* ‘rape’ and *\*sondVlin-* ‘water bird’. Two other words where we would expect *a*-umlaut by this extended *a*-umlaut process are *chunn-* ‘dog’ and *chunn-*, *chund-* ‘a hundred’, as they originate from PGm. *\*hunda-*. The fact that we do not see an /o/ in these words indicates that these are archaisms.

Then there are those words that do show /o/ from Proto-Germanic *\*u*, without the umlaut factor of the vowel *\*a* in the next syllable. The first of these is the form *\*drocht-* ‘host’. It is remarkable that the word *drucht-* < *\*druhti-* is only found with an /o/ when in a compound with *\*līdi* (ONW, 2018: s.v. *\*druhtslīdi*), which could indicate one of two things; either the second

vowel of the compound was at some stage a low vowel, of which we have no other indication, or the process that we call *a*-umlaut was later extended to all PGm. *\*u*'s, as we have also seen that a consonant cluster including a nasal did not stop the process from happening. This would mean that the forms with *\*drocht-* were simply added later in the manuscripts than those with *drucht-*. The second word showing the sound change is *schot-* 'enclosed' from PGm. *\*skut-*. This word is attested in Middle Dutch as *schutte*, but the vowel [ʏ] in this word needs to go back to a PGm. *\*u* in a closed syllable, followed by *\*i* in the next syllable, so PGm. *\*skutti-* (cf. Van Bree, 1977: 134-139). In the Lex Salica, the second syllable always contains the vowel <o>, so the words do not necessarily share the same derivation from the verb *\*skutjan-*, and consequently we cannot be entirely sure whether the umlaut factor of a low vowel in the next syllable was present. The last root that shows an unexpected /o/ is the root *mos-* 'to plunder' which is mostly found written as <mosido>. The form is analysed as a noun with the suffix *-ida* by the ONW, translating it as 'robbery' (2018: s.v. *\*muosit*). In my opinion, this suffix could also be the 3sg.pret. suffix of verbs in *\*-jan-*, identical to the suffix in Gothic and Old Dutch, as a verbal form is preferable as a gloss to the verb *expoliamerit* 's/he plundered' (De Vries, 1982: 51; Quak & Van der Horst, 2002: 49). In the end, the fact is that the PGm. vowel *\*u* is followed by a high vowel, so again the sound change of PGm. *\*u* to Frankish /o/ seems to be unconditioned.

In the Old Dutch period, /u/ is often found for PGm. *\*u*, while /o/ is becoming the norm. For example, ODu. *brust-* 'breast' is only found with /u/, and for ODu. *hund-* 'dog' the forms with /o/ only appear at the end of the twelfth century (ONW, s.v. *hunt I*). Proto-Germanic *\*u* became Dutch [ʏ] in closed syllables, when in *i*-umlaut position, e.g. *vullen* 'to fill' < *\*fulljan-*, and [ø:] in open syllables in *i*-umlaut position, e.g. in *euvel* 'evil, bad' < *\*ubila-*. In other positions, PGm. *\*u* became either [ɔ], in closed syllables, or [o:], in open syllables (Van Bree, 1977: 20). All outcomes, so [ʏ], [ø:], [ɔ] and [o:] are lower than both [i] and [u], so a situation in which [u] was lowered under influence of a following [i] is not likely. In my opinion, this situation is thus better explained when we assume that [u] first became [o] everywhere, after which the [o] was fronted and/or raised to either [ʏ] or [ø:]. This situation is attested in Early Middle Dutch, where PGm. *\*ubila-* 'evil, bad' is written as *ouel* or *ovel* in some cases the early thirteenth century, after which *euvel* becomes the norm, and the word meaning 'door' is normally written as *dore* or *doere* < *\*durī-* (VMNW, 2018: s.v. *uevel I*; *duere*). The umlaut was not always written, but the unumlauted vowel was written as <o> rather than as <u>. So, I conclude that, as in Frankish, Dutch has lowered PGm. *\*u* unconditionally to /o/.<sup>10</sup>

PGm. *\*u* has many different outcomes in Luxembourgish; in *i*-umlaut conditions, we find either /ɪ/ in *Kinne* 'king', /ə/ in *dënn* 'thin', or /i:/ in *Dir* 'door'. PGm. *\*u* developed into /u:/ in *Fuuss* 'fox', but into /ɔ/ in *Gott* 'god', *Vollek* 'people', *Broscht* 'breast', *Loft* 'air' or *domm* 'stupid', and a diphthong /uə/ is found in *Dueref* 'village' and *Duechter* 'daughter'. Before PGm. *\*p* and *\*k*, it seems that PGm. *\*u* developed into /a/ in *affen* 'open' and *Matt* 'moth' (Keller, 1961:

<sup>10</sup> For the situation on Romance /u/ and /o/, see Kerkhof 2018, 139-140. I deem it unlikely that the lowering of PGm. *\*u* to /o/ is due to Gallo-Romance, as Early Gallo-Romance /u/ changed into /y/.

256-259). It has to be said that the conditions are not always clear, but /ɔ/ seems to be the default outcome of PGm. \**u* when not in *i*-umlaut position, as is also noted by Sturm (1988:77).

### **Raising of PGm. \**e***

We see two different reflexes of PGm. \**e*, namely /e/ and /i/. The /i/ is found in \**fitther* and in *sicht-*, \**secht-* ‘to cut off’, in both cases immediately before a fricative. The shift from PGm. \**e* to /i/ is also sporadically found in Old Saxon, e.g. in *fihu* ‘cattle’ < \**fehu*, *filu* ‘many’ < \**felu*, and *wisen* ‘to be’ < \**wesan-* (Tiefenbach, 2010: 86; 90; 457; see already Bethge et al., 1900: 99). In Old High German this sound change has taken place in *fihu* ‘cattle’ < \**fehu*, and *sibun* ‘seven’ < \**sebun-* (Bethge et al., 1900: 133), and in Old Dutch there are examples of the change as well, e.g. *uilo* ‘many’ and *siuen* ‘seven’ (ONW, 2018: s.v. *filo*; *sivon*). However, all these cases are before PGm. \**u* in the next syllable. In Luxembourgish there are also examples in other contexts, e.g. in *siwen* ‘seven’, *vill* ‘much’ and *ginn* ‘to give’, and a diphthong /iə/ is found in *liewen* ‘to live’, *Bierg* ‘mountain’ and *Bier* ‘bear’ (Keller, 1961: 259). The Frankish word \**fitther* might have undergone the stages \**fitthur* < \**fetthur* < \**fetthwar* < \**feþwar-*, but the gloss *sicht-* is less easy to explain as caused by a following \**u*. So, the Frankish development more closely resembles Luxembourgish, as both languages shows the raising also in other environments than before /u/.

### ***I*-umlaut of PGm. \**a***

The phenomenon of *i*-umlaut is very rare in the Lex Salica. Most of the words that meet the requirements for this development do not show it, and may have seemingly lost the umlaut factor already, e.g. in *nare* ‘sucking’ < \**nazjan-*.<sup>11</sup> For the word *chanzist* ‘stallion’, there is one attestation that shows *i*-umlaut, namely <chengisto> in H, but it should be pointed out that the H-manuscript dates from the sixteenth century, and so the <e> might as well be a later interpolation by the author. For the word *lamp-*, *lamm-* we find four spellings with <e> in C6, D79, and H, and there is one spelling of <alcheio> for \**alachalt-* ‘to cut off’ in D8. We could assume a situation in which PGm. \**a* had become [æ] by *i*-umlaut, written as <a>, whereas \**a* became [e] in a certain environment. One possibility is before a nasal, but that does not work for \**alachalt-*. Another possibility is in closed syllables, in which case we would have to assume that we find an older <a>-spelling in the words *chalt-* ‘sow’, *frīfastin-* ‘to betroth a girl’ and \**marchi* ‘mare’.

As most the West-Germanic dialects seem to have undergone *i*-umlaut of PGm. \**a* in one way or another, the fact that we find some cases of umlaut in de Malberg glosses is not unexpected. Although *i*-umlaut may have not always been written, scholars believe that it was phonemic in Old High German (Fertig, 1996: 170, 171). Also in Old Saxon, the number of cases where *i*-umlaut was not written is large, but the language has definitely undergone the process (see also Rauch, 1970). Not all of the Dutch dialects have known the process, as explained by Buccini:

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<sup>11</sup> For more on this phenomenon that is known as the *umlaut puzzle*, see e.g. Fertig 1996.

“Starting from the German border, we have first an eastern group, comprised of the dialects of Limburg, eastern North Brabant, and the eastern parts of Gelderland and Overijssel. In these dialects, *i*-umlaut has developed essentially as it has in the German dialects and its reflexes survive in a number of morphological roles such as plural formation, diminutive formation, and verbal inflexion. (...) Moving west we come to the central dialect group which is comprised primarily of the dialects of Brabant and Utrecht. In this area umlaut also appears to have developed as in German, as evidenced by the great number of lexical items in these dialects which still reflect the operation of that sound change. (...) Finally, we come to the western coastal region consisting of the Flemish, Zeeuws, and Hollands dialects. In these dialects we find virtually no evidence for the regular operation of *i*-umlaut except in the case of WGmc. *ǣ* which shows a lexical, though not morphological, distribution of umlauted forms essentially the same as in the other Frankish dialects.” (Buccini, 1992: 16-18).

In his article from 2010, Buccini explains the lack of *i*-umlaut in coastal Dutch as caused by language contact in the seventh and eighth century. His idea is that Ingvaemonic speakers had already undergone this process and by imposition disrupted the process in Dutch (Buccini, 2010: 306). The assumption that the Ingvaemonic speakers had already undergone this process in the seventh or eighth century is not indisputable however. Bremmer dates *i*-mutation in Old Frisian later than the palatalisation of initial velar stops, as the word for ‘king’ is *kening* < *kuning*-, and never *\*tsening* (Bremmer, 2009: 32, 33). Although there are no good examples of a velar plosive before PGm. *\*a* in umlaut position, this lack of palatalisation before umlauted vowels is the reason why the process of *i*-umlaut is dated “perhaps as late as the eighth century” by Salmons (Salmons, 2007: 376).

In conclusion, we can say that the fact that we find *i*-umlaut in Frankish does not give us a good indication as to the position within the West-Germanic dialect continuum, as the process is very widespread.

### The Development of PGm. *\*jan* to Frankish <in>

Although the main focus of this paper is the accented syllable, one striking development in the unaccented syllables had to be discussed. In multiple glosses to Merovingian Latin verbs, the Lex Salica shows words ending in what is spelled as <in>, and as length of vowels is not spelled, it is both possible to read this ending as either /in/ or /īn/. This ending is often analysed as being a suffix /īn/, creating abstract nouns, for example by Van Helten and the ONW (ONW, 2018: s.v. *\*selin*, *\*terin*, *\*vialāgin*). This analysis is consistent with the ONW’s approach to read the glosses as explanatory glosses rather than as lexical glosses. I prefer to read these words as lexical glosses, and the main problem with the explanation of the forms as abstract nouns, is that the Merovingian Latin lemmata to which the glosses belong show inflected verbs, e.g.

*vialazina* gl. *de uia ostauerit* (C6), or *odocarina* gl. *uel expoliauerit* (C6). There is thus no obvious reason why the glossators would use an abstract noun.

In Old Dutch, the old verbs in *\*-jan-* changed their infinitive suffix into *-on* (Quak & Van der Horst, 2002: 50), while in Old High German these verbs had the ending *-en* (Boutkan, 1995: 365). The ending of the present participles of weak verbs show a similar development, cf. Gothic *nasjands* ‘saving’, OHG *suochenti* ‘searching’ and Old Dutch *leuenda* ‘living’ (Boutkan, 1995: 366; Quak & Van der Horst, 2002: 51). The unstressed *\*jan* thus became /en/ in Old High German and Old Dutch, but not in Old English or Old Saxon (see also Boutkan, 1995: 230-235), while unstressed *\*ja* became /i/ in West-Germanic (Boutkan, 1995: 416). In my opinion, these developments might well be compared to a development of *\*jan* to <in> in the Lex Salica.

A possible parallel of the change of PGm. *\*jan* to <in> in Frankish, can be seen in the word *thunzin-* ‘thing-judge’. Schmidt-Wiegand derives the word making use of a suffix *-ina* (ONW, 2018: s.v. *\*thungin*), of which Kern cites some more examples, namely Gothic *kindins* ‘governor’, OS *drohtin* ‘lord’, and Frankish *scapin* ‘judge’ (1880: 536). Kroonen would not agree with OS *drohtin* ‘lord’ in this list, as the *a*-umlaut seen in this word points to a preform *\*druhtana-* (Kroonen, 2013: 104). However, we could assume that the ending <in> is the same as for the verbal forms, namely PGm. *\*-jan*. So, I reconstruct the proto-form of *thunzin-* as PGm. *\*þungjan-* with a zero-grade, derived from *\*þinga-* ‘thing, court meeting’, cf. PGm. *\*fanþjan-* ‘foot-soldier’ < *\*finþan-*, *\*skapjan-* (n.) ‘judge’ < *\*skapjan-* (v.) ‘to form, create’<sup>12</sup>, and *\*wraþjan-* ‘persecutor’ < *\*wrekan-* (Kroonen, 2013: 128; 440; 594).

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<sup>12</sup> The reason to assume the suffix *\*-jan-* for this form, is found in German *Schöffe*, which underwent gemination as a result of the intervocalic cluster *\*pj*. The stem in the Dutch form *schepen*, ODu. *scepeno*, has been generalised from a form without gemination, for example the genitive *\*skapinaz*.

## Summary and Conclusions

By comparing the phonology of Frankish to those of the other West-Germanic languages, we have seen that there is a varying degree of similarity between the languages. Some developments are shared by all West-Germanic languages, while some are specific for Frankish. When we look at table 7, we can easily see the differences between the languages. The fricativisation of intervocalic *\*b* shows that Frankish is not to be identified as High German (1.). Developments 2. and 3. are only shared as such by Luxembourgish. The development of PGm. *\*sk* to /sch/ (4.) is paralleled in most languages, except for Old Frisian. The outcomes of this change vary however. Feature 5. is not shared by the other West-Germanic languages, but probably due to language contact. The merger of the voiced velar plosive and the voiceless velar fricative (6.) is only partially mirrored in Old Dutch, Old Frisian and Luxembourgish, namely in the auslaut. The fortition of PGm. *\*p* (7.) does not occur in Old English and is rather late in Old Saxon. Old Frisian merges the phoneme with *\*t*, which does not happen in Frankish. In this case, Frankish is best compared to Old Dutch, Old High German and Old Saxon. Feature 8. is rather common and is only absent in Old High German and Luxembourgish. The lowering of PGm. *\*i* (9.) is only shared as such with Luxembourgish, but is the lowering of PGm. *\*u* (10.) is present in Old Dutch as well. The raising of *\*e* (11.) is best compared with the Luxembourgish development, while the raising of *\*a* (12.) is shared by more languages and is thus no good indicator. The final development at which we have looked, the development of unaccented *\*jan* to /in/ (13.), is possibly shared by Old Dutch and Old High German.

	Fr.	Lux.	ODu.	OS	OHG	OFri.	OE
1. <i>*VbV</i> > /f/	+	+	+	+	-	+	+
2. <i>*nd</i> > /nn/	+	+	-	-	-	-	-
3. <i>*ld</i> > /ll/	+	+	-	-	-	-	-
4. <i>*sk</i> > /sch/	+	+	+/-	+/-	+/-	-	+
5. <i>*gi</i> > /dʒi/	+	-	-	-	-	-	-
6. <i>*g, *h</i> > /ch/	+	+/-	+/-	-	-	+/-	-
7. <i>*p</i> > /d/	+	+	+	+/-	+	+/-	-
8. <i>*VNF</i> > /VF/	+	-	+/-	+	-	+	+
9. <i>*i</i> > /e/	+	+/-	-	-	-	-	-
10. <i>*u</i> > /o/	+	+	+	-	-	-	-
11. <i>*e</i> > /i/	+	+	+/-	+/-	+/-	-	-
12. <i>*aCi</i> > /eCi/	+	+	+	+	+	+	+
13. <i>*jan</i> > /in/	+	?	+/-	-	+/-	-	-

7. The Frankish developments in a West-Germanic context.

So, what is the position of the language of the Franks as attested in the Malberg glosses, within the West-Germanic dialect continuum? Is it justified to include the Malberg glosses in a corpus for Old Dutch? After this thorough research into the language of the Malberg glosses, I would

say that Frankish cannot simply be ranked under the umbrella of Old Dutch, as Frankish shows internal developments that are not present in Old Dutch, nor can be ancestral to Old Dutch. For example, the assimilation of Proto-Germanic *\*nd* and *\*ld* is incompatible with Old Dutch or any of the dialects of Modern Dutch for that matter, as is the affrication of PGm. *\*g* before *\*i*. The language of the Malberg glosses more closely resembles Central Franconian than it does Low Franconian, as evidenced by the number of similarities between Frankish and Luxembourgish. Although Luxembourgish is attested very late when compared to the Malberg glosses, more research into the history of this language might reveal whether the comparisons made here will hold.

The Frankish language has acquired a distinctive character as is evidenced by various phonological innovations, and some of these innovations may be caused by the specific linguistic situation in the south of the Germanic-speaking area. In Kerkhof's Pippinid Hypothesis he assumes an adstratal situation in Austrasia, i.e. the north-east of the Merovingian realm, in which Frankish and Gallo-Romance had equal status. There the Franks learned Gallo-Romance, albeit with Frankish influence, and it was this language variety that spread in the north of the realm (Kerkhof, 2018: 153). The evidence from this thesis suggests that in this adstratal situation the Gallo-Romans also learned Frankish. As is well-known, the phonology of one's dominant language is easily transferred to one's non-dominant language, and some phonological features in the language of the Malberg glosses are probably due to imposition by Gallo-Romance speakers. The most obvious of these is the change of /gi/ to /dʒi/, but one might also see the early development of /sk/ to /sch/, and the merger of PGm. *\*g* and *\*h* as caused by this influence. It is hard to tell whether the Gallo-Romance influenced Frankish variety became the norm, as it happened with Frankish influenced Gallo-Romance, or whether the language of the Malberg glosses is that of native Gallo-Romans and there also existed a less Gallo-Romance flavoured Frankish. What is clear, is that the Gallo-Romance language ultimately survived, while Frankish did not. The time of death of Frankish remains an unsettled issue (see e.g. Kerkhof, 2018: 29-30), but the language of Luxembourg might be the closest related language variety that is still spoken today.



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